

To the Graduate Council:

I am submitting herewith a dissertation written by Hyung Chul Park entitled "Examining Consumer Pre-purchase Deliberation Process in an Online Marketplace." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted on partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Human Ecology.

Ann E. Fairhurst
Major Professor

We have read this dissertation
and recommend its acceptance:

Laura D. Jolly

Youn-Kyung Kim

Ernest Cadotte

Accepted for the Council:

Anne Mayhew
Vice Chancellor and
Dean of Graduate Studies

(Original signatures are on file with official student records.)

**Examining Consumer Pre-purchase Deliberation Process
in an Online Marketplace**

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Hyung Chul Park
December 2005

ABSTRACT

The research objective of this study was to examine the consumer pre-purchase deliberation process in an online marketplace. Especially, examining the role of extrinsic quality (website-related quality), intrinsic quality (business operation-related quality), reputation of the retailer (other consumers' opinions), attitude toward the retailer, and intention to transact with the retailer in an online marketplace context was main purpose of this study.

To collect the data, extensive online survey was performed. The data were analyzed through structural equation modeling test.

Findings revealed that there are significant positive relationships among extrinsic quality, intrinsic quality, reputation of the retailer, attitude toward the retailer, and intention to transact with the retailer in an online marketplace. Especially, influence of extrinsic quality on intrinsic quality was considerably strong. However, influence of the reputation of the retailer showed weak influence on attitude toward the retailer unlike the suggestions of previous studies. In addition, the result of this study revealed that there is double-layered structure (extrinsic and intrinsic quality) in the quality of the retailer, which has not been conceptualized and empirically tested in the previous studies. Managerial and academic implications and future research directions based on the findings were offered.

TABLES OF CONTENTS

CHAPTER		PAGE
I	INTRODUCTION.....	1
	Research Objectives.....	10
	Theoretical Framework.....	13
	Concepts and Definitions.....	14
	Extrinsic Quality of the Retailer.....	14
	Intrinsic Quality of the Retailer.....	16
	Reputation of Extrinsic Quality of the Retailer.....	17
	Reputation of Intrinsic Quality of the Retailer.....	17
	Attitude toward the Retailer.....	17
	Intention to Transact with the Retailer.....	18
	Contributions of Study.....	18
II	REVIEW OF LITERATURE.....	22
	Online Marketplace.....	22
	Concepts and Definition of an Online Marketplace.....	22
	Characteristics of an Online Marketplace.....	25
	Quality of the Online Retailer: Attributes and Dimensions.....	29
	Extrinsic Quality: Focusing on Website Attributes.....	33
	Intrinsic Quality: Focusing on Retail Business Operation Attributes.....	34
	Conceptual Framework of the Pre-purchase Deliberation Process in an Online Marketplace Context.....	41
	Intention to Transact as a Consequence in the Pre-purchase Deliberation Process.....	42
	Antecedents in Pre-purchase Deliberation Process Models.....	43
	Extrinsic and Intrinsic Quality of the Retailer.....	45
	Reputation of the Retailer.....	48
	Attitude toward the Retailer.....	53
	Hypotheses.....	55
III	RESEARCH METHODOLOGY.....	63
	Sampling.....	63
	Survey Implementation.....	65
	Selecting Survey Agent.....	65
	Survey Implementation Steps.....	66
	Development of the Scenario.....	68
	Creation of the Fictitious Website of the Online Retailer, ‘Camera World’.....	69
	Creation of the Fictitious Customer Reviews on the Online	

	Retailer, ‘ <i>Camera World</i> ’	73
	Development of the Measurement.....	77
	The Measurement Development Process.....	77
	The Measurement for Extrinsic Quality of the Retailer.....	81
	The Measurement for Intrinsic Quality of the Retailer.....	81
	The Measurement for Reputation of Extrinsic Quality and Intrinsic Quality of the Retailer.....	81
	The Measurement for Attitude toward the Retailer.....	84
	The Measurement for Intention to Transact with the Retailer.....	86
IV	ANALYSIS AND RESULTS.....	88
	Results.....	88
	Sample Characteristics.....	88
	Evaluation of Measures.....	91
	Model Testing: Fitting the Proposed Conceptual Model.....	94
	Final Model.....	98
	Hypotheses Testing: Test of Finalized Structural Model.....	104
V	CONCLUSIONS AND FUTURE RESEARCH.....	111
	Discussion of Findings.....	111
	Finding from the Finalization of the Proposed Conceptual Model.....	112
	Finding from Hypotheses Testing.....	117
	Implications.....	122
	Academic Implications.....	122
	Managerial Implications.....	125
	Limitation and Directions for Future Research.....	128
	REFERENCES.....	131
	APPENDIX.....	141
	VITA.....	168

LIST OF TABLES

TABLES		PAGE
1	Summary of Structure (Antecedents & Consequence) of Major Studies.....	38
2	Classification Results of Dimensions for Extrinsic and Intrinsic Quality of the Retailer.....	79
3	Selected Items for Extrinsic Quality and Intrinsic Quality of the Retailer.....	80
4	Items for Extrinsic Quality of the Retailer.....	82
5	Items for Intrinsic Quality of the Retailer.....	82
6	Items for Reputation of Extrinsic/Intrinsic Quality of the Retailer..	85
7	Items for Attitude toward the Retailer.....	87
8	Items for Intention to Transact with the Retailer.....	87
9	Demographic Characteristics of Sample.....	90
10	Reliability Coefficient for Extrinsic Quality of the Retailer.....	92
11	Reliability Coefficient for Intrinsic Quality of the Retailer.....	93
12	Reliability Coefficient for Attitude toward the Retailer.....	93
13	Reliability Coefficient for Intention to Transact with the Retailer..	93
14	Fit Indices for the Proposed Conceptual Model.....	96
15	Fit Indices for the Final Model.....	100
16	Items Eliminated and Remained in the Final Model.....	101
17	Fit Indices for the Finalized Structural Model.....	105
18	Standardized Path Coefficients and Hypotheses Test Results.....	105
19	Mean Comparison among RREQ, RRIQ, and ATT.....	110

LIST OF FIGURES

FIGURE		PAGE
1	An Example of the List of Retailers Provided by an Online Marketplace (Bizrate.com).....	5
2	Theoretical Framework (Model) of this study.....	15
3	Illustration of the Process for Choosing an Retailer in an Online Marketplace (Nextag.com).....	28
4	Conceptual Framework (Model) and Hypotheses of This Study....	62
5	Survey Implementation Steps.....	67
6	Descriptive Supposition Used in the Scenario.....	69
7	List of Retailers Used in the Scenario.....	70
8	Customer Reviews Provided by Bizrate.com.....	74
9	Created Web-page including Customer Reviews on ‘Camera World’	76
10	Proposed Conceptual Model.....	95
11	Final Model.....	99
12	Standardized Path Coefficients and Hypotheses Test Results.....	106
13	Alternative Model for Future Study.....	129

CHAPTER I

INTRODUCTION

The online environment ¹ has dramatically changed not only the way of doing retail business but also the traditional landscape of the retail industry. One of the changes made possible by the online environment is the expansion of the opportunity of retailing (Hoffman and Novak, 1996). The online environment, especially the Internet, enables an individual or an organization to sell without the physical retail assets such as a nationwide chain of stores and salespersons. It is easier for an individual or an organization can take advantage of lower fixed costs and entry barriers for initiating and implementing retailing in an online retailing environment than in a traditional retailing environment. In addition, the online environment has increased considerably the effectiveness of retailing through the richness of information and interactivity (Hoffman and Novak 1996; Hauble and Trifty 2000).

The combination of the lower costs and the higher effectiveness for retail implementation has drastically increased the number of individuals and organizations engaging in retailing in an online environment (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer, and Wood 1997; PricewaterhouseCoopers 2001; Boston Consulting 2002). The fact that the U.S. Census Bureau, at this point, cannot count the number of organizations engaging in online retailing in the U.S. demonstrates that a large number

¹ Online environment is 'Computer-Mediated Environment (CME)' conceptualized as the infrastructure where the individual's or organization's computer is connected to and can interact with each other through a network such as Internet and world-wide web (Hoffman and Novak, 1996).

of organizations engage in online retailing (US Census Bureau, 2003).² If we expand the scope of online retailers from the large-scale organizations to the smaller-scale organizations and the individual entrepreneurs engaged in online retailing, we can easily justify that there are so many retailers that cannot be counted in the current online retailing environment.

The online environment has not only expanded the number of retailers engaged in online retailing but also has rapidly increased the adoption of online shopping by broad consumer segments (Kalakota and Whinston, 1997). A significant number of consumers conduct shopping-related activities, from the pre-purchase information search to completion of order and payment, through online (Alba et al., 1997). More than 51% of U.S. households have Internet access, and 45% of households that have Internet access purchase at least once per year on the Internet (PricewaterhouseCoopers, 2001). In 2004, the estimated sales volume of online retailing was \$69,176 million, which is 14 times greater than that in 1998 (US Census Bureau, 2005). Therefore, we can conclude that the online environment is now a virtual retail mega-marketplace where various activities related to numerous transactions are fulfilled between a large number of consumers and retailers/sellers³.

² US Census Bureau estimates retail e-commerce sales on the basis of the sales volume of total retail trade and the portion of online channels (Internet, extranet, Electronic Data Interchange (EDI) network, electronic mail, or other online systems) sales of all sales estimated in 'Annual Retail Trade Survey' of which the sample is 11,000 of about over two million retailer population in the U.S. due to unavailability and unfeasibility of estimating the number of retailers engaging in online retailing. (See '<http://www.census.gov/mrts/www/data/html/04Q4.html>' and '<http://www.census.gov/eos/www/papers/arts.pdf>').

³ Individual sellers/entrepreneurs as well as organizational retailers are engaging in selling new or used goods and services in an online environment. For example, there is a significant portion of individual sellers who regularly sell used or new goods and services on eBay, one of the largest online marketplaces in the world. In this study, the term retailer represents an organizational retailer, and the

Typical examples of an online marketplace are ‘online shopping malls⁴’, ‘online intermediaries⁵’, and ‘online auctions⁶’, which is the virtual online marketplace connecting numerous retailers to consumers (Timmers 1998; 2000; Smith 2002). In terms of sales revenue in 2000, four of the top 10 companies in the field of online retailing were online marketplaces (Stores, 2000). During the 4th quarter in 2004, the top four companies in terms of the number of unique visitors to the website of all online shopping-related companies were the online marketplaces (Nielson Net Ratings, 2005). eBay, one of the largest online marketplaces in the world, alone explains 24% of the total 2004 U.S. online shopping sales (eBay, 2005).

Online marketplaces not only enable consumers to minimize the time and effort for information processing to choose the right retailer from a great number of retailers (Bakos 1997; Hauble and Trifty 2000; Smith 2002; Srinivasan, Anderson, and Ponnaveolu 2002), but also they enable retailers to be exposed to a great number of consumers with relatively little marketing effort and expenditure (Kalakota and Whinston, 1997; Smith 2001; 2002; Timmers 2000). In addition, an online marketplace connects retailers to consumers through an interactive list of retailers (linked to the retailer’s own website) who have merchandise a consumer wants at the time of the information search.

term seller means an individual who is independently engaging in retailing by regularly selling products or services.

⁴ E.g., AOL shopping (instore.com), shopping.excite.com, shopping.msn.com, shopping.yahoo.com, etc

⁵ E.g., amazon.com (Except CD or books), bizrate.com, cnet.com (cnetshopper), dealtime.com, epinion.com, half.com, mysimon.com, nextag.com, pricegrabber.com, pricescan.com, shopping.com, shopper.com, etc

⁶ E.g., auction.yahoo.com, auctionwatch.com, eBay.com, priceline.com, qxl.com, ubid.com, etc

To consumers, the large number of retailers/sellers in an online retailing environment means a significant increase in information consumers have to process to choose a retailer/seller (Payne, Bettman, and Johnson, 1993). To retailers/sellers (hereafter, just the term, 'retailer' will be used for 'retailer/seller'), the increased number of retailers means intensity of competition and a decrease in the possibility for being included in the consumer's consideration-set (Hauser and Wernerfelt, 1990).

As shown in Figure 1, in the interactive list of retailers from Bizrate.com, one of the well-known online marketplaces in the U.S., all retailers are presented in the same way (i.e., similar size of space, color, and font are used for store description, store name, and the hyperlink to the website, and exactly the same attributes such as base price, tax, shipping cost, status of stock, and the customer reviews on the quality of the retailer are used for retailer information) regardless of brand awareness and company size in the list.

The low marketing costs and the equalness of being presented with the big online retailers in the consumer's pre-purchase deliberation process can be the real benefits for small-scale retailers and the individual sellers whose brands are not strong in terms of consumer's awareness and perceived reliability (Alba et al. 1997; Hauble and Triftly 2000; Smith 2002). For these reasons, the online marketplace is expected to continuously attract more retailers, and so the role of the online marketplace in an online retailing environment continues to grow. For example, in eBay, the number of listings for transactions posted by retailers in 2004 was 750 million, which is 68% compounded annual growth from 1998 (eBay, 2005). It is almost the same as saying everyone in the U.S. has 2.8 listings on eBay.

► The product a consumer want to buy at the time of searching

BizRate shopping search

Log in to your account April 26, 2005

Home | Clothing | Computers | Electronics | Home & Garden | Jewelry | Kids | Toys | Video Games | Store Ratings | All Departments

I'm shopping for in

Home > Computers & Software > Laptop Computers > Sony VAIO A690 1.8 GHz Pentium M 750 Laptop > Compare Prices and Store Ratings

Sony VAIO A690 1.8 GHz Pentium M 750 Laptop
 PC - 100 GB HD - 1 GB RAM - Windows XP Professional - DVD±RW - 17 in - Warranty: 1 Year - Sku: VGN-A690

Overall Product Rating: ★★★★★
 Price Range: \$2,400 to \$3,391 at 30 stores

Compare Prices & Stores
 See Product Details
 Read Reviews (1)
 Write a Review

Not what you're looking for? [Search all departments for "Sony Laptop"](#)

Found at 30 stores

Legend: Outstanding (5 stars), Good (4 stars), Satisfactory (3 stars), Poor (2 stars)

sort by Store Name	sort by Would Ship Again	sort by On Time Delivery	sort by Customer Support	sort by Prod. Met. Expect.	sort by Customer Certified	Additional Info	sort by Base Price	+ Tax & Ship =	sort by Total Price
RadixGear, LLC	★★★★★ Read 100+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock	\$2,761.77	Tax: \$0.00 Free Shipping	\$2,761.77 Go!
Featured Store PC Universe	★★★★★ Read 2,500+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock	\$2,776.01	Tax: \$0.00 Free Shipping	\$2,776.01 Go!
eCOST.com	★★★★★ Read 50,000+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock	\$2,779.95	Tax: \$0.00 Ship: \$20.45	\$2,800.40 Go!
Cost Central	This store is not yet rated. Why? Read reviews in screenshots (Less than 20 reviews)					In Stock	\$2,809.84	Tax: \$0.00 Free Shipping	\$2,809.84 Go!
Featured Store TigerDirect.com TigerDirect	★★★★★ Read 200,000+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock Same day shipping	\$2,799.99	Tax: \$0.00 Ship: \$29.98	\$2,829.97 Go!
B&H Photo-Video	★★★★★ Read 100,000+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock Authorized Dealer	\$2,799.00	Tax: \$0.00 Ship: \$36.33	\$2,835.33 Go!
PC Connection	★★★★★ Read 75,000+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock	\$2,799.00	Tax: \$25.91 Free Shipping	\$3,057.91 Go!
Featured Store circuitcity.com	★★★★★ Read 625,000+ reviews	★★★★★	★★★★★	★★★★★	Customer Certified	In Stock	\$2,799.99	Tax: \$25.00 Free Shipping	\$3,058.99 Go!
EZ Systems	This store is not yet rated. Why? Be the first to review this store					In Stock	\$3,391.00	Tax: \$0.00 Ship: See Store	Check Store for Total Price Go!

Previous 1 2 3

↓

Retailer's name and hyperlink to the website of the retailer

↓

Quality of the retailer rated by other consumers

↓

Retailer's in stock status

↓

Sorted by the lowest total price

Figure 1. An Example of the List of Retailers Provided by an Online Marketplace (Bizrate.com) Retrieved on April 18, 2005, from http://shop.bizrate.com/marketplace/product_info/overview/index_cat_id--462.html

Competing with a great number of retailers in the world of online marketplace is a few mouse clicks away (Srinivasan et al., 2002). According to Kuttner (1998, p. 20), “The Internet is a nearly perfect marketplace, because information is instantaneous and buyers can compare the offerings of sellers worldwide. The result is fierce price competition and vanishing brand loyalty.”

Parasuraman and Zinkhan (2002) also argue that customer loyalty is relatively difficult to maintain on the Internet due to the systematic search function online marketplaces provides with the high level of convenience and ease to transport a consumer to an entirely new shopping site providing better deals. For example, the interactive list of retailers sorted by sales prices facilitates the customer’s switching to competitors and diminishes the advantage of retailers having loyal customers and strong brand awareness (Burke, 2002). Even though customer loyalty formed by a customer’s long-term positive relationship with a retailer has been recognized as a key path to profitability (Reichheld and Sasser 1990; Reichheld 1993), we can speculate that it is harder for retailers to create and take advantage of loyalty if the chance of exposure is limited during the consumer’s pre-purchase deliberation process.

Moreover, even though online retailers are able to succeed in frequently being chosen by customers, it seems to be very difficult for online retailers to develop customer loyalty. According to Noble and Phillips (2004), even though customer relationship management (CRM) has been one of the most frequently mentioned critical success factors for online retailing by both academia and practitioners, there is no strong evidence that customers want to develop loyalty and long-term relationships with

retailers. What we have seen as loyalty in the current online retailing environment may be just the repeated transaction or patronage behavior resulting from the consumer's susceptibility to the low price or the price discount effect created by membership programs such as a loyalty card.

Considering that consumers are able to search and manage the numerous alternatives through an online marketplace, the reason for a consumer to stay loyal to a particular retailer may be weak. Moreover, if consumers really enjoy the advantage of convenience and ease in the pre-purchase deliberation process from a large number of alternatives in an online marketplace⁷, each online marketplace is certain to keep attracting more online retailers into its online marketplace and strengthening the convenient and ease functions for consumer's pre-purchase deliberation process. In these chain-reactions, we can certainly expect that the possibility of a retailer's being exposed to consumers, included in the consideration-set of consumers, and chosen by consumers keeps decreasing in consumer's pre-purchase deliberation process.

Therefore, in the current online retailing environment, especially in an online marketplace, an essential strategic advantage for retailers is to be frequently exposed to consumers, given attention to by consumers and included in the consumer's pre-purchase deliberation process rather than to satisfy customers through the entire purchase experience or develop customer loyalty in the long-term.

⁷ According to David Lewis Consultancy, one of the leading consumer & marketing research firms, 71% of the U.S. adults believe new technology, especially the Internet, not only increases the convenience and ease of comparison for product/service provider choice but also reduces the 'stress of choice' caused by a huge number of alternatives in the market (David Lewis & Daren Bridger (2000). *The Soul of the New Consumers: What We Buy and Why in the New Economy*. Nicholas Brealey Publishing, London)

To develop this strategic advantage, retailers should thoroughly understand what factors lead to the greater possibility of being exposed to consumers, given attention to by consumers, and included in the consumers' pre-purchase deliberation process in an online marketplace context. In addition, retailers should understand how these factors interact with each other and impact consumers' final retailer choice (or intention to transact with a retailer) in an online marketplace context.

To determine these factors, a model of consumer pre-purchase deliberation process for retailer choice in an online marketplace should be developed. In developing the model, the final consequence of the model should be determined. Since this model is to express the consumer's pre-purchase deliberation process for retailer choice, the consequence should be the final outcome from the pre-purchase deliberation process, which is 'intention' or 'intention to purchase' (Nicosia 1966; Howard and Sheth 1969; Engel and Blackwell 1986). Therefore, the consequence of this model is 'Intention to Transact with a Retailer'.

The type of antecedents as well as the number of antecedents of the consequence, 'intention to transact with a retailer', may vary by research purpose and research scope. In the field of cognitive or information science, consumers' characteristics (e.g., technological readiness) and search behaviors (e.g., human to computer interactions) have been mainly investigated as antecedents. However, in the fields of retailing, consumer behavior, and marketing research, one evident stream of research has used quality of the retailers as antecedents to customer attitude toward retailers or intention to purchase from retailers in their explorations, investigations, and models (Oliver 1996; Wolfinbarger and Gilly 2003).

Another antecedent currently included in online retailing research is the electronically published word-of-mouth (WOM) information (Schindler and Bickert 2002; Senecal and Nantel 2004). Even though word-of-mouth has been frequently investigated as the consequence of an attitude or intention in many consumer behavior studies, the role as an antecedent to attitude or intention has been limited. However, as the rapid increase of the availability of electronically published word-of-mouth information, especially provided by online marketplaces, the demand for investigating the role of electronically published word-of-mouth information as an antecedent to attitude and intention in the pre-purchase deliberation process has also increased (Schiffman and Kanuk 2000; Schindler and Bickert 2002).

Adapting common concepts and variables of the major consumer pre-purchase deliberation process models and considering that the context of this study is an ‘online marketplace’, the model of this study uses Extrinsic Quality of the Retailer⁸, ‘Intrinsic Quality of the Retailer⁹’, ‘Reputation of the Retailer¹⁰’, and ‘Attitude toward the Retailer’ as the antecedents (constructs).

The model for this study will be established by investigating causal relationships among the above constructs (causal relationships among antecedents as well as causal relationships between antecedents and the consequence). In addition, in the course of developing the model, representative attributes for each conceptualized construct are theoretically and empirically explored.

⁸ This is not the objective quality but the consumer’s perceived subjective quality

⁹ This is not the objective quality but the consumer’s perceived subjective quality

¹⁰ Electronically published reviews or opinions on a specific retailer by other consumers who already experienced a transaction or shopping with the specific retailer. This concept corresponds to the word-of-mouth in existing consumer behavior theories

Research Objectives

The ultimate purpose of this study is to explore the opportunity for strategic advantage to retailers doing business through online marketplaces. Following the rationale of this study discussed in the 'Introduction', the probability of a retailer being chosen by the consumer as a final transaction partner may be significantly limited in an online marketplace, compared to that of a traditional retailing environment. This is mainly because there are a great number of retailers in an online marketplace where consumers have a high level of convenience and ease of finding them in the pre-purchase deliberation process with the assistance of electronic decision aids (Alba et al. 1997; Hauble and Triftly 2000; Smith 2002).

Therefore, to strengthen the strategic position of retailers in an online marketplace, it is essential to understand what factors lead to the greater possibility of being exposed to consumers, given attention to by consumers, and included in the consumers' pre-purchase deliberation process in an online marketplace context. Investigating what factors interact and impact the consumer's final retailer choice decision (or intention to transact with a retailer) in an online marketplace is the main objective of this study.

While it has been hypothesized that consumers' decision process and shopping behavior online may be fundamentally different from behaviors in traditional retail settings (Alba et al. 1997; Winer, Deighton, Gupta, Johnson, Mellers, Morwitz, O'Guinn, Rangaswamy, and Sawyer 1997), theorizing about the nature of these

differences has been limited (Hauble and Triftly 2000; Zeithaml et al. 2002). The pre-purchase deliberation process, which plays a critical role in the success of a retailer in an online marketplace, has not been the main area of examination of many previous studies related to the development of consumer behavior models in an online shopping context. Rather than the pre-purchase deliberation process, many previous studies have examined the entire customer experience from motivation to after-purchase satisfaction to long-term loyalty (Wolfenbarger and Gilly, 2003), which is hard for a retailer to consider and create in an online marketplace (Parasuraman and Zinkhan 2002; Noble and Philips 2004).

The majority of previous studies do not effectively reflect the distinguished characteristics of the online marketplace such as interactive information search and decision aids (e.g., the interactive list of retailers filtered by customer's request) and the very large number of retailers in an online marketplace. Even though several studies took interactive decision aids of the online marketplace into account for developing a consumer choice model, almost all of them are not about the choice of retailer but about the choice of the product with the help of the interactive decision-aids on the Internet (Alba et al. 1997; Hauble and Triftly 2000; Diehl, Kornish, and Lynch 2003). Furthermore, no systematic research is known to investigate the consumer's behavior for devising retailer strategy in an online marketplace context in spite of the growing importance of online marketplaces in the online retailing environment.

Considering the above-mentioned interests of this study and the inadequacy of previous relevant studies, the fundamental and academic objective of this study is 'to

develop a model of consumer's pre-purchase deliberation process in an online marketplace'.

Many of the currently published research efforts fail to adequately define important constructs; rather, the tendency has been for researchers to develop a list of attributes and then to show that these attributes are related to some outcome measure such as customer satisfaction (Wolfenbarger and Gilly, 2003). Therefore, under the above fundamental objective, exploring the representative attributes for each conceptualized construct ('Extrinsic Quality of the Retailer', 'Intrinsic Quality of the Retailer', 'Reputation of the Retailer', 'Attitude toward the Retailer', and 'Intention to Transact with the Retailer') in the consumer's pre-purchase deliberation process in an online marketplace is another objective of this study.

Considering that a website may represent both the brand and the physical store, customer's perceived quality of the retailer depends, first, on the website's performance (that is, its usefulness) and, secondly, on the service quality beyond the website (Khanh and Jay, 2002). For example, a consumer may have to speculate or infer the intangible quality (e.g., 'reliability' of the retailer/seller) only on the basis of a tangible quality of the retailer (e.g., 'design' or 'information' on the website of the retailer), if a consumer has no prior transaction experience with the retailer, which is a frequent situation in an online marketplace (Degeratu, Rangaswamy, and Jianan, 2000).

Limited research has tried to investigate and establish the causal order among the antecedents (constructs) in consumer's online shopping behavior models. Also, investigating the causal order among the constructs (or dimensions), which may represent different aspects of quality of the retailer, has not been done in major

published research. Therefore, examining the causal relationships among constructs (causal relationships among antecedents as well as causal relationships between antecedents and consequence) is the final objective of this study.

Theoretical Framework

The main purpose of this study is to develop a model of consumer's pre-purchase deliberation process for selecting a retailer in an online marketplace. Therefore, the theoretical framework for this study is adapted and applied from 'consumer pre-purchase decision steps' in the major consumer decision process models, such as Nicosia (1966), Howard-Sheth (1969), and Engel-Kollat-Blackwell (1986) Model, within the context of an online marketplace.

The major antecedents (constructs) adapted for this study are 'Extrinsic Quality of the Retailer' (adapted from '*Stimuli*' in Engel-Kollat-Blackwell (1986) and Howard-Sheth (1969), and '*Message about firm's attribute*' in Nicosia (1966) model), 'Intrinsic Quality of the Retailer' (adapted from '*Stimuli*' in Engel-Kollat-Blackwell and Howard-Sheth, and '*Firm's attribute*' in Nicosia (1966) model), 'Reputation of the Retailer' (adapted from '*Reference group opinion as a social stimuli or influence*' in Engel-Kollat-Blackwell and Howard-Sheth, and the influence of '*Word-of-mouth information from external search*' in Nicosia), and 'Attitude Toward the Retailer' (adapted from '*Attitude*' in all three models). The final consequence (construct) of the model of this

study is ‘Intention to Transact with the retailer’ (adapted from ‘*Intention*’ in Engel-Kollat-Blackwell and Howard-Sheth, and ‘*Motivation*¹¹’ in Nicosia)

Both ‘Extrinsic Quality of the Retailer’ and ‘Intrinsic Quality of the Retailer’ constructs are conceptualized as ‘quality of the website’ and ‘quality of the online retailer’. The ‘Reputation of the Retailer’ construct is conceptualized as the impact of ‘word of mouth’ information and ‘reference group opinion’ on the pre-purchase deliberation process in an online retailing environment. Based on the above summary, the theoretical framework (Model) of this study is structured as follows (Figure 2):

Concepts and Definitions

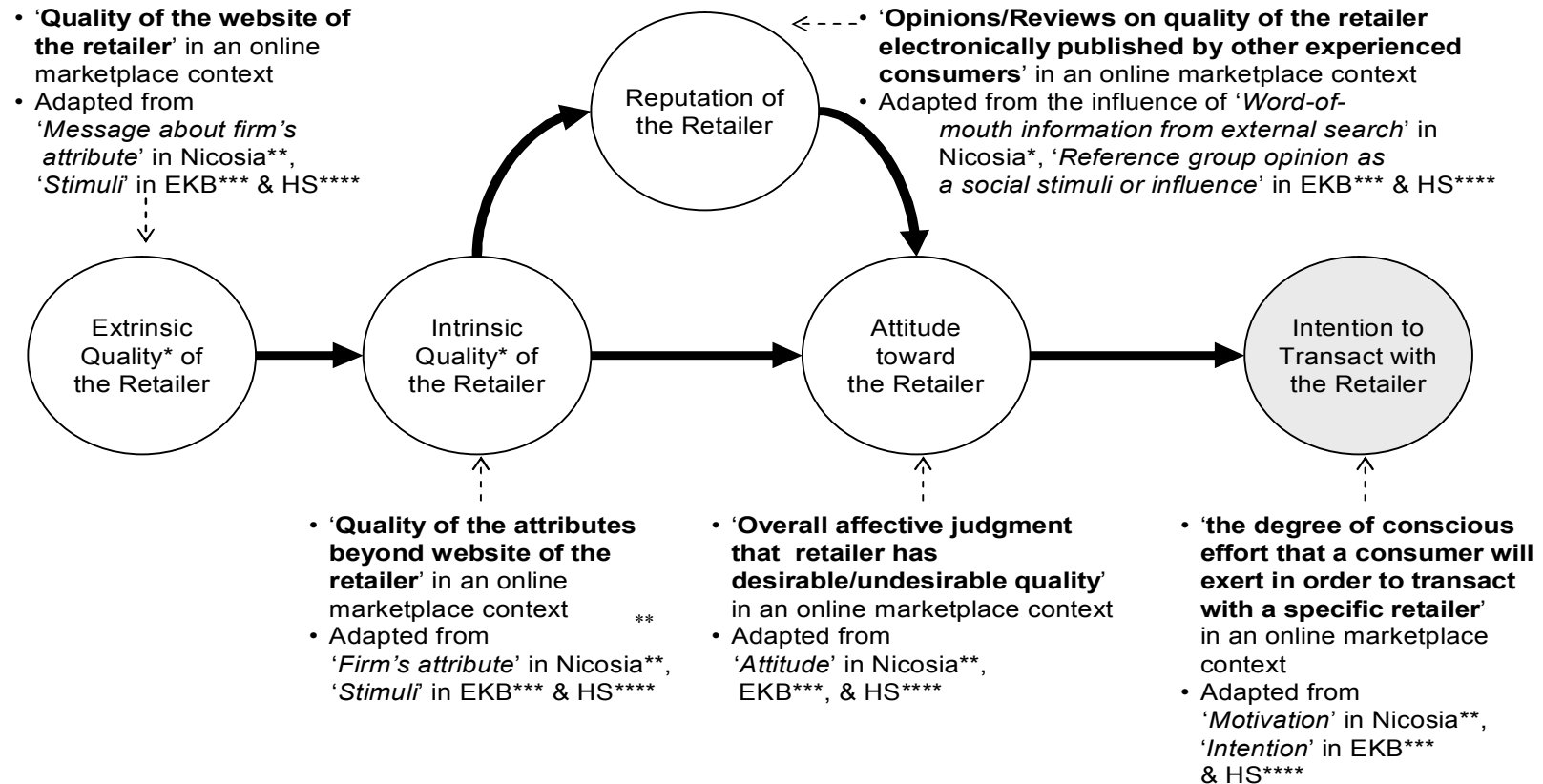
The major constructs in the model of this study are ‘Extrinsic Quality of the Retailer’, ‘Intrinsic Quality of the Retailer’, ‘Reputation of the Retailer’, ‘Attitude toward the Retailer’, and the ‘Intention to Transact with the Retailer’. All constructs are conceptualized in the context of an online marketplace and defined as follows.

Extrinsic Quality of the Retailer

Oliver (1996) defined quality as the “Consumer’s cognitive and perceived excellence or ideals of performance of attributes or dimensions, which is specific to characteristics defining quality” (p28).

¹¹ In the Nicosia model (1966), motivation toward a specific brand is defined as “the more specific, differentiated, and higher in action orientation transformed from attitude toward the specific brand” (p178)

Context: Online marketplace



* Extrinsic and intrinsic Quality is 'consumer's perceived quality

** Nicosia Model (1966) ***Engel-Kollat-Blackwell Model (1986) **** Howard-Sheth Model (1969)

Figure 2. Theoretical Framework (Model) of This Study

Zeithaml et al. (2002) defined the quality of the online retailer as “the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery of products and services” (p 363). Founded on the above definitions, this study defines ‘Quality of the Retailer’ in an online marketplace as ‘consumer’s perceived excellence of performance of attributes related to the website (tangible) and retail business operation (intangible) of a retailer linked from the online marketplace.

In accordance with the above definition of quality of the retailer, ‘Extrinsic Quality of the Retailer’ is defined as ‘consumer’s perceived excellence of performance of attributes related to the website (tangible attributes) of the retailer linked from the online marketplace’

Intrinsic Quality of the Retailer

This study uses two concepts within the quality concept for the purpose of examining causal relationships. In accordance with the above definition of quality of the retailer ‘Intrinsic Quality of the Retailer’ is defined as ‘consumer’s perceived excellence of performance of attributes of retail business operation (intangible attributes) of a retailer linked from the online marketplace’. That is, the intangible attributes related to the retail business operation beyond the website of a retailer that a consumer has to speculate based on tangible attributes identified in the website of the retailer.

Reputation of Extrinsic Quality of the Retailer

Brown, Barry, Dacin, and Gunst's (2005) definition of 'electronically posted word-of-mouth', which includes any information about a target object (e.g., company, brand, or product) transferred from one individual to another either in person or via some electronic communication medium (p125), can be applied to the definition of 'Reputation of the Retailer' in this study. 'Reputation of Extrinsic Quality of the Retailer' is defined as 'reviews, opinions, or comments of extrinsic quality of a specific retailer electronically posted in the online marketplace by other consumers who have transaction experience with the specific retailer'.

Reputation of Intrinsic Quality of the Retailer

In accordance with the above definition of reputation of extrinsic quality of the retailer, 'Reputation of Intrinsic Quality of the Retailer' is defined as 'opinions, reviews, or comments of intrinsic quality of a specific retailer electronically posted by other consumers who already experienced the transaction with the specific retailer in an online marketplace'.

Attitude toward the Retailer

According to Oliver (1996), "attitude is an overall affect-like judgment that an object has desirable or undesirable properties. The judgment takes the form of liking or disliking and is based on many separate evaluations of the object's attributes. So, the attitude resulted from deliberate processing of the object's information". (p27). Based

on the theoretical framework of this study, a consumer may form an overall affective (i.e., *like* or *dislike*) judgment toward the retailer based on cognitive information processing such as perception of the specific qualities of the retailer or referring to opinions of other consumers about the retailer (Cohen and Areni, 1991). Therefore, ‘Attitude toward the Retailer’ is defined as ‘a consumer’s overall affective judgment that an online retailer has desirable or undesirable qualities’. Oliver (1996) defined ‘desirable quality’ more specifically as excellence and so preferred quality. Thus, more specifically, Attitude toward the Retailer is defined as ‘a consumer’s overall affective judgment that the quality of an online retailer is excellent for transaction through the online marketplace’.

Intention to Transact with the Retailer

According to Ajzen (1985; 1991), intention represents a motivational component of a behavior, that is, the degree of conscious effort that a person will exert in order to perform a behavior. Fishbein and Ajzen (1975) suggested that intention resulted from attitude or a subjective norm. Based on these definitions, this study defines ‘Intention to Transact with the Retailer’ as ‘the degree of conscious effort that a consumer will exert in order to transact with a specific retailer’.

Contributions of Study

By achieving the objectives, this study expects to contribute to strengthening the managerial as well as academic implications for online retailing management.

Even though there is a research stream exploring the consumer's perceived quality of an online retailer and to develop a consumer online retailer choice model where consumer's perceived quality plays a significant antecedent, the majority of the previous research seems to apply the theoretical framework of the quality of the retailers or even products existing in the context of traditional retailing (in other words, offline retailing) into their research about online retailers. A significant amount of research failed to theorize the nature of differences between online and traditional (offline) retailing and also failed to apply those differences into the development of new online-specific consumer decision process or choice behavior models, even though they hypothesized that consumers' decision process and shopping behavior in an online environment may be fundamentally different from those in traditional retail settings (Alba et al. 1997; Winer et al. 1997; Hauble and Triftly 2000; Zeithaml, Parasuraman, and Malhotra 2000; 2002). For example, the online retailing environment's technological advances making consumer's decision process (such as information search, evaluation, and choice) effective, easy, and convenient are not effectively reflected in the development of constructs and models (Srinivasan et al. 2002; Zeithaml 2002; Wolfinbarger and Gilly 2003).

The characteristics of an online marketplace, one of the fastest growing methods of online retailing, have not been reflected in the previous online retailing studies, in spite of its impact on consumer pre-purchase deliberation process for online shopping (Hauble and Triftly 2000; Varadarajan and Manjit 2002).

Taking the major objectives and the reasons of this study, discussed in the 'Introduction' and 'Theoretical Framework' section, into account, this study is expected

to contribute to narrowing the gaps between the realities of online retailing and the conceptual/theoretical frameworks and models in the academic area of online consumer decision process and behavior research.

Result from examining the role of word-of-mouth in an online marketplace context is another contribution of this study. The growing presence of the Internet marketplace is expanding the availability and importance of word of mouth (WOM) in a consumer's decision process (Kwak, Zinkhan, and Pitt 2001; Pitt, Berthon, Watson, Zinkhan 2002; Zinkhan, Kwak, Morrison, and Peters 2003). However, few studies have examined the roles and antecedents/consequence of word-of-mouth in a consumer's decision process in an online retailing context (Brown et al., 2005). Especially, the word-of-mouth construct has mostly been investigated as the consequence of satisfaction or loyalty in the consumer's after-purchase behaviors, instead of the antecedent to attitude or intention in the consumer's pre-purchase deliberation process¹² (Andersen, 1998). Since this study investigates the mediating role of the 'Reputation of the Retailer' between consumer's own perceived quality and the attitude toward the retailer, the results from this investigation may contribute to empirical research related to the role of word-of-mouth in consumer's pre-purchase deliberation process in an online marketplace.

¹² According to Brown (2005), "In 1967, Arndt noted that the process and causal mechanisms of word-of-mouth advertising have not really been given much attention. More than 30 years later, Anderson commenting on the field, once again noted that the antecedents of word of mouth have seldom received direct attention" (p. 124).

Related to managerial implications for online retailers, the results from this study may strengthen the strategic advantage and positions of the online retailers. Based on this problem, this study assumes that an essential strategic advantage of retailers in an online marketplace should be more frequent exposure to consumers during the consumer's pre-purchase deliberation process rather than developing the customer's long-term commitment or loyalty to an online retailer.

This assumption leads this study to investigate what factors (especially quality and reputation) related to online retailers in an online marketplace strengthen the possibility of being exposed to and chosen by consumers. Therefore, the results and implications from this investigation may increase the possibility of retailers' being exposed to and chosen by consumers, and so strengthen the strategic position and advantage of a retailer in an online marketplace.

CHAPTER II

REVIEW OF LITERATURE

The review of literature is divided into three sections. The first section introduces and describes the concepts and distinguished characteristics of an online marketplace, and discusses the importance and influence of these concepts in an online retailing environment. The second section discusses consumer's pre-purchase deliberation process models, and deals with the roles of and relationships among major constructs (antecedents and consequence) within consumer pre-purchase decision process models. The third section summarizes and compares attributes and concepts of quality of the online retailer from previous studies. The final section discusses the conceptual framework (model) and the hypotheses.

Online Marketplace

Concepts and Definition of an Online Marketplace

The term, online marketplace, has been continuously refined toward more business model concepts (Timmers 1998; 2000). At the first stage of conceptualization, an online marketplace was regarded as all types of electronic marketplaces including Electronic Data Exchange (EDI) (Timmers 2000; Varadarajan and Manjit 2002).

As the Internet age emerged, the Internet became the key aspect of an online marketplace. Hoffman and Novak (1996) argued that the Internet in itself, a rapidly expanding global computer and communications infrastructure and so called Computer-Mediated Environments (CME), is the online marketplace, because the Internet serves as the marketplace for buyers and sellers. Bakos (1991) defined the online marketplace as “an inter-organizational information system that allows participating buyers and sellers to exchange information about prices and product offerings” (p. 296).

However, Varadarajan and Manjit (2002) argued that an online marketplace not only allows sellers and buyers to exchange information about prices and product offerings but also facilitates the transactions and other activities related to before/during/after transactions. In addition, they insisted that an online marketplace is not limited to an inter-organizational information system but a networked information system or virtual space any sellers and buyers can participate in and join. So, they re-defined an online marketplace as “a networked information system that serves as an enabling infrastructure for buyers and sellers to exchange information, transact, and perform other activities related to the transaction before, during, and after the transaction” (p297).

Technically, an online marketplace can accommodate and serve all types of exchange from ‘Business to Business (B2B)’ exchanges, ‘Business to Consumer (B2C)’ exchanges, and ‘Consumer to Consumer (C2C) exchanges’. However, nowadays, C2C is similarly dealt with B2C, because an individual consumer engaging in selling

activities can be regarded as a seller engaging in retailing (IDC 2002¹³; McKinsey 2002; eBay 2005). Considering the context of this study is online retailing, the focus is on B2C/C2C online marketplace.

A B2C/C2C online marketplace is a networked information system¹⁴ of third party merchant agents (sometimes categorized as ‘consumer information providers’¹⁵), online mall operators, or online auction providers (for the corresponding example of companies or URL of website to each business model, see footnote 4~6 p3).

Even though there are slight differences, both of them do not merchandise or sell by themselves directly to consumers. Instead, they connect an organizational retailer or an individual seller to a consumer by providing product/price information for the retailer’s merchandise, retailer’s information, reputation of the retailer (evaluated opinions on quality of the retailer by experienced customers), and a hyperlink to the website of the retailer (Reibstein, 2002).

For example, eBay, the largest B2C/C2C online marketplace in the world in terms of both transaction volume and the number of registered users (eBay, 2005), provides the online space (i.e., information systems) where buyers and sellers can exchange or transact with each other rather than selling its own merchandise.

¹³ IDC concluded that the online auction is, in essence, the same as an online shopping mall or agent. For example, HP and DELL currently sell their PCs to consumers via eBay. They also sell their PCs in their brand e-stores (e.g., DELL laptop store in yahoo shopping mall) in an online shopping mall (IDC (2002). HP on eBay: HP Dips a Toe in the Auction. IDC)

¹⁴ Website is just a part of the networked information system. The role of the website is to provide the visual interface allowing the sellers and buyers to read information in information system and to process the communications with information system or others in network.

¹⁵ See Alexa.com online shopping site classification (<http://www.alexa.com/browse?&CategoryID=192>)

An online marketplace also provides various value-added functions¹⁶ facilitating the transactions between retailers and consumers.

Characteristics of an Online Marketplace

An online marketplace performs essentially the same functions as a physical marketplace does - brings buyers and sellers together. While they both share this important common purpose, online and physical marketplaces do have certain distinguishing characteristics. The most salient difference, of course, is that the enabling infrastructure is electronic rather than physical. This difference, in turn, leads to a number of other differences that are worth mentioning.

Electronically enabled 'Many to Many' exchange/communications

Unlike the independent online front-store of a company, an online marketplace facilitates both numerous sellers and consumers (buyers) to participate in transactions (exchanges) or in other value-added activities related to transactions. In addition, unlike the traditional markets, there is little physical barrier for participants (both sellers and consumers) to participate in transactions. Thus, a consumer's alternatives for choice are broader than in any other form of market.

Furthermore, as seen on eBay, a consumer is able to play the role of a seller whenever he/she wants to sell his/her goods. For these reasons, online marketplaces

¹⁶ Search/Browse/Navigate by product/seller, seller/buyer reputation information, communication tools between seller and buyer, security/regulation of transaction, payment processing/brokering, seller-assistance services, etc (eBay, 2005)

contribute to a dramatic increase in the number of retailers and the sales volume of transactions online (Kalakota and Whinston 1997; Timmers 2000; eBay 2005)

Information richness and real-time interactivity for pre-purchase deliberation

Varadarajan and Manjit (2002) reviewed extant work in the area and defined interactivity in the online marketplace as “the degree to which computer-mediated communication between entities/individuals comprising the marketplace is (a) bidirectional, (b) timely, (c) mutually controllable, and (d) responsive” (p. 6). Hoffman and Novak (1996) also argued that real-time interactivity enables a consumer to experience the vividness and tele-presence, which makes it possible to overcome the physical and psychological spatiality from others (retailers).

From the consumer’s experiential point of view, every step in an online marketplace needs interactivity between the consumer and the information system (database), consumer and retailer, or consumer and consumer. Thus, the consumer may significantly reduce the time and effort (cost) for information search and evaluation by the interactivity the online marketplace provides. As indicated in the definition of Varadarajan and Manjit (2002), timely, mutually controllable, and responsive interactivity certainly strengthens the convenience, ease, and quality of the consumer’s pre-purchase deliberation process.

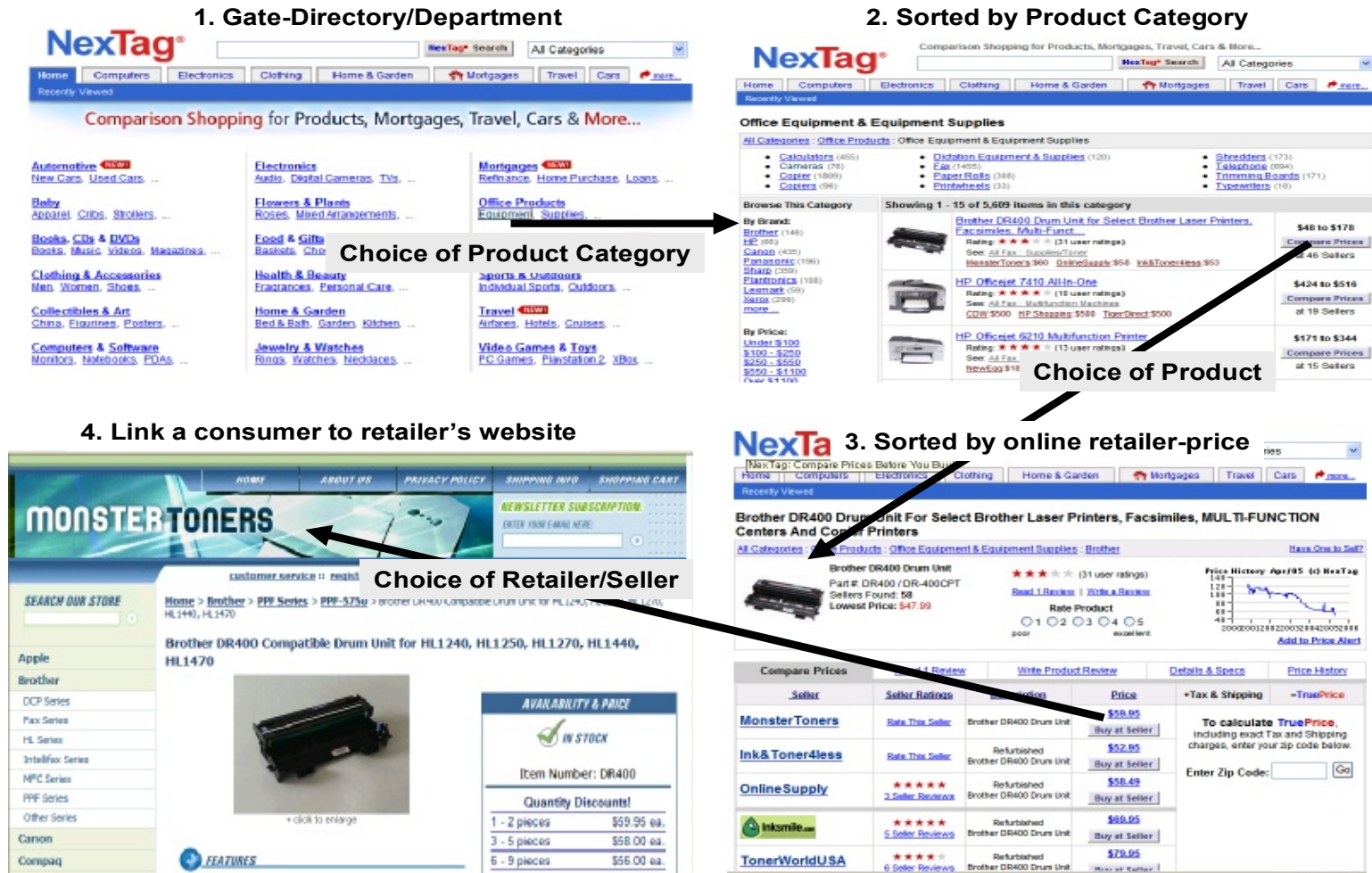
Moreover, since almost all information search and evaluation steps are processed in the pre-purchase deliberation process, an online marketplace contributes to increasing the effectiveness of the consumer’s pre-purchase deliberation process. Information may be also significantly increased by the interactivity, because the

outcome of interactive search and communication can produce the customization of existing information as well as new information for the consumer's pre-purchase deliberation process. With technological advances currently occurring in the realm of high-speed connectivity, even higher levels of interactivity can be envisioned in the future (Cairncross, 1997).

Merchant (Retailer) brokering agent

Most consumers using an online marketplace are reported to (1) find/seek the best deal, (2) narrow down a set of product features to a brand, or (3) narrow down a set of products under the same manufacturer brand to a specific model (Smith, 2002). For any of these three purposes, consumers ultimately have to face the step of selecting a retailer from multiple alternatives recommended in the interactive list an online marketplace provides (Smith, 2002), as shown in Figure3.

Therefore, consumers take advantage of the high-level of availability of alternatives, the high-level of convenience, and the low cost for the retailer search and choice (Bakos 1997; Smith 2002). Consequently, retailers find it hard to create loyalty from customers, and even harder to be exposed to consumers in an online marketplace (Kuttner1998; Burke 2002; Parasuraman and Zinkhan 2002; Srinivasan et al. 2002).



Quality of the Online Retailer: Attributes and Dimensions

Quality of the retailer is an important concept and construct in the model of consumer's pre-purchase deliberation process, because this construct not only initiates the consumer's information processing for the retailer choice but also explains a significant portion of the types and characteristics of information a consumer processes in the pre-purchase deliberation process (Nicosia 1966; Zeithmal, Parasuraman, and Berry 1988; Oliver 1996).

Furthermore, the quality construct is a kind of grand construct, which might be composed of several dimensions (sub-constructs), which are also composed of multiple, even numerous attributes (Zeithaml et al. 1988; 1991; 1993; Oliver 1996). Therefore, discussion and investigation about attributes and dimensions of the quality of the online retailer are essential for developing a model of the consumer pre-purchase deliberation process for retailer choice in an online marketplace context.

The one common agreement in academic research regarding the quality of the online retailer is that quality of the online retailer is not uni-dimensional but multi-dimensional (Zeithaml et al. 2002; Wolfinbarger and Gilly 2003). The exploration of the sub-dimensions (sub-constructs) of quality of the online retailer through identifying attributes and examining relationships among attributes of the quality of the online retailer is necessary. In other words, the development of the measurements for sub-dimensions is the first fundamental step for understanding the quality of the online retailer.

Both academic and practical efforts to explore and measure the sub-dimensions of the quality of the online retailer started with capturing what online consumers want from the online retailer (Zeithaml et al., 2002). Bizrate.com is one of the best known online marketplaces in the U.S. Their measurements are based on intercept surveys online purchasers receive immediately after purchase or after product delivery. Bizrate.com includes an overall score for an online retailer, and ratings on the attributes of ease of ordering, product selection, product information, price, on-time delivery, product representation, customer support, privacy policies and shipping and handling (Tam, 2002).

BizRate.com's scale¹⁷ is the most widely cited scale in popular literature. Using consumers as evaluators of sites in diverse categories (e.g., CDs, books, toys, and apparel) after they have made purchases, the scale identifies the strengths and weaknesses of individual sites. The BizRate.com scale has 10 dimensions: 'ease of ordering', 'product selection', 'product information', 'price', 'website performance', 'on-time delivery', 'product representation', 'customer support', 'privacy policies', and 'shipping and handling'. In addition to using customers' perceptions of online retailers along the ten dimensions, BizRate.com researchers also measure the availability of features and service at each retailer's website in terms of the followings:

- Ordering methods (online, e-mail, telephone, fax, toll-free phone)
- Delivery methods (e.g., immediate, priority next day, standard next-day air)
- Payment methods (e.g., American Express, Diners Club)
- Special features (customer information always confidential, customer information confidential by request, live customer help, available 24 hours a

¹⁷ For more detail information, see http://www.bizrate.com/content/ratings_guide.html#12

day, online order-tracking system, online ordering shopping cart, secure ordering/payment, search on site, you must register, gift services, one-click ordering, guaranteed security).

Gomez.com provides an alternative evaluation system that uses researchers rather than consumers to evaluate sites. The company's researchers measure the performance of the site and assign ratings based on whether various criteria are satisfied. Measurement involves direct examination of the Web site, performance monitoring of various pages on the site, pricing transactions, mock transactions (account opening), interaction with customer service representatives, and a questionnaire filled out by each company. The categories measured by Gomez are broadly classified into the following (Gomez.com (Lovett), 2003):

- Ease of use: functionality of the Web site, consistency of design and navigation, smoothness of interactions
- Efficient access to information: signifying back-end integration of data
- Customer confidence: breadth and depth of customer service options, including channels of interactions, promptness and accuracy of e-mail response, privacy policies, guarantees
- Reliability: load times and security
- Years the website or company has been in business
- On-site resources: availability of products, availability of online response to requests, detailed information on each product line
- Relationship services: online help/tutorials, recommendations, personalization of information, reuse of customer information to facilitate future interactions, incentive programs

- Overall cost: total cost of ownership of typical offering baskets, added fees for shipping and handling, minimum balances and interest rates—for financial services companies.

Other online research firms have attempted to measure quality as well. Forrester Research, dot-com-Score Networks, and Jupiter Communications/Media Metrix regularly publish research suggesting various attributes that are related to consumers' ratings of online experiences.

While firms studying the behavior of online shoppers begin to create a picture of attributes that are important to online consumers, they largely do not address the issue of conceptualizing constructs rather than individual attributes (Wolfenbarger and Gilly, 2003). In addition, the validity and reliability of their measures have not been established (Zeithaml et al. 2002; Wolfenbarger and Gilly 2003).

To fill this gap, scholars have attempted to understand what and how customers perceive the quality of the online retailer from the online shopping experience. However, little commonality or agreement exists among the measurements developed for measuring quality of the online retailer important to consumers (Yoo and Donthu 2001; Zeithaml et al. 2002; Wolfenbarger and Gilly 2003).

For example, some measurements focus exclusively on the website interface, while others attempt to measure the consumer's perception formed during the entire purchase experience. Other measurements are developed to predict intention (to return to the online retailer (e.g., Rice, 2002) / to buy from the online retailer (e.g., Loiacono,

Watson, and Goodhue 2002), while others are developed to predict satisfaction or loyalty with an online retailer (e.g., Alpar, 2001).

Thus, the sub-dimensions and the list of attributes found to be important to consumers are varied. However, Wolfinbarger and Gilly (2003) found that there are two kinds of measurements. One is to measure quality of the online retailer within the context of the website, and another is to measure quality of the online retailer within the context of retail business operations.

Extrinsic Quality: Focusing on the Website Attributes

One of the most empirically grounded measurements that focus specifically on the website interface is WebQual™ (Loiacono et al., 2002). Through interviews and surveys, Loiacono et al. identified 12 dimensions of website quality which they claim have sufficient discriminant validity among the sub-constructs: ‘informational fit-to-task’, ‘interactivity’, ‘trust’, ‘response time’, ‘ease of understanding’, ‘intuitive operations’, ‘visual appeal’, ‘innovativeness’, ‘flow/emotional appeal’, ‘consistent image’, ‘online completeness’, and ‘better than alternative channels’. The composite WebQual™ measure significantly correlates with intentions to purchase and intention to revisit the site. However, in their measurements, customer service and fulfillment attributes, which is considered to be one of the key success factors in online retailing, are not included and investigated.

Another scale to measure the tangible attributes in website interface is Yoo and Donthu’s (2001) SITEQUAL. Their findings led to the development of a simplified scale of four dimensions; ease of use, aesthetic design (site creativity with multimedia

and color graphics), processing speed (promptness of online processing and interactive responsiveness to consumer requests) and security of personal and financial information. But, like Loiacono et al.'s WebQual™, attributes related to customer service and fulfillment issues were not included.

Liu and Arnett (2000) surveyed webmasters, asking about factors critical to website success. They found that webmasters believe that information and service quality, system use (including ease of use and privacy), playfulness, and system design quality (including processing speed and balance between security and ease-of-use for payment method) are important for a successful website. However, it should be noted that this study was not from the consumer's point of view; webmasters may or may not know what customers want (Yoo and Donthu 2001; Zeithaml et al. 2002).

Intrinsic Quality: Focusing on Retail Business Operation Attributes

A customer's online buying experience consists of everything in the pre-purchase deliberation process (information search, evaluation, intention, and decision making), transaction, and post-purchase process (delivery, returns, and customer service). Therefore, we can assume that consumer's perceived quality of the online retailer resulted from the entire buying experience with an online retailer.

However, the focus of the majority of researchers studying online retailers has been only on the customer's interface with the website. Moreover, many of the research projects studying the design of the website interface include all kinds of sites, not just online retailers, even though consumers have different motivations for interacting with a news and entertainment website for instance than they do for

shopping online (Wolfenbarger and Gilly, 2003). Hoffman and Novak (1996) argued that most online shoppers are goal-directed rather than experiential, and goal-oriented behaviors may differ from experiential navigation.

Several studies have examined the consumers' entire online buying experience. For example, Szymanski and Hise (2000) suggest that four factors are important in "e-satisfaction": consumer perceptions of 'convenience', 'merchandising (including product offerings and product information)', 'site design', and 'financial security'. However, the measurements of this study just questioned the consumer's general opinion of past-experience with online shopping, compared to an experience of offline traditional shopping. Therefore, this study is not online shopping situation-specific where consumers perceive the quality of the online retailer on the basis of tangible features of the website, so it is not appropriate for understanding consumer's independent judgment of quality of an online retailer from quality of the offline retailers.

Novak, Hoffman, and Yung (2000) measured the customer experience in online environments. They found that a consumer perceives the following attributes in online shopping: 'ease of contact', 'ease of ordering', 'ease of payment', 'ease of returns/cancellation', 'customer support', 'cutting edge', 'variety', 'quality information', 'reliability', 'security', and 'low prices' to be important. However, they focus more on factors leading consumers to a positive experience in online shopping rather than the quality of online retailers. In addition, the sub-dimensions are not structured to examine the possibility of cause and effect among sub-dimensions.

Francis and White (2002) developed the scale measures, "perceived Internet retailing quality" (PIRQUAL). PIRQUAL includes six dimensions: 'web store

functionality’, ‘product attribute description’, ‘ownership conditions (which combines email confirmation and ease of calculating total purchase cost with delivery items related to timing)’, ‘delivery (correct items in good working order)’, ‘customer service’, and ‘security’. The authors use intention to purchase from an online retailer as a consequence, and find that ‘web store functionality’ and ‘ownership conditions’ are the factors most predictive of intention.

Zeithaml et al. (2002)’s e-Service Quality (eSQ) measurement also intends to measure the consumer’s pre and post experience with the website of an online retailer. After several stages of empirical tests, they conceptualize e-SQ as seven sub-dimensions (sub-constructs) under two grand dimensions (constructs): a core e-SQ dimension and a recovery e-SQ dimension. Four sub-dimensions – efficiency, reliability, fulfillment, and privacy – form the core e-SQ dimension that can be used to measure customer perceptions of service quality. Three other dimensions of recovery e-SQ, become salient when online customers run into problems – responsiveness, compensation and contact. Importance of this measurement is that it was developed on the basis of the flow of customer-online retailer interactions in the process of online retailing business. So, eSQ is considered to reflect long-term on-going quality of online retailers more than other measurements. However, the flow of customer-online retailer interactions eSQ reflected is not appropriate for the consumer decision process. So, this model may not be appropriate for understanding the quality of the online retailer in the short-term and the pre-purchase deliberation process context.

Finally, Wolfinbarger and Gilly (2003) suggested that there are four major dimensions consumers perceive as the quality of online retailers: ‘website design’,

‘customer service’, ‘fulfillment/reliability’, and ‘security/privacy’. Their measurements are meaningful, because they refined and screened measurement items used in previous research for developing their own scale, e-Tail Q. In addition, they tested their measurement only with online retailers, while previous research developed measurements on the basis of empirical tests for various types of company websites. However, even though they tried to divide the quality between tangible dimensions related to website interface and intangible dimensions beyond the website in their initial stage of development of measurements, they did not seem to do so in their final measurement. Moreover, even though they indicated that the website is the only clue for consumer’s perception and evaluation of the quality of online retailers, they did not investigate the causal relationships between tangible and intangible dimensions.

Based on above-discussions and presented in Table 1, this study summarizes the structure (consequence / antecedents / implications) of the major studies for conceptualizing dimensions and drawing attributes of the quality of the online retailer. The summary also indicates that, as already suggested by both Zeithaml et al. (2002) and Wolfinbarger and Gilly (2003), there are two major dimensions in the quality of the online retailer.

One quality dimension is the extrinsic/tangible dimension related to ‘Design/Image/Aesthetics’, ‘Layout/Structure’, ‘Features/Functions (e.g., search, customization, or value-added functions)’ and ‘Information’ in/of the website that a consumer can evaluate its degree of excellence at the time of surfing, watching, and experiencing the website. That is, the quality of this extrinsic/tangible dimension is perceived as the excellence of attributes related to the website of the online retailer in

Table 1. Summary of Structure (Antecedents & Consequence) of Major Studies

Study (Year I Authors)		Title of the Model	Website only	Online Retailer only	Pre-purchase only	Defendant Construct(s) (Consequence(s))	Independent Constructs (Antecedents / Dimensions)
Academic							
1996	Dabholkar		YES	NO	N/A	Intention to use	Speed of delivery; ease of use; reliability; enjoyment; control
1999	Chen& Wells		YES	NO	N/A	Attitude toward the site	Entertainment; informativeness; organization
1999	Muylle, Moenaert, & Despontin		YES	NO	N/A	Satisfaction	Info relevancy; info accuracy; info comprehensibility; info comprehensiveness; ease of use; layout; entry guidance; website structure; hyperlink connotation; website speed; language customization; marketplace anchorage
2000	Liu & Arnett		YES	NO	N/A	Website success	Info and service quality; system use; playfulness; system design quality
2000	Montoya-Weiss, Voss, & Grewal		YES	YES	YES	Online channel use	Navigation structure; info content; graphic style
2000	Novak et al.	Flow	NO	NO	N/A	Compelling online experience	Easy to contact; easy ordering; easy payment; easy returns; easy to cancel; quick delivery; customer support; cutting-edge; variety; quality info; reliability; security; low prices
2000	Rice		YES	NO	N/A	Intent to return	Design/technical evaluation; emotional experience
2000	Szymanski & Hise		NO	YES	YES	Satisfaction	Convenience; merchandising; site design; financial security
2000	Yang, Peterson, & Huang		NO	YES	NO	Satisfaction/dissatisfaction	Product cost and availability; customer service; online info systems quality
2001	Alpar		YES	NO	N/A	Satisfaction with website	Ease of use; info content; entertainment; interactivity
2001	Childers et al.		YES	YES	YES	Online shopping attitudes	Navigation; convenience; substitutability of personal examination
2001	Eroglu, Machleit, & Davis		YES	YES	YES	Approach/avoidance	High task relevant info; low task relevant info
2001	Koufaris, Kambil, & LaBarbera		YES	YES	YES	Unplanned purchases; intention to return	Perceived control; shopping enjoyment
2001	Schlosser & Kanfer		YES	YES	YES	Attitudes toward site; intentions to buy	Person interactivity (customer service); machine interactivity (navigation and role playing); traditional marketing content
2001	Yoo & Donthu	SITEQUAL	YES	YES	YES	Overall site quality; attitude toward site; online purchase intention; site loyalty; site equity	Ease of fuse; design; speed; security
2002	Francis& White		NO	YES	NO	Intentions	Webstore functionality; product attribute description; ownership conditions; delivered products; customer service; security
2002	Loiacono et al.	WebQual	YES	YES	YES	Intention to purchase; intention to revisit	Ease of understanding; intuitive operation; information quality; interactivity; trust; response time; visual appeal; innovativeness; flow
2002	Srinivasan et al.	8Cs	NO	YES	NO	Customer loyalty	Customization; contact interactivity; care; community; cultivation; choice; character
2002	Zeithaml et al.	eSQ	NO	YES	NO	Quality	Efficiency; reliability; fulfillment; privacy; customer service (responsiveness; compensation; contact)
2003	Wolfenbarger & Gilly	e-Tail Q	NO	YES	NO	Overall site quality	Website design; Customer service; Fulfillment/reliability; Security/privacy
Commercial							
2005 Bizrate.com		Bizrate.com 10+3 sclae	NO	YES	NO	Repuation of the online retailer	ease of ordering; product selection; product information; price; Web site performance; on-time delivery; product representation; customer support; privacy policies; shipping and handling, diversity of delivery methods; diversity of payment methods, divers
2003 Gomez.com		*evaluated by professionals (not by consumers)	NO	NO	NO	Performance of the website	ease of use; efficient access to information; customer confidence; reliability; years the Web site or company has been in business; on-site resources; relationship services; overall cost

terms of usefulness for transaction by consumers. The excellence of these attributes is mainly represented by the following usefulness to consumers:

- For Design/Image/Aesthetics: ‘Appealing’, ‘Visually good’, ‘Impressive’, ‘Creative’, and ‘Professional’
- For Layout/Structure: ‘Organized’, ‘Easy’, and ‘Convenient’
- For Features/Functions: ‘Available’, ‘Easy’, ‘Convenient’, ‘Effective’, ‘Controllable’, ‘Interactive’, and ‘Helpful/Useful’
- For information: ‘Available’, ‘Enough/Rich/Detailed’, ‘Accurate’, ‘Relevant’, ‘Understandable’, ‘Vivid (by multimedia)’, and ‘Helpful/Useful’

Another quality dimension is the intrinsic/intangible dimension related to reliability of the online retailer in terms of the retail business operation such as ‘Quality of the Merchandise’, ‘Sales Price and Total Cost’, ‘Transaction Process (Order and Payment) and Security Protection’, ‘Privacy Protection’, ‘Fulfillment (delivery) of the transaction’, and ‘Customer Care/Service (return, refund, cancel, technical-support, etc)’, which a consumer is not able to evaluate before the actual experience. Therefore, a customer has to speculate about the likelihood of the excellence of these attributes on the basis of the perceived excellence of extrinsic/tangible attributes and other external information. That is, the quality of this intrinsic/intangible dimension is perceived as the likelihood of the excellence of attributes related to the retail business operation of the online retailer in terms of desirability for transaction by consumers. The excellence of these attributes is mainly represented by the following desirability to consumers:

- For Merchandise/Product: ‘Quality’, ‘Reliable’
- For Price/Costs: ‘Fair’, ‘Reasonable’, ‘Value’, and ‘Worth’
- For Transaction Process and Security Protection: ‘Available/Diverse’ ‘Easy’, ‘Convenient’, ‘Accurate/Reliable’, ‘Controllable’, ‘Speedy’, and ‘Secure’
- For Privacy Protection: ‘Willingness’, ‘Secure’, and ‘Reliable’,
- For Fulfillment: ‘Accurate/Reliable/As-promised’ and ‘Speedy/On-Time’
- For Customer Care/Service: ‘Available’, ‘Easy’, ‘Convenient’, ‘Kind’, and ‘Responsive/Willingness’

Based on the summary of the studies in Table 1, we can confirm that there is no study that tried to investigate the antecedents (attributes and dimensions related to website and beyond website quality of online retailers) to the ‘intention to transact with the online retailer’ focusing on the ‘pre-purchase deliberation process’¹⁸, which may dominate the success and failure of online retailers in the current online marketplace, where the possibility of an online retailer’s being exposed to consumers, given attention to by consumers, being included in consideration-set, and chosen by consumers in the pre-purchase deliberation process are significantly limited. Furthermore, there is no study that examined the causal relationships among dimensions (between tangible dimensions related to website and intangible dimensions related to retail business operations) of the quality of the online retailer. In addition, there is no study that used ‘Reputation of the Retailer’, which is one of the main information pieces online marketplaces provide to consumers, as an antecedent to consumer’s attitude toward the online retailer.

¹⁸ In Table 1, there is no study showing ‘NO (website attributes only) – YES (online retailer sample only) – YES (pre-purchase deliberation process focus) – Intention to Transact (Dependent Variable)’

Considering the purpose and the theoretical framework of this study, therefore, the distinctive approach and contribution of this study can be justified since there is no existing or established model satisfying all major components, extrinsic and intrinsic quality of the online retailer, in an online marketplace context, and in the pre-purchase deliberation process.

Conceptual Framework of the Pre-purchase Deliberation Process in an Online Marketplace Context

Since the main purpose of this study is to develop a model of consumer's pre-purchase deliberation process for selecting a retailer in an online marketplace context, the theoretical framework is based on 'consumer pre-purchase deliberation process' models and theories.

Mostly, this study focuses on and adapts concepts (constructs) and theories from 'Nicosia Model' (1966), 'Howard-Sheth Model' (1969), and 'Engel-Kollat-Blackwell Model' (1986) for developing a model in an online marketplace context. Among these three models, the Nicosia model plays a more critical role in defining the role of each construct in the consumer's pre-purchase deliberation process model because of the clarity of constructs and fit with an online marketplace context. Therefore, the following discussion is based on and adapted from the above three models, focusing more on the application of the Nicosia model.

Intention to Transact as a Consequence in the Pre-purchase Deliberation Process

The first step to develop a model is to decide the final consequence, because it defines not only the scope and boundary of the model but also the relevant concepts of the antecedents (Osgood, Suci, and Tannenbaum, 1975). Since the model for this study is to describe the consumer's pre-purchase deliberation process for choosing a retailer to transact with, especially in the situation that a consumer has no prior experience, satisfaction, or loyalty with the retailer, the consequence should be the final outcome resulting from the pre-purchase deliberation process, which is the phase right before the actual transaction behavior.

The phase before the actual behavior or action is the 'intention' in both the Howard-Sheth (1969) and Engel-Kollat-Blackwell (1986) models. In the Nicosia (1966) model, it is termed 'motivation'¹⁹, which is the same concept as 'intention' in the other two models (in terms of action-orientation and transformed from an attitude). Therefore, we can conceptualize the consequence in the proposed model of the consumer's pre-purchase deliberation process for retailer choice as the 'Intention to Transact with the Retailer'.

Even though many previous studies related to the development of consumer behavior models in an online environment frequently use 'satisfaction (with an online retailer)', 'intention to re-purchase (from an online retailer)' or 'loyalty (to an online retailer)' as a final consequence in the model (Wolfenbarger and Gilly, 2003), these may not be appropriate consequences in the model for the pre-purchase deliberation process.

¹⁹ In the Nicosia model (1966), motivation toward a specific brand is defined as "the more specific, differentiated, and higher in action orientation transformed from attitude toward the specific brand" (p178)

From previous satisfaction and loyalty models, both emotional and behavioral loyalty can be created only after satisfaction, which is created after one or several purchases and through a significant amount of time and experience bonding to a retailer (Oliver 1980; 1981; Cronin and Taylor 1992; Zeithaml et al. 1996).

Considering the characteristics of an online marketplace, the great number of alternatives of retailers and the high level of convenience and ease consumers may have in the decision process, this study does not investigate the antecedents and their relationships to outcomes through customer's long-term commitment to a retailer (e.g., satisfaction, intention to repeat transaction, or loyalty) but investigates the antecedents and their relationships to the outcome for increasing the possibility of being chosen by a consumer (Burke 2002; Parasuraman and Zinkhan 2002).

In addition, due to a great number of retailers/sellers in an online marketplace, behavioral loyalty, which frequently resulted from a lack of available alternatives (Jocoby and Chestnut, 1978), is also hard to create in an online marketplace. For that reason, 'intention to transact with a retailer/seller' is the most appropriate consequence for a model of pre-purchase deliberation process for choosing the retailer/seller in an online marketplace.

Antecedents in Pre-purchase Deliberation Process Models

The type of antecedents as well as the number of antecedents may vary by research purpose and research scope. Following the agreement of the major consumer pre-purchase deliberation process models (*Engel-Kollat-Blackwell*, *Howard-Sheth*, and *Nicosia* Model), the major antecedents (constructs) to 'intention' are 'Stimuli' (firm or

product attributes and message about firm or product attributes)’ ‘consumer’s attributes such as demographics, psychographics, motives, and lifestyle’, ‘internal search (consumer’s information search from his/her own stored memory)’, ‘external search (consumer’s information search through external information sources such as word-of-mouth channels, advertisements, or promotions)’, ‘reference group influence’, ‘evaluation (compare and evaluate the attributes of the firm or product)’, and ‘attitude toward the firm or product’ (Nicosia 1966; Howard and Sheth 1969; Claxton, Fry, and Portis 1974; Robertson 1974; Bloch, Sherrell, and Ridgeway 1986; Engel et al. 1986; Schiffman and Kanuk 1987; Hoffman and Novak 1996; Oliver 1997).

The proposed conceptual model focuses on investigating object quality (i.e., quality related to the product or retailer) and its relationship with a final outcome of the consumer’s pre-purchase deliberation process (e.g., intention to transact). Thus, the model does not include ‘consumer’s demographics and psychographics’ and ‘motivation’, which is hard to manage by the retailers, as antecedents.

The major antecedents (constructs) that fit in this model of the consumer’s pre-purchase deliberation process in an online marketplace can be summarized as follows:

- Consumer’s perceived ‘Extrinsic Quality of the Retailer’ (adapted from ‘*Stimuli*’ in *Engel-Kollat-Blackwell* (1986) and *Howard-Sheth* (1969), and also adapted from ‘*Message about firm’s attribute*’ in *Nicosia* (1966) model)
- Consumer’s perceived ‘Intrinsic Quality of the Retailer’ (adapted from ‘*Stimuli*’ in *Engel-Kollat-Blackwell* and *Howard-Sheth*, and also adapted from ‘*Firm’s attribute*’ in *Nicosia* model)

- Consumer's perceived 'Reputation of the Retailer' (adapted from the influence of '*Word-of-mouth information from external search*' in Nicosia, and '*Reference group opinion as a social stimuli or influence*' in Engel-Kollat-Blackwell and Howard-Sheth)
- Consumer's 'Attitude Toward the Retailer' (adapted from '*Attitude*' in all three models)

Extrinsic and Intrinsic Quality of the Retailer

From the academic perspective, constructs related to the concept of quality of the retailer are key antecedents in the consumer's pre-purchase deliberation process model in an online marketplace.

From the managerial perspective, the quality of the retailer is considered to be a critical factor for differentiating among competitors in an online marketplace due to the high-level of homogeneous product assortments and merchandising among online retailers (Smith, 2002).

The majority of empirical and theoretical models of consumer's online shopping behavior used 'quality of the retailer' as an initial construct impacting on major consequences (Wolfenbarger and Gilly, 2003). Based on the Nicosia model (1966), the first phase in the consumer decision process is initiated by 'stimuli', which are the firm's organizational attributes. In the other major models, Howard-Sheth (1969) and Engel-Kollat-Blackwell (1986), the quality of the product or service, served as stimuli to initiate the consumer's pre-purchase deliberation process. Based on previous online consumer shopping behavior models and the major consumer pre-purchase deliberation process models (Nicosia 1966; Howard-Sheth 1969; Engel-Kollat-Blackwell 1986), 'quality of the retailer' is the first antecedent (construct) in the proposed model of

consumer's pre-purchase deliberation process for selecting a retailer in an online marketplace.

There is a significant difference between consumer's perceived quality in a traditional retailing environment and consumer's perceived quality in an online marketplace context. Even though the majority of previous studies attempted to dimensionalize the quality of the online retailer into several sub-constructs (e.g., fulfillment, reliability, website design, privacy/security, and customer service), they did not hypothesize the causal relationships among dimensions (sub-constructs) underlying the quality of the online retailer (Zeithaml et al. 2002; Wolfinbarger and Gilly 2003). That is, many previous studies hypothesized that all dimensions are parallel with each other as antecedents to satisfaction or loyalty.

Reibstein (2002) speculated that the qualities related to the retail website initially draw a buyer and the experience with the retail website might motivate consumers to form an opinion about the reliability of the retailer. Since the retail website represents both the brand and the physical store, customer's perceived quality of the retailer depends, first, on the website's performance (that is, its usefulness) and, secondly, on the service quality provided by the retailer during and after purchase (Khanh and Jay, 2002).

Therefore, during the pre-purchase deliberation process, consumers may have to make a decision to select a specific retailer only on the basis of the tangible (i.e., visible or identifiable) attributes of the quality of the specific retailer, in the absence of prior transaction experience with the specific retailer in an online marketplace (Degeratu et al., 2000).

It is highly possible for a consumer to encounter an unknown or unfamiliar retailer in an online marketplace. Therefore, according to Smith and Brynjolfsson (2001), a consumer may infer or speculate on the retailer's likelihood of performing or providing intangible qualities (e.g., reliability, assurance, responsiveness, or empathy²⁰) based on tangible attributes (e.g., website design, website functionality, or information on the website).

Smith (2002) indicated that it is more difficult for online retailers to communicate intangible attributes of quality, such as service quality or reliability than to communicate tangible attributes of quality, such as price or product feature information described in the website. Based on these discussions, quality can be conceptualized and measured in two ways. One is the 'Extrinsic Quality of the Retailer', which is perceived by a consumer mainly from the tangible attributes a consumer encounters through the website of the retailer, and another is the 'Intrinsic Quality of the Retailer', which is perceived by a consumer mainly from intangible attributes a consumer has to speculate or infer on the basis of perceived quality through the website of the retailer (i.e., 'extrinsic quality of the retailer').

The two construct structure ('Extrinsic Quality of the Retailer' and 'Intrinsic Quality of the Retailer') of the 'quality of the online retailer' concept can be justified by the classic models of the consumer decision process.

According to the Nicosia Model, a consumer processes and evaluates a firm's attributes on the basis of the '*message*' a firm delivers through advertisements or

²⁰ Based on the dimensions of the service quality (Zeithmal V.A, Parasuraman A, Berry L.L., (1991) Refinement and Reassessment of the SERVQUAL Scale, Journal of Retailing, Vol 67 (4), 420-450)

promotions (Nicosia, 1966). In the Howard-Sheth model, what a consumer pays attention to at the first stage of the decision process is not the ‘stimuli’ itself but the ‘*displayed stimuli*’ about the quality of the firm or product, before evaluation and attitude (Howard and Sheth, 1969). The Engel-Kollat-Blackwell model shows that a consumer starts to form a perception of the quality of the firm or product based on marketing communications or activities from the firm (Engel and Blackwell, 1986).

In an online marketplace context, the message, the displayed stimuli, and the marketing communication can be regarded as the retailer’s website. So, a consumer, may form a perception of the quality of the retailer’s website, and then infer from that perception other quality dimensions or attributes of the retailer that a consumer cannot cognitively evaluate in the pre-purchase deliberation process. That is, it is highly possible that consumer perceived quality related to the website impacts the consumer’s perceived quality of the retailer.

Therefore, we can expect that there is a causal relationship from the ‘Extrinsic Quality of the Retailer’ to the ‘Intrinsic Quality of the Retailer’ in the consumer’s pre-purchase deliberation process in an online marketplace context.

Reputation of the Retailer

After a consumer’s internal search and evaluation, a consumer starts to seek information (Nicosia, 1966). Information from external sources is typically the opinions of others, such as family, friends, co-workers, or any other word-of-mouth (WOM) channels. An online marketplace typically provides a consumer with

comments or reviews from other consumers about the retailer or the classified rank/class of the retailer, which is termed 'Reputation' (Reibstein, 2002).

The 'Reputation of the Retailer' in an online marketplace refers to 'electronically published reviews, comments, or opinions about the quality of retailers by other experienced consumers', and can be regarded as the construct of word-of-mouth external information source a customer refers to for his/her retailer choice in the pre-purchase deliberation process.

In an online marketplace, one of the advantages related to the consumer's pre-purchase deliberation process is the high-level of availability of other consumers' reviews, comments, or opinions on the retailer a consumer might consider prior to transaction (Alba et al. 1997; Bakos 1997; Hauble & Triftly 2000; Reibstein 2002; Smith 2002; Diehl et al. 2003). In addition, consumers are able to make a retailer choice with significantly less effort and search time than in a traditional retail environment, because the information provided by an online marketplace is more systematic, organized, and manageable than that provided by traditional word-of-mouth channels (Hauble and Triftly 2000; Reibstein 2002; Schindler and Bickart 2002).

Jaideep and Gita (2002) argued that as the availability of word-of-mouth information about the brand increases, the influence of word-of-mouth on attitude toward the brand increases in the consumer's pre-purchase deliberation process. Thus, we can assume that word-of-mouth in an online marketplace, which is the 'Reputation of the Retailer', significantly impacts the 'Attitude toward the retailer' in the consumer's pre-purchase deliberation process.

Brown et al. (2005) found that advice provided by persons who have greater prior experience with certain types of service providers impact the consumer's service provider choice more than advice provided by persons who have limited or no experience. In addition, they found that advice from experienced others significantly lessens the importance of consumer's established brand awareness/loyalty to a service provider, and thus, increases the possibility of consumer's choice of the service provider who has high service quality but has weak consumer brand awareness.

Previous studies (Friedkin 1982; Constant, Sproull, and Kiesler 1997; Schindler and Bickart 2002) found that word-of-mouth information from weak-tie²¹ sources is more persuasive than from strong-tie²² sources for persuading consumers. As already indicated, it is highly possible for a consumer to encounter unknown or unfamiliar retailers suggesting the best deal or value via the list of retailers from an online marketplace. Considering that 'Reputation of the Retailer' is reviews, comments, or opinions published by other anonymous consumers (i.e., people regarded as a weak-tie relationship) in an online marketplace, we can, assume that the 'Reputation of the Retailer' strongly impacts the 'Attitude toward the Retailer' during the consumer's pre-purchase deliberation process in an online marketplace.

Another critical issue is the influence of the outcome of intrinsic search/evaluation on the consumer's interpretation or decoding of external source information (Nicosia, 1966). Consumer's perceived quality is the outcome of cognitive

²¹ Consumers who have no previous relationships or recognition to buyers

²² Consumers with previous relationships or recognition to buyers such as family, friends, or co-workers, etc For more detailed definition of 21 and 22, refer to 'Granovetter, M. S. (1973). The strength of weak-ties. *American Journal of Sociology*, 78, (May), 1360-1380.'

evaluation based on internal search. If a consumer is not able to acquire an overt answer about retailer choice through internal search/evaluation and is confronted with uncertainty about the quality of the retailer. A consumer may try to settle this uncertainty through external search methods such as referring to other experienced consumers' opinions.

External search is completed by a consumer's selective exposure to information (Nicosia, 1966). That is, a consumer selectively searches or refers to information from external sources based on the situation (i.e., the uncertainty of the perceptions) created by internal search/evaluation. Therefore, the perception formed by the internal search/evaluation may impact the intensity of external search, the tendency of interpretation or decoding of information acquired by external search, and the level of application of perception formed by external search in a decision (Nicosia, 1966).

For example, the consumer's perceived quality of the retailer can impact the willingness to search the reputation of the retailer, the interpretation of the reputation of the retailer (i.e., interpretation if other consumers think of the quality of a specific retailer as excellent (positive) or poor (negative) overall), and the level of reflection of reputation of the retailer into the decision for a retailer choice.

'Reputation of the Retailer' is defined as the other consumers' reviews, comments, and opinions about the quality of a retailer in an online marketplace. So, it is suggested that 'Reputation of the Retailer' is composed of reviews, comments, and opinions about the extrinsic and intrinsic quality of the retailer.

Based on this supposition, we can expect that consumer's perception of the extrinsic quality of the retailer impacts the consumer's interpretation of the reputation of

the extrinsic quality of the retailer (i.e., other consumers' reviews, comments, or opinions about the extrinsic quality of the retailer). We can also expect that consumer's perception of the intrinsic quality of the retailer impacts the interpretation of the reputation of the intrinsic quality of the retailer.

In addition, the influence of the consumer's perceived extrinsic quality of the retailer on the interpretation of the reputation of extrinsic quality of the retailer may be greater than that of the consumer's perceived intrinsic quality of the retailer on the interpretation of the reputation of intrinsic quality of the retailer, because the consumer's perceived extrinsic quality is likely to be more solid or firm than the consumer's perceived intrinsic quality of the retailer in an online marketplace²³.

We can also assume that the influence of reputation of the intrinsic quality of the retailer may be greater than that of reputation of extrinsic quality of the retailer on the attitude toward the retailer, because the trustworthy and usefulness of other consumers' reviews, comments, or opinions about the intrinsic quality may be stronger than those about the extrinsic quality in the consumer's pre-purchase deliberation process in an online marketplace²⁴.

In conclusion, it is assumed that the consumer's perceived 'Reputation of the Retailer' mediates between the consumer's perceived quality of the retailer and the

²³ A consumer is likely to pay little attention to others' opinion about the quality of the website of the retailer, because the consumer may have his/her own evaluation based on the attributes of the website of the retailer a consumer can observe and experience in the pre-purchase decision process

²⁴ For example, a consumer is likely to give more weight to others opinions about fulfillment or post-purchase-service of the retailer that a consumer has yet to experience in the pre-purchase decision process than others' opinions about the website design which a consumer is able to observe for him/herself

attitude toward the retailer in the consumer's pre-purchase deliberation process in an online marketplace context.

Attitude toward the Retailer

According to Oliver's (1996) definition, "attitude is an overall affect-like judgment that the object has desirable or undesirable properties. The judgment takes the form of liking or disliking and is based on many separate evaluations of the object's features and attributes. So, the attitude resulted from deliberate processing of object's information". (p27)

Therefore, the attitude toward the retailer is the consumer's overall affective judgment of whether the quality of the retailer is desirable or undesirable for a consumer's final choice for transaction (Cohen and Areni, 1991). As shown in Oliver's definition, the attitude toward the retailer refers to the 'overall' affect-like judgment of the 'quality' of the retailer.

Through perception of attributes of the quality of the retailer, based on the major consumer decision process, a consumer forms an attitude toward the object before intention toward the object. And, according to the 'Theory of Planned Behavior (Ajzen, 1985; 1991)', an attitude is the immediate determinant of intention to perform a behavior. Therefore, we may conclude that attitude toward the retailer impacts the intention to transact with the retailer in the consumer's pre-purchase deliberation process in an online marketplace.

Related to the antecedents to 'Attitude toward the Retailer' in the consumer's pre-purchase deliberation process in an online marketplace, we can suppose there are

two major antecedents. The first antecedent is the 'Intrinsic Quality of the Retailer'. The empirical study of Wolfinbarger and Gilly (2003) found that reliability/fulfillment of the online retailer (i.e., intrinsic quality), shows more influence on the consumer's attitude toward the online retailer than website design (i.e., extrinsic quality). So, it may be speculated that consumer's perceived intrinsic quality may be more appropriate as a direct antecedent to attitude toward the retailer rather than consumer's perceived extrinsic quality.

The second antecedent is the 'Reputation of the Retailer'. Subjective norm, which is the consumer's perception of the extent to which significant referents approve or the perceived pressure by relevant others' opinions in the decision process, has been tested and shown to be a significant predictor of retail patronage intentions, if it is in conjunction with the attitude (Shim, Eastlick, Lotz, and Warrington, 2001). For example, Evans, Christiansen, and Gill (1996) demonstrated that interaction between attitude toward shopping and a subjective norm had a significant effect on shopping center patronage intentions ($R^2 > 60\%$). In the context of electronic shopping, interactions between attitude toward online shopping and normative components accounted for almost one-third of the variation in intention to purchase apparel from online retailers (Shim and Drake, 1990).

Therefore, it may be speculated that the consumer's perceived 'Reputation of the Retailer' impacts the 'Attitude toward the Retailer'. That is, 'Attitude toward the Retailer' mediates between two antecedents, the consumer's perceived 'Intrinsic Quality of the Retailer' and the consumer's perceived 'Reputation of the Retailer', and

the consequence, 'Intention to Transact with the Retailer', in the consumer's pre-purchase deliberation process in an online marketplace.

Hypotheses

The main purpose of this study is to develop a model of consumer's pre-purchase deliberation process for a retailer choice in an online marketplace. Of course, the development of the model involves investigating relationships among major constructs ('Extrinsic Quality of the Retailer', 'Intrinsic Quality of the Retailer', 'Reputation of the Retailer', 'Attitude toward the Retailer', and 'Intention to Transact with the Retailer') in the model.

Online patronage behavior studies use the quality of the retailer as the initiating antecedent impacting attitude or behavior toward the retailer in their models (Zeithaml et al. 2002; Wolfinbarger and Gilly 2003). Considering the purpose of this study and adopting from previous studies, this study also assumes that the 'Quality of the Retailer' initiates consumer's pre-purchase deliberation process and impacts the 'Intention to Transact with the Retailer/Seller' in an online marketplace.

However, Degeratu et al., (2000), Hanson (1999), Mandel & Johnson (2000), Khanh & Jay (2002), and Reibstein (2002) said, there may be causal relationships or orders among the constructs within the quality of the retailer. In other words, the qualities related to the website of the retailer initially draw a buyer and experience with the website might motivate customers to perceive the intangible reliability of the retailer. This study divided the concept, quality of the retailer, into 'Extrinsic Quality of the

Retailer' (i.e., tangible quality a consumer encounters through the website of the retailer) and 'Intrinsic Quality of the Retailer' (i.e., intangible quality beyond a website a consumer has to speculate on or infer based on the 'Extrinsic Quality of the Retailer').

Therefore, this study assumes that the consumer's perceived 'Extrinsic Quality of the Retailer' positively influences the consumer's perceived 'Intrinsic Quality of the Retailer' in an online marketplace.

- n** H₁: The consumer's perceived 'Extrinsic Quality of the Retailer' positively influences the consumer's perceived 'Intrinsic Quality of the Retailer' in an online marketplace

According to major consumer decision process models and Oliver (1996), a consumer may form an attitude toward the retailer, which is the overall affective judgment that the quality of the retailer is excellent for transaction consideration after the perception and evaluation of attributes of the online retailer.

In this study, 'Extrinsic Quality of the Retailer' is defined as perceived excellence of attributes of retailer's website, while 'Intrinsic Quality of the Retailer' is defined as perceived likelihood of excellence of attributes of business operation of the retailer in an online marketplace.

Therefore, an attitude, as a form of overall affective judgment of excellence, is more likely to be the result or outcome of the cognitive evaluation of the 'Intrinsic Quality of the Retailer' rather than 'Extrinsic Quality of the Retailer'. The empirical study of Wolfinbarger and Gilly (2003) also found that fulfillment and reliability of the online retailer, which is an intrinsic and intangible quality related to the retail business

performance beyond a website, shows more impact than extrinsic and tangible attributes related to the website on attitude toward the retailer. Therefore, this study assumes that the consumer's perceived 'Intrinsic Quality of the Retailer' positively influences the consumer's 'Attitude toward the Retailer' in an online marketplace.

- n H₂: The consumer's perceived 'Intrinsic Quality of the Retailer' positively influences the consumer's 'Attitude toward the Retailer' in an online marketplace

Online marketplaces provide other consumers' reviews, comments, or opinions about the quality of the specific retailer, which corresponds to 'word-of-mouth' information in a traditional retail environment (Reibstein, 2002). These electronically published reviews, comments, or opinions by other consumers are termed as 'Reputation of the retailer' in this study.

Reputation of the retailer in online marketplaces is available, systematic, well-organized, and effectively managed, compared to the word-of-mouth information in a traditional (offline) retail environment, and therefore, strongly impacts the consumer's attitude toward the retailer (Alba et al. 1997; Bakos 1997; Hauble and Triftly 2000; Jaideep and Gita 2002; Reibstein 2002; Smith 2002; Diehl et al. 2003).

In addition, opinions of anonymous but experienced others, so-called a weak-tie network, are more persuasive to consumers in the decision for shopping than opinions of family or friends (Friedkin 1982; Constant et al. 1997; Schindler and Bickart 2002). Therefore, this study assumes that the consumer's perceived 'Reputation of the Retailer'

positively influences the consumer's 'Attitude toward the Retailer' in an online marketplace.

A consumer may start to selectively search and refer to information from the external sources, such as opinions of others, if a consumer experiences difficulty, uncertainty, or disequilibrium in the quality of the retailer based on internal search and evaluation (Nicosia, 1966). So, it is possible that the consumer's perceived quality of the retailer, which is formed by internal search and evaluation, influences the interpretation of other consumers' opinions and the level of reflection of other consumers' opinions to a consumer's overall and final attitude toward a retailer in an online marketplace.

Therefore, this study assumes that the consumer's perceived 'Quality of the Retailer' positively influences the consumer's perceived 'Reputation of the Retailer'. In summary, the consumer's perceived 'Reputation of the Retailer' is not only influenced by the consumer's perceived 'Quality of the Retailer', but also impacts the consumer's 'Attitude toward the Retailer' in an online marketplace. So, this study assumes that the consumer's perceived 'Reputation of the Retailer' mediates between the consumer's perceived 'Quality of the Retailer' and the consumer's 'Attitude toward the Retailer'.

However, this study divides the quality of the retailer into 'Extrinsic' and 'Intrinsic' quality of the retailer. So, this division enables this study to develop more specific hypotheses. In the above, this study assumes that the consumer's perceived quality of the retailer positively influences the consumer's perceived reputation of the retailer.

Therefore, it is speculated that the consumer's perceived 'Extrinsic Quality of the Retailer' positively impacts the consumer's perceived 'Reputation related to the extrinsic quality of the Retailer' (A).

In the like manner, the consumer's perceived 'Intrinsic Quality of the Retailer' can be speculated to positively impact the consumer's perceived 'Reputation related to intrinsic quality of the Retailer' (B).

Between causal relationships (A) and (B), this study assumes that (A) is stronger than (B), because the consumer's perceived extrinsic quality of the retailer can be more obvious and stronger than consumer's perceived intrinsic quality of the retailer.

- n** H_{3a}: Consumer's perceived 'Extrinsic Quality of the Retailer' positively influences consumer's perceived 'Reputation of the extrinsic quality of the Retailer' in an online marketplace
- n** H_{3b}: Consumer's perceived 'Intrinsic Quality of the Retailer' positively influences consumer's perceived 'Reputation of the intrinsic quality of the Retailer' in an online marketplace
- n** H_{3c}: The influence of consumer's perceived 'Extrinsic Quality of the Retailer' on the consumer's perceived 'Reputation of the extrinsic quality of the Retailer' is greater than the influence of consumer's perceived 'Intrinsic Quality of the Retailer' on the consumer's perceived 'Reputation of intrinsic quality of the Retailer' in an online marketplace

This study assumes that the consumer's perceived 'Reputation of the Retailer' positively impacts the consumer's 'Attitude toward the Retailer' in an online marketplace. Therefore, it is speculated that the consumer's perceived 'Reputation related to the extrinsic quality of the Retailer' positively impacts the consumer's

‘Attitude toward the Retailer’ (C). In a like manner, the consumer’s perceived ‘Reputation related to intrinsic quality of the Retailer’ can be speculated to impact the consumer’s ‘Attitude toward the retailer’ (D).

In examining causal relationships between (C) and (D), this study assumes that (D) is significantly stronger than (C), because the trustworthiness and usefulness of other consumers’ opinions about the intrinsic quality (i.e., quality a consumer has no prior experience or knowledge of) may be stronger than other consumers’ opinions about extrinsic quality in pre-purchase deliberation process in the online marketplace.

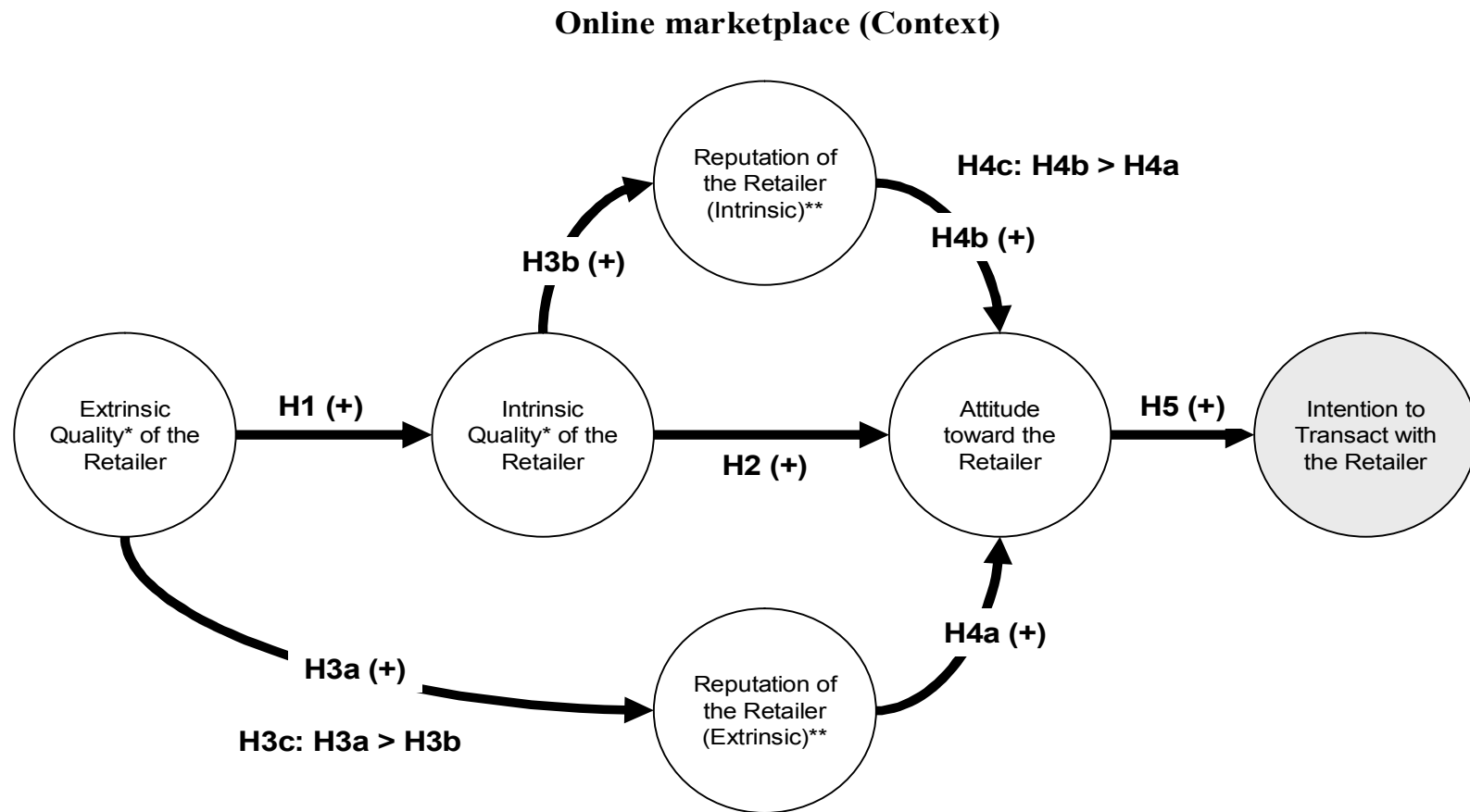
- n H_{4a}: Consumer’s perceived ‘Reputation of the extrinsic quality of the Retailer’ positively influences consumer’s ‘Attitude toward the Retailer’ in an online marketplace
- n H_{4b}: Consumer’s perceived ‘Reputation of the intrinsic quality of the Retailer’ positively influences consumer’s ‘Attitude toward the Retailer’ in an online marketplace
- n H_{4c}: The influence of consumer’s perceived ‘Reputation of the intrinsic quality of the Retailer’ on the consumer’s ‘Attitude toward the Retailer’ is greater than the influence of consumer’s perceived ‘Reputation of extrinsic quality of the Retailer’ on the consumer’s ‘Attitude toward the Retailer’ in an online marketplace

In most major decision process models, the phase between a final single attitude toward the object and an actual behavior is ‘intention (to behave)’. This study is about consumer’s pre-purchase deliberation process for a retailer choice in an online marketplace, and so the final consequence of the model is ‘Intention to Transact with a Retailer’. Therefore, this study assumes that the consumer’s ‘Attitude toward the

Retailer' positively impacts the consumer's 'Intention to Transact with the Retailer' in an online marketplace.

- n** H₅: Consumer's 'Attitude toward the Retailer' positively influences consumer's 'Intention to Transact with the Retailer' in an online marketplace

The conceptual framework (model) reflecting the above hypotheses are shown in Figure 4.



* Extrinsic and Intrinsic Quality of the Retailer is the 'consumer's perceived quality

** Reputation is the consumer's perceived reputation of the retailer

Figure 4. Conceptual Framework (Model) and Hypotheses of This Study

CHAPTER III

RESEARCH METHODOLOGY

For testing the conceptual and hypothesized framework, an online consumer survey was conducted.

Sampling

The main purpose of this study is to develop a model of the consumer pre-purchase deliberation process for retailer choice in an online marketplace, and to investigate the influence of the quality of online retailers and the influence of the reputation of online retailers on consumers' intention to transact in an online marketplace context.

Therefore, the sample frame of this study is consumers who have experience in using an online marketplace and have chosen to transact with an online retailer (purchase product/service from an online retailer/seller via an online marketplace). This study distributed a survey through an online survey agent.

The sample frame of this study is a panel from the online survey agent. Online survey agents recruit and maintain respondents in the form of a panel, a group of individuals who have agreed to be contacted and receive surveys, by giving them

economic or non-economic compensation (Schonlau, Fricker, and Elliott, 2002). The main reason online survey agents maintain a consumer panel is that the panel makes it possible for a researcher to calculate the probability of sampling.

Surveys implemented via the web or e-mail basically have no sample frame, because all respondents voluntarily respond to the survey. Therefore, the sampling method of surveys conducted via web or e-mail is not a probability sampling but convenient sampling (Schonlau et al., 2002). This is one of the significant problems with an online survey. Through the pre-recruited and maintained panels, this problem can be overcome, because the potential survey respondents in the pre-recruited panel are recruited by some probabilistic methods from the general population (Dillman 2000; Schonlau et al. 2002).

Some online survey agents maintain several types of panel whose sample frame is different by the purpose (e.g., ‘online user panel’ V.S. ‘online non-user panel’). The sample frame for this study is an online survey agent’s panel pre-recruited from U.S. registered members²⁵ of major online shopping sites of which headquarters are in the U.S. as of January 2005. According to Surveyz.com, the survey agent for this study, the distributions in terms of gender, age, residence area (state), and occupation are fairly consistent with those of the U.S. online shoppers, published every year by leading research organizations. Therefore, the use of the panel of Surveyz.com as a sample frame of this study can be justified in terms of the quality of the sample frame.

In addition, the survey for this study has a screening question preventing a person who has no experience with using an online marketplace from participating in

²⁵ That is, the consumers who registered their e-mail to the online shopping sites to become a member.

this survey. Every participant of this survey, as soon as he/she opened the electronic questionnaire (i.e., click and open the website including questions), encountered the question “*Have you had experience using an online marketplace for online shopping?*”. Respondents who revealed no experience using online marketplaces (i.e., click or select the ‘NO’ button) were automatically excluded from the survey (i.e., respondents who click ‘NO’ were led to the website explaining why they were not appropriate to this survey).

In conclusion, the quality and characteristics of the panel from an online survey agent and the screening question satisfied the condition of the sample frame for this study, consumers who have experience using online marketplaces in a past online shopping experience.

Survey Implementation

Selecting Survey Agent

For survey implementation and data collection, this study used an online survey agent. An online survey agent is defined as a service provider enabling a researcher to electronically build up and post a survey questionnaire on the website or online information system and to conduct a survey to a number of respondents via Internet or online network (Schonlau et al., 2002). Using an online survey agent for survey implementation and data collection has the following advantages over a web-posted survey or a mail survey.

- n An online survey appears to be less costly to administer (Kennedy, Kuh, and Carini, 2000). Mass email software allows personalized messages and eliminates the costs of printing and postage. Also, immediate access to the survey data is possible because the survey data are stored in a database. Consequently, survey processing time and costs are significantly reduced.
- n Another positive factor of an online survey is the quickness of survey completion. A typical mail survey design with multiple mailings requires a field period of at least two months (Dillman, 2000). With the web surveys, Kennedy et al. (2000) noticed that a four-contact survey process could be completed within three weeks with no loss of response.

In this regard, an appropriate online survey agent who maintains a wide range of online consumer panels, Surveyz.com²⁶, was selected as the survey agent from among other commercial enterprises that specialized in conducting web surveys (e.g., Knowledge Networks and Harris Interactive²⁷), based on the survey cost and procedural fit to this study.

Survey Implementation Steps

The survey was implemented through six steps (See Figure 5). The 1st step was to screen out respondents who had no experience using an online marketplace.

The 2nd step was to introduce the scenario to respondents. The purpose of introducing the scenario was to facilitate and remind a respondent of his/her previous experience of using an online marketplace for online shopping. Therefore, the scenario included a descriptive situation of online shopping via an online marketplace.

²⁶ www.Surveyz.com

²⁷ Knowledge Network: www.knowledgenetworks.com, Harris Interactive: www.harrisinteractive.com

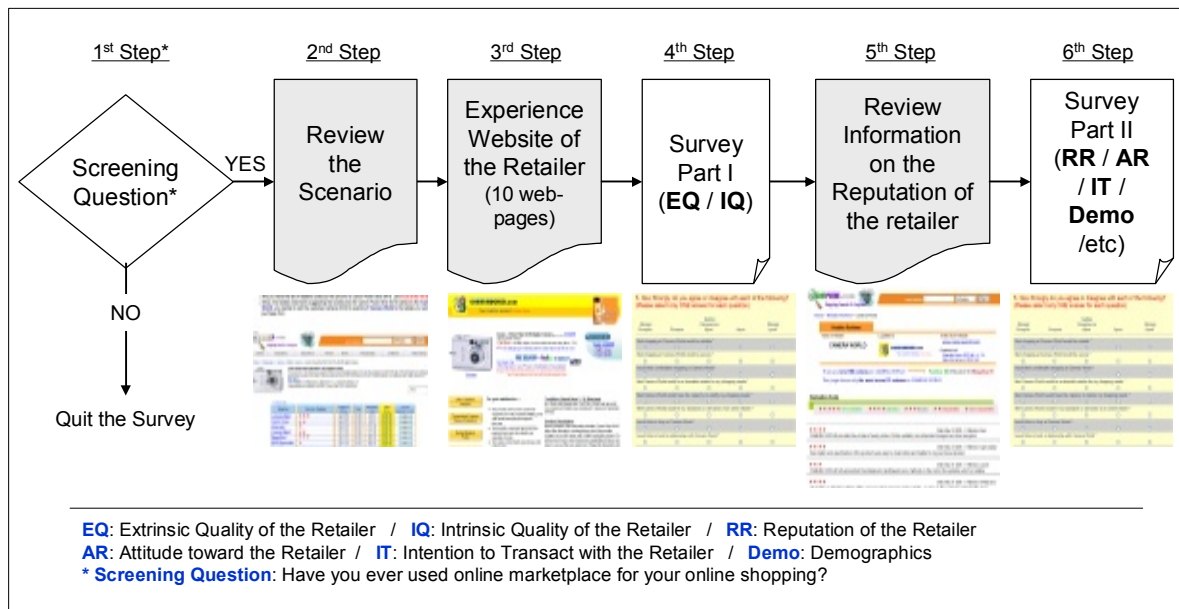


Figure 5. Survey Implementation Steps

The 3rd step was to enable a respondent to experience. Respondents were able to look at the content, navigate by scrolling up/down the content within a website, and navigate by clicking the links to other web-pages of the retailer. Respondents could take as much time and experience as many areas of the website as they desired.

The 4th step was to ask a respondent to answer questions about his/her perceptions of the extrinsic quality and intrinsic quality of the online retailer operating the website based on their experience in the first step.

The 5th step was to have respondents review ‘Reputation of the Retailer’, which were descriptive reviews and comments about extrinsic and intrinsic quality attributes of the online retailer operating the website experienced during the first step.

The 6th step was to ask a respondent to answer questions about ‘his/her perception of the reputation of the retailer’, ‘attitude toward the retailer’, and ‘intention to transact with the retailer’ that operated the website experienced through the first step.

Additional information such as general online shopping behaviors, online marketplace usage behaviors, and demographics were also asked. Actual image of web-based survey is presented in Appendix 1

Development of the Scenario

The scenario was developed to remind a respondent of the experience of online shopping via an online marketplace. The scenario begins with the descriptive supposition that a respondent wants to buy a specific brand of a digital camera (Canon Power Shot S410²⁸) from an online retailer and is comparing the prices and quality of retailers selling this brand of a digital camera through an online marketplace (named as ‘Compare.com’). The descriptive supposition used in the scenario is presented in Figure 6.

The scenario also shows fictitious list of retailers similar to those online marketplaces provide to consumers. The list of retailers used in this scenario includes information of ‘original price’, ‘tax’, ‘shipping cost’, ‘total price’, and ‘quality of shopping experience rated by shoppers’ of each retailer. Among this information, the list in this scenario is sorted by the total price.

²⁸ The reason for selecting a digital camera as a product for this study is to strengthen the reality of the scenario, because a digital camera is one of the most frequently sold items online via online marketplaces. The reason for using the Canon Power Shot brand is to reduce the effect from an unknown or unfamiliar brand on consumer perceptions of the online retailer, because Canon is one of the most common and well-known brands in the digital camera industry.

Following is the fictitiously created scenario for giving you the sense of potential purchase experience with Camera World through an online comparison shopping engine

- n** Let's suppose that you want to buy a digital camera
- n** Based on your own search and recommendations from your friends, you decide to buy a Cannon Power Shot S410
- n** To save time, you want to buy the digital camera online. However, you found that there are a great number of online retailers selling a Canon Power Shot S410 at different prices
- n** You visit 'Compare.com', an online comparison shopping engine
- n** And you have the list of retailers sorted by the price for a Canon Power Shot S410. Let's look at the list below
- n** Since, the retailer (merchant) suggesting the lowest price for Canon Power Shot S410 Camera is the 'Camera World', you decide to visit the website Camera World to examine if Camera World is the retailer you want to purchase from

Figure 6. Descriptive Supposition Used in the Scenario

Based on the lowest total price, respondents were led to the website of the online retailer (fictitiously named '*Camera World*') suggesting the lowest total price for the Canon Power Shot S410 digital camera via the hyperlink in the scenario. Figure 7 is the fictitiously created list of retailers used in the scenario.

Creation of the Fictitious Website of the Online Retailer, '*Camera World*'

For the 3rd step, a website of an online retailer was fictitiously created. The online retailer was named '*Camera World*' who primarily sells cameras through online. Ten hyperlinked web-pages²⁹ were created under the website of '*Camera World*'.

²⁹ According to Webster Dictionary, Website is defined as a group of World Wide Web pages usually containing hyperlinks to each other and made available online (<http://www.webster.com/cgi-bin/dictionary?book=Dictionary&va=website>)



SEARCH SMARTER:
All Products

BooksComputersElectronicsMoviesMusicPhotographySoftwareVideo Games

Home > Photography > Cameras > Digital Cameras > Canon Power Shot S410 DIGITAL ELPH Digital Camera



Canon Power Shot S410 DIGITAL ELPH Digital Camera

The successor to the enormously popular Power Shot S400 Digital ELPH camera, this new four-mega pixel model offers all of the advantages of its distinguished predecessor as well as the array of above-mentioned Direct Print/Print/Share and Direct Transfer features. Among the Power Shot S410 Digital ELPH camera other key attributes are its peak resolution of...[Read More....](#)

- Key Features: 4.0 Mega pixel - optical zoom: 3 x - supported memory: CF
- Manufacturer Part Number: 9345A001, Power Shot S410, 9345A001AA

Price

16 of 80 retailers

Retailer	Retailer Rating	Original Price	Tax	Shipping Cost	Total Price	Link to Retailer's Site
Camera World	★ ★ ★	\$228.99	\$0.00	\$0.00	\$228.99	GO
Digital Image	★ ★	\$228.99	\$0.00	\$0.00	\$228.99	GO
eBuy.com	★	\$228.99	\$0.00	\$15.00	\$243.99	GO
Camera Direct	★ ★	\$230.99	\$0.00	\$17.00	\$247.99	GO
Mega-Pixel	★ ★ ★	\$232.99	\$0.00	\$22.00	\$254.99	GO
BEST-Electronics	★	\$234.99	\$0.00	\$25.00	\$259.99	GO
Digital Max	★ ★	\$244.99	\$0.00	\$25.00	\$269.99	GO
PC World Online	★	\$254.99	\$0.00	\$20.00	\$274.99	GO
APA Camera	★ ★	\$264.99	\$0.00	\$10.00	\$274.99	GO
Gadget World	★ ★ ★	\$276.99	\$0.00	\$0.00	\$276.99	GO
BEST-Electronics	★ ★ ★	\$277.99	\$0.00	\$0.00	\$277.99	GO
USA Camera	★ ★ ★ ★	\$274.99	\$0.00	\$5.00	\$279.99	GO
eStock.com	★ ★ ★ ★	\$275.99	\$0.00	\$10.00	\$285.99	GO
Target.com	★ ★ ★ ★ ★	\$297.99	\$26.82	\$0.00	\$324.81	GO
BESTBUY.com	★ ★ ★ ★ ★	\$317.99	\$28.62	\$0.00	\$346.61	GO
Circuitcity.com	★ ★ ★ ★ ★	\$337.99	\$30.42	\$0.00	\$368.41	GO

112131415

Figure 7. List of Retailers Used in the Scenario

The reason for developing ten web-pages linked to each other is to enable respondents to navigate multiple web-pages the same as they do in their real online shopping through websites of online retailers.

Generally, one gate web-page (portal) and multiple web-pages structure the website of an online retailer. For consumers' navigational convenience and effectiveness, online retailers do not include all the information in one web-page but sectionalize the information and distribute it in multiple web-pages. Thus, each web-page presents unique information and plays a unique function in the structure of the website of an online retailer.

Information controlled for representing the quality of an online retailer in this survey was sectionalized into multiple web-pages to increase the reality of the experience. In addition, as already discussed in the literature review of 'Quality of the Online Retailer', layout and structure of the website, closely related to navigation from a web-page to other web-pages, is one of the key dimensions of quality of the online retailer. Therefore, this survey enables respondents to experience the navigation from a web-page to other web-pages through the created website to get respondents' evaluations of the layout/structure of the website. Thus, the website of 'Camera World' was sectionalized into ten web-pages.

The reason that ten web-pages were created is related to the 'information' dimension of the extrinsic quality of the online retailer. As already discussed, the information dimension is the presentation of intrinsic quality on the website by text and graphics. The information presented in the web-pages should reflect the measurement for intrinsic quality of the online retailer.

Based on the literature review regarding the intrinsic quality of an online retailer (Dabholkar 1996; Alpar 2001, Chen and Wells 1999; Muylle, Moenaert, and Despontin 1999; Liu and Arnett 2000; Montoya-Weiss, Voss, and Grewal 2000; Novak et al. 2000; Szymanski and Hise 2000; Yang, Peterson, and Huang 2000; Childers, Carr, Peck, and Carson. 2001; Eroglu, Machleit, and Davis 2001; Koufaris, Kambil, and LaBarbera 2001/2002; Schlosser and Kanfer 2001; Yoo and Donthu 2001; Zeithaml et al. 2000; 2002; Francis and White 2002; Loiacono et al. 2002; Rice 2002; Srinivasan et al. 2002; Gomez.com (Lovett) 2003; Wolfinbarger and Gilly 2003; Bizrate.com 2005), 13 attributes were selected and developed to represent the intrinsic quality of an online retailer (see the measurement development section p86). These 13 attributes were sectionalized into ten web-pages under the website of 'Camera World'.

As a result, the 'Camera World' website is composed of a 'main gate' web-page, two web-pages discussing the 'product (Canon Power Shot S410)', a web-page of 'transaction/order placement methods and processes and security protection', a web-page of 'return and refund policy', a web-page of 'privacy protection', a web-page of 'shipping/handling/delivery methods, costs, and process', a web-page of 'customer service/care', and a web-page of 'the general information of the retailer'. All ten web-pages that were fictitiously created for this study are presented in Appendix 2.

Even though the website of 'Camera World' was fictitiously created, there is no manipulation of the level of the quality of 'Camera World' on the website. Instead, this study tried to include all attributes in the measurement for extrinsic and intrinsic quality on the website of 'Camera World', because this study measures and uses customer's

subjective perception based on the fact that each individual consumer's perception can vary regarding a retailer (Olshavsky 1985; Zeithaml et al 1988).

Creation of the Fictitious Customer Reviews on the Online Retailer, '*Camera World*'

For the 5th step, a fictitious web-page showing the reputation of the retailer (i.e., descriptive reviews and comments about extrinsic and intrinsic quality attributes of the retailer operating the website a respondent experienced during the first step) was fictitiously created. Customer reviews of the purchase experience with a specific online retailer are generally provided by online marketplaces as one of key services. This distinguishes the online marketplace from other online shopping-related business models, because consumers recognized online marketplaces as the third party online shopping organizers, which provide more objective and reliable customer reviews on the online retailers than online retailer themselves.

A website including customer reviews of '*Camera World*' was created as the website of an online marketplace (fictitiously named '*Compare.com*'). To increase the reality of customer reviews, this study referred to the format of a website for customer reviews in Bizrate.com, one of the representative online marketplaces³⁰ (See Figure 8).

Twelve customer reviews on the extrinsic and the intrinsic quality of '*Camera World*' were fictitiously created for the web-page. The reason for having all twelve reviews included in the web-page is to increase the possibility that a respondent will read all twelve reviews. Customer reviews are presented by both descriptions and

³⁰ As already indicated, the format and style of customer reviews of Bizrate.com is widely accepted as an industry standard (Zeithaml, 2002).

I'm shopping for in [Store Ratings](#)

[Home](#) > [Store Ratings](#) > eCOST.com

[Email This Page](#)

eCOST.com Customer Reviews

Store Details

[Customer Reviews](#)
[Detailed Store Ratings](#)
[Store Information](#)
[Write a review for this store](#)
[Go to Store](#)

Store Ratings Summary

Overall Rating:

[eCOST.com](#)
 Customer Certified
Over 50,000 customers have rated this store since 1999

Would Shop Here Again	On Time Delivery	Customer Support	Products Met Expectations

Overall Rating Summary	Past Week	Past Month	Past 3 Months
Positive	70%	75%	81%
Neutral	8%	3%	3%
Negative	22%	22%	16%

[See detailed store ratings](#)

Symbol Key

Customer Certified denotes stores that provide satisfactory service and are proactively committed to monitoring their customer's satisfaction by allowing every customer to provide feedback to BizRate.com directly at the point-of-sale check-out.

Outstanding
 Good
 Satisfactory
 Poor

[Read more about ratings](#)

Overall Rating ←

Reviews of eCOST.com

[Write a Review](#)

Would Shop Here Again
 On Time Delivery
 Customer Support
 Products Met Expectations

Rating

Online Shopper
Apr 26, 2005

Received an FM transmitter for an Ipod that was worthless. Emailed for a RA# and NEVER received a reply. Although I did receive several other items prior without problems, you've lost me as a customer. ZERO response = ZERO new orders from me, and I am a BizRate panel member. [\(more\)](#)

Was this review helpful?

Online Shopper
Apr 26, 2005

I placed an order and I received a confirmation email. The order never arrived and I checked the status online. That stated I had no orders with the company. I repeatedly contacted the company and received no reply nor response to my questions. I never received a notice that the order was cancelled, nor did anyone ever respond to my emails asking about the situation. I have dealt with many online companies in the past and have always been pleased. This one is terrible and I will advise any friends who ask about my experience. [\(more\)](#)

Was this review helpful?

Online Shopper
Apr 26, 2005

They canceled my order because of an apparent price mistake, but did not contact me with an explanation.

Was this review helpful?

Figure 8. Customer Reviews Provided by Bizrate.com
Retrieved on April 18, 2005, from
http://shop.bizrate.com/ratings_guide/cust_reviews_mid--18045.html

scaled star ratings (5 stars: very satisfied ~ 1 star: very dissatisfied) similar to those of 'Bizrate.com'.

In addition, like Bizrate.com, the total number of positive ratings and negative ratings are presented at the head of the web-page. Five of the twelve reviews are related to extrinsic quality and the remaining reviews are about the intrinsic quality of '*Camera World*'. Even though the customer reviews were fictitiously created, there is no manipulation on the level of positiveness or negativeness toward '*Camera World*' in customer reviews, because this study measures and uses customer's subjective perception based on the fact that each individual consumer's overall perception can vary toward the same phenomenon. The fictitious web-page including customer reviews of '*Camera World*' is presented in Figure 9.

Instead of using the actual website of an online retailer or simply asking respondents their perceptions of an online retailer based on the respondent's general shopping experience via an online marketplace, the website is created to reflect the reality of an online marketplace. As discussed, it is highly possible for a consumer to encounter an unknown retailer with whom a consumer has no prior transaction experience in online marketplaces. Also the fictitious website allowed the investigation of the pure effects and causal relationships among the constructs of the conceptual model of this study (Mandel and Johnson, 2000).

By having the respondents experience the website of an unknown retailer, this study may effectively prevent other external variables, such as an attitude formed from past shopping/transaction experience (e.g., enduring preference or loyalty) with the



SEARCH SMARTER:
All Products

Home > Retailer Reviews > Camera World

Retailer Reviews

Name of Retailer	Logo/Brand	Online Store Website
CAMERA WORLD		www.cameraworld.com Company info. Operated since 2003 at L.A., CA Sales Revenue in 2004: N/A

There are **total 180 reviews** on CAMERA WORLD → **Positive 100** | **Neutral 10** | **Negative 70**

This page shows only **the most recent 12 reviews** on CAMERA WORLD

★★★★★

Date: May 24 2005 | Rated by Keen

CAMERA WORLD provides the picture of every product in the website, and all product images are clear and good.

★★★★★

Date: May 23 2005 | Rated by Super-steady

Description and specification of the product were easy to understand and helpful for my purchase decision.

★★★★

Date: May 21 2005 | Rated by Aussie

CAMERA WORLD fully presented the shipping & handling process, methods, & the cost in the website, which is reliable.

★★★★★

Date: May 21 2005 | Rated by 104dotcoms

I found the in-detail description of the cancel or return process in the website. As long as this company indicated the clear process, I was comfortable to order from CAMERA WORLD

★★★★★

Date: May 20 2005 | Rated by Knox

I actually never heard of this company. But there are company information and contact number and address in the website. This information relieved my concern about buying something from 'unknown company'

★

Date: May 19 2005 | Rated by Piper1970

DO NOT ORDER FROM THIS COMPANY. The camera this company recommended and sold to me has not been properly worked just 2 days after I received.

★★★★

Date: May 19 2005 | Rated by wanes

I ordered Nikon 303, but what I got was Nikon 100 -_- . CAMERA WORLD promised me to correct this error in a week and send me \$20 gift card for this error.

★★★

Date: May 19 2005 | Rated by Colleen

They billed me twice for one item, but refunded me as soon as I called

★★

Date: May 18 2005 | Rated by Vermont88

After comparing with the price of other retailers, I realized that I paid \$10 more on Kodak E30 camera I bought from CAMERA WORLD two weeks ago than average price of other retailers.

★

Date: May 16 2005 | Rated by Acer1987

I found they did not ship my order I placed a week ago. They just keep saying they will ship it 1 or 2 business days whenever I send them complaint email.

★

Date: May 14 2005 | Rated by COWS21

No response to my e-mail inquiries since I sent a week ago. I bought the refurbished canon camera from CAMERA WORLD two weeks ago. But I found flash did not work at all. So, I asked them to change my camera through email. But... No response at all

★★★★★

Date: May 09 2005 | Rated by veteran99

I've bought three cameras from this company, and there was no problem at all in both cameras and service of CAMERA WORLD

END of the most recent 12 reviews on CAMERA WORLD

Figure 9. Created Web-page including Customer Reviews on ‘Camera World’

retailer or personal interest³¹, from influencing the respondent's perception and response to the questions in the survey of this study.

Development of the Measurement

The scaled items for each construct are presented in the order of 'Extrinsic Quality of the Retailer', 'Intrinsic Quality of the Retailer', 'Reputation of the Retailer', 'Attitude toward the Retailer', and 'Intention to Transact with the Retailer'.

The Measurement Development Process

Since there is little difference in studies for 'Attitude' and 'Intention', this study adapted items for 'Attitude toward the Retailer' from Oliver (1996) and adapted the items for 'Intention to Transact with the Retailer' from SITEQUAL (You and Donthu, 2001).

However, among the empirical studies about 'Quality of the Retailer', there is little consensus about specific measurement items. Therefore, this study developed items for 'Extrinsic Quality of the Retailer' and 'Intrinsic Quality of the Retailer' in an online marketplace context through several steps.

While researchers typically move directly from exploratory research to development of a questionnaire, this study used an intermediate step to improve conceptualization. "Structured conceptualization" was used to develop empirically

³¹ E.g., it is possible that a respondent or family, relative, or friends of a respondent is an employee of the sample retailer, if this survey uses a actual website of the actual retailer

derived categories that reflect the gross structure of reality or at least the distinct features of reality that are most important for human transactions with the world (Trochim and Linton, 1986).

Based on the "Structured conceptualization" approach, 124 conceptual dimensions were identified (see Table 1. Summary of Structure of Major Studies p40) from the empirical literature (Dabholkar 1996; Alpar 2001, Chen and Wells 1999; Muylle et al. 1999; Liu and Arnett 2000; Montoya-Weiss et al. 2000; Novak et al. 2000; Szymanski and Hise 2000; Yang et al. 2000; Childers et al. 2001; Eroglu et al. 2001; Koufaris et al. 2001/2002; Schlosser and Kanfer 2001; Yoo and Donthu 2001; Zeithaml et al. 2000; 2002; Francis and White 2002; Loiacono et al. 2002; Rice 2002; Srinivasan et al. 2002; Gomez.com (Lovett) 2003; Wolfenbarger and Gilly 2003; Bizrate.com 2005).

Next, five reviewers³² classified these dimensions into two groups based on extrinsic quality or intrinsic quality. As a result of the above process, four dimensions for extrinsic quality of the retailer and six dimensions for intrinsic quality of the retailer were selected. Classification results are shown in Table 2.

Next, each of the five judges selected the most representative items for each dimension using items from the 124 dimensions identified in previous 22 research (Dabholkar 1996; Alpar 2001, Chen and Wells 1999; Muylle et al. 1999; Liu and Arnett 2000; Montoya-Weiss et al. 2000; Novak et al. 2000; Szymanski and Hise 2000; Yang et al. 2000; Childers et al. 2001; Eroglu et al. 2001; Koufaris et al. 2001/2002;

³² Including the author of this dissertation, two consultants from professional e-business consulting firms and two researchers from marketing research firms helped with the development of items for extrinsic and intrinsic quality of the retailer in this study

Table 2. Classification Results of Dimensions for Extrinsic and Intrinsic Quality of the Retailer

Extrinsic Quality of the Retailer	Intrinsic Quality of the Retailer
n Website Visuals: Design/Image/Aesthetics n Website Layout/Navigational Structure n Website Feature/Functions n Information on the Website	n Merchandise/Products n Price/Economic Value n Transaction Process/Security n Privacy Protection n Fulfillment n Customer Care/Service

Schlosser and Kanfer 2001; Yoo and Donthu 2001; Zeithaml et al. 2000; 2002; Francis and White 2002; Loiacono et al. 2002; Rice 2002; Srinivasan et al. 2002; Gomez.com (Lovett) 2003; Wolfinbarger and Gilly 2003; Bizrate.com 2005).

Twenty-six items were successfully matched by all five judges and were selected as items to represent the extrinsic and the intrinsic quality of the retailer for this study. Two items were not matched consistently by the judges but were considered to be important for extrinsic and intrinsic quality and included after discussions and brainstorming.

Two items were also included based on the advice of professional academic researchers³³. As a result of the above process, 17 items for extrinsic quality of the retailer and 13 items for intrinsic quality of the retailer were selected for this study. The selected items are presented in Table 3. The expression of each item was elaborated on by five judges and five graduate students.

³³ Dissertation committee members for this dissertation

Table 3. Selected Items for Extrinsic Quality and Intrinsic Quality of the Retailer

Construct	Selected Dimensions	Selected Items
Extrinsic Quality	Website Visuals: Design/Image/Aesthetics	• Website is visually attractive • Website is professional looking* • Website is creative** • Website provides good picture of product
	Website Layout/Navigational Structure	• Website is easy to navigate • Website is easy to find information
	Website Feature/Functions	• Website recommends related products • Website enables to upgrade the components of product**
	Information on the Website	• Website presents in-depth information about product • Website presents in-depth information about price • Website presents in-depth information about shipping/handling process • Website presents in-depth information about payment methods • Website presents in-depth information about return/refund policy • Website presents in-depth information about customer service • Website presents in-depth information about security protection • Website presents in-depth information about privacy protection • Website presents in-depth information about retailer
Intrinsic Quality	Merchandise/Products	• Retailer sells an authentic product
	Price/Economic Value	• Retailer charges me a reasonable price for a product
	Transaction Process and Security	• Retailer bills me without an error • Retailer securely process my payment
	Privacy Protection	• Retailer is willing to protect my privacy
	Fulfillment	• Retailer charges me a reasonable shipping/handling prices • Retailer delivers the exact product I ordered from the website • Retailer delivers the product on time • Retailer packages the product well*
	Customer Care/Service	• Retailer informs me of the delivery status • Retailer responses promptly to any inquiry • Retailer communicates in a friendly manner with me • Retailer makes any return and refund easy

* Unmatched but considered to be important by four of five judges, and so included.

** Included by the advice of professional academic researchers (see footnote 33).

The Measurement for Extrinsic Quality of the Retailer

Seventeen items with a 5 point Likert Scale (5: Strongly Agree ~ 1: Strongly Disagree) were developed for measuring the ‘Extrinsic Quality of the Retailer’ as shown in Table 4. Since this survey was conducted after showing a fictitiously created website for ‘*Camera World*’ with the supposition of a respondent’s buying a ‘*Canon Power Shot S410 Digital Camera*’, ‘*Canon Power Shot S410 Digital Camera*’ and ‘*Camera World*’ was included in all items to increase the involvement of a respondent with the situation.

The Measurement for Intrinsic Quality of the Retailer

Thirteen items with a 5 point Likert Scale (5: Strongly Agree ~ 1: Strongly Disagree) were developed for measuring the ‘Intrinsic Quality of the Retailer’ as shown in Table 5. ‘Intrinsic Quality of the Retailer’ is the consumer’s assumption about intrinsic quality on the basis of the website a consumer experiences. That is, ‘Intrinsic Quality of the Retailer’ was measured by a consumer’s perceived likelihood those attributes would be performed by the retailer in this survey. All items for Intrinsic Quality of the Retailer start with the phrase “*Camera World is likely to....*”.

The Measurement for Reputation of Extrinsic Quality and Intrinsic Quality of the Retailer

‘Reputation of the Retailer’, in an online marketplace is defined as ‘electronically published reviews, opinions, or comments on the extrinsic or intrinsic quality of the retailer by other experienced consumers’ in this study.

Table 4. Items for Extrinsic Quality of the Retailer

Dimensions	Items
Scale	5-----4-----3-----2-----1 Strongly Agree Agree Neither Agree Disagree Strongly Agree nor Disagree Disagree Disagree
Website Visuals: Design/Image /Aesthetics	• Camera World website is visually attractive • Camera World website is professional looking • Camera World website is creative • Camera World website provides good picture of Canon Power Shot S410 digital camera
Website Layout /Navigational Structure	• Camera World website is easy to navigate • Camera World website is easy to find information
Website Feature /Functions	• Camera World website recommends related products to Canon Power Shot S410 digital camera • Camera World website enables to upgrade the components of Canon Power Shot S410 digital camera
Information on the Website	• Camera World website presents in-depth information about Canon Power Shot S410 digital camera • Camera World website presents in-depth information about total price • Camera World website presents in-depth information about shipping/handling process • Camera World website presents in-depth information about payment methods • Camera World website presents in-depth information about return/refund policy • Camera World website presents in-depth information about customer service • Camera World website presents in-depth information about security protection • Camera World website presents in-depth information about privacy protection • Camera World website presents in-depth information about Camera World Company

Table 5. Items for Intrinsic Quality of the Retailer

Dimensions	Items
Scale	5-----4-----3-----2-----1 Strongly Agree Agree Neither Agree Disagree Strongly Agree nor Disagree Disagree Disagree
Merchandise/Products	• Camera World is likely to sell an authentic Canon Power Shot S410 digital camera
Price/Economic Value	• Camera World is likely to charge a reasonable price for Canon Power Shot S410 digital camera
Transaction Process and Security	• Camera World is likely to bill me without an error • Camera World is likely to securely process my payment
Privacy Protection	• Camera World is likely to be willing to protect my privacy
Fulfillment	• Camera World is likely to charge me a reasonable shipping & handling prices • Camera World is likely to deliver the exact Canon Power Shot S410 digital camera I ordered from the website of Camera World • Camera World is likely to deliver the digital camera on time • Camera World is likely to package the digital camera well
Customer Care/Service	• Camera World is likely to inform me of the delivery status • Camera World is likely to response promptly to any inquiry • Camera World is likely to communicate in a friendly manner with me • Camera World is likely to make any return and refund easy

What this study seeks to measure is not the ‘Reputation of the Retailer’ itself but the consumer’s perceived reputation of the retailer. That is, in this study, it’s possible that the perception of respondent A is different from that of respondent B toward the same customer reviews on retailer C (i.e., respondent A perceives the customer reviews on retailer C to be positive whereas respondent B perceives the same customer reviews to be negative). On the other hand, if a consumer perceives the customer reviews to be positive/negative but useless (or unreliable), it is hard for a consumer to use those reviews for his/her retailer choice.

Since this study investigates the mediating role of reputation of the retailer between ‘quality of the retailer’ and ‘attitude toward the retailer’ in the consumer’s pre-purchase deliberation process, this study should acquire the level of each consumer’s perceived usefulness of the reputation of the retailer (i.e., customer reviews on the retailer). For example, if respondent A perceives the customer reviews on retailer C to be positive but useless, a consumer may not refer to or use these useless customer reviews for forming his/her attitude toward retailer C. Therefore, the level of consumer’s perceived usefulness of the reputation of the retailer (customer reviews on the retailer) as well as the level of perceived positiveness/negativeness of the reputation of the retailer should be measured.

Based on this logic, two items were developed for reputation of the extrinsic quality of the retailer. One item (A) is to measure the respondent’s perceived positiveness/negativeness of the customer reviews on the extrinsic quality (quality of attributes related to the website) of Camera World. The scale of this item (A) is a semantic differential composed of five points from positive (5 point) to negative (1

point). Another (B) is to measure the respondent's perceived usefulness of the customer reviews on the extrinsic quality of Camera World. The scale of this item (B) is a semantic differential composed of five points from useful (5 point) to useless (1 point). The score of the reputation of the extrinsic quality of the retailer used in the proposed model for this study is a product of (A) and (B).

In the same way as above, two items were developed for reputation of the intrinsic quality of the retailer. One item is to measure the respondent's perceived positiveness/negativeness of the customer reviews on the intrinsic quality (quality of attributes related to retail business operation) of Camera World. Another is to measure the respondent's perceived usefulness of the customer reviews on the intrinsic quality of Camera World. The score of the reputation of the intrinsic quality of the retailer used to test the model proposed in this study is a product of the above two items (the respondent's perceived positiveness/negativeness of the customer reviews on the intrinsic quality and the respondent's perceived usefulness of the customer reviews on the intrinsic quality). Table 6 shows the scaled items for reputation of extrinsic quality of the retailer and reputation of intrinsic quality of the retailer.

The Measurement for Attitude toward the Retailer

The construct, attitude toward the retailer, in this study was developed based on Oliver's (1996) conceptual definition of attitude toward the product. Therefore, items for measuring attitude toward the retailer were also adapted from Oliver (1996)'s global measurement for attitude. Oliver (1996) suggested the global measurement for a consumer's attitude toward the overall quality of the product should be based on the

Table 6. Items for Reputation of Extrinsic/Intrinsic Quality of the Retailer

Constructs	Items
Reputation of Extrinsic Quality of the Retailer = (A) X (B)	Overall, I feel user reviews on the website of Camera World are (A) Negative <-----> Positive 1 2 3 4 5 (B) Useless <-----> Useful 1 2 3 4 5
Reputation of Intrinsic Quality of the Retailer = (A) X (B)	Overall, I feel user reviews on the purchase experience with Camera World are (A) Negative <-----> Positive 1 2 3 4 5 (B) Useless <-----> Useful 1 2 3 4 5

concept of attainment, desirability, and usefulness. Considering this suggestion and the fact that the model for this study relates to the pre-purchase deliberation process, the following items in Table 7 were developed using a 5 point Likert Scale (5: Strongly Agree ~ 1: Strongly Disagree).

The Measurement for Intention to Transact with the Retailer

Table 8 shows the developed measurement for ‘Intention to Transact with the Retailer’. According to Ajzen (1985; 1991), intention represents motivational components of a behavior, that is, the degree of conscious effort that a person will exert in order to perform a behavior. This study defined ‘Intention to Transact with the Retailer’ as the degree of conscious effort that a consumer will exert in order to transact with a specific retailer as a result of attitude toward the specific retailer in an online marketplace.

Even though Zeithaml, Berry, and Parasuraman’s (1996) measurement has been widely used to measure ‘intention’ in the retailing context (Wolfenbarger et al., 2003), it is hard to distinguish from the concept of loyalty, and is frequently called ‘Loyalty Intention’ instead of ‘Intention’. Therefore, this study adapted the measurement of SITEQUAL (You and Donthu, 2001) for developing the items for ‘Intention to Transact with the Retailer’, as shown in Table 8.

Table 7. Items for Attitude toward the Retailer

Dimensions	Items
Scale	5-----4-----3-----2-----1 Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
Attainment	• I feel shopping at Camera World would be reliable • I feel shopping at Camera World would be secure
Desirability	• I would feel comfortable shopping at Camera World • I feel Camera World would be a desirable retailer for my shopping needs
Usefulness	• I feel Camera World would have the capacity to satisfy my shopping needs • I feel Camera World would fit my standards or demands of an online retailer

Table 8. Items for Intention to Transact with the Retailer

Scale	5-----4-----3-----2-----1 Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
Item	• I would like to shop at Camera World • I would like to build a relationship with Camera World • If I want to purchase Canon Power Shot s410 digital camera, I would make a purchase at Camera World • I would be willing to order the Canon Power Shot S410 digital camera through Camera World website

CHAPTER IV

ANALYSIS AND RESULTS

The goal of this study is to develop a model of the consumer pre-purchase deliberation process for retailer choice in an online marketplace context, based on the investigation of the causal relationships among constructs. Therefore, all hypotheses are about the causal relationships and impacts among constructs in the model.

The conceptual model of this study has multi-layered antecedents, and so, the causal relationships among antecedents were examined using ‘Structural Equation Modeling (SEM)’ (Andersen and Gerbing, 1988) with the use of AMOS 5.0 statistical computing software³⁴.

Descriptive statistics were generated by using the SPSS 13 statistical computing software package.

Results

Sample Characteristics

Over a four-week period, an online survey was conducted by sending out 3,000 emails to online consumers who used online marketplaces for online shopping at least

³⁴ Copyrighted by James L. Arbuckle, 1994 ~ 2003

once and were between the ages of 18 and 64. A purchased email list from Surveyz.com was used.

Among the recipients, 601 respondents completed the survey (20% response rate) and were used for the analyses. The main reason for a relatively low response rate is that this survey screened out recipients who had no experience using an online marketplace at the first stage of the survey. Sample characteristics regarding gender, education, age, and income are presented in Table 9.

Since there is no widely accepted estimated population of online marketplace users from any credible research organization, it is hard to conclude whether the sample of this study is accurately representing the population of total online marketplace users in terms of demographic distribution.

However, this survey screened out the non-users of online marketplaces at the beginning of the survey. Considering that Surveyz.com, the online survey agent for this study, distributed the survey to a sample of 3000 of which distribution in terms of major demographics are almost the same as those of the total panel of Surveyz.com (U.S. registered members of major online shopping sites headquartered in the U.S. as of January 2005), this study can roughly compare which demographic characteristics are more typical among the users of an online marketplace compared to those of general online shoppers.

Regarding gender, the portion of males is slightly larger than female. Considering that the female is the largest (about 60%) gender in the panel of Surveyz.com, gender proportion in the sample of this study suggests that a male is more likely to use an online marketplace than a female.

Table 9. Demographic Characteristics of Sample

Gender	Frequency	Percent (%)	AGE	Frequency	Percent (%)
Female	289	48.09	18 ~ 23	103	17.14
Male	312	51.91	24 ~ 30	187	31.11
Total	601	100.00	31 ~ 40	169	28.12
			41 ~ 50	121	20.13
			51 ~ 60	21	3.49
			Total	601	100.00
Education	Frequency	Percent (%)	Income	Frequency	Percent (%)
Some high school	11	1.83	less than \$15K	11	1.83
High school or equivalent	94	15.64	15K ~ \$24,999	28	4.66
Some college	138	22.96	\$25K ~ \$34,999	103	17.14
College graduate	234	38.94	\$35K ~ \$49,999	207	34.44
Master's Degree	87	14.48	\$50K ~ \$74,999	191	31.78
Doctoral Degree	19	3.16	\$75K or above	61	10.15
Professional Degree (JD MD)	18	3.00	Total	601	100.00
Total	601	100.00			

College graduates accounted for about 40% of the sample of this study. Interestingly, the portion of higher educated respondents (Master's degree, Doctoral Degree, and Professional Degree) was about 20.6%, which is considerably higher than that of 11% of the total panel of Surveyz.com.

The age range for the majority of the sample of this study is 24 to 30. The distribution of age showed no particular difference from those of the total panel of Surveyz.com.

In reference to income, the range of '\$35,000 to \$74,999' accounted for 66.2%. This portion is considerably higher than that of the total panel of Surveyz.com (45%). On the contrary, the portion of \$75,000 or above, 10.2%, was significantly smaller than not only that of the total panel of Surveyz.com (21%) but also that of the total Internet users (31.2%) reported by NTIA (National Telecommunications and Information

Administration) in 2002. This discrepancy could either limit the representativeness of the sample of this study or roughly suggest that people whose income level is middle range are more likely to use an online marketplace of which one of the core functions is price comparison than high income users who are generally less sensitive to price and exhibit less need to compare prices.

Evaluation of Measures

This study focuses on six constructs: Extrinsic Quality of the Retailer, Intrinsic Quality of the Retailer, Reputation of the Extrinsic Quality of the Retailer, Reputation of the Intrinsic Quality of the Retailer, Attitude toward the Retailer, and Intention to Transact with the Retailer. Among these constructs, the reliability coefficient (Cronbach's Alpha) of Reputation of the Extrinsic Quality of the Retailer and Reputation of the Intrinsic Quality of the Retailer is not reported. These two constructs were measured by one score of the product of two items.

The reliability coefficient (Cronbach's Alpha) of the 17 items for Extrinsic Quality of the Retailer was 0.977 (Table 10). The reliability coefficient of 13 items for Intrinsic Quality of the Retailer was 0.984 (Table 11). The reliability coefficient of six items for Attitude toward the Retailer was 0.983 (Table 12). The reliability coefficient of four items for Intention to Transact with the Retailer was 0.979 (Table 13). The above calculated reliability coefficients (Cronbach's Alpha) for each construct shows the highly significant internal consistency among the measurement items.³⁵

³⁵ Nunnally (1978)'s suggestion was used to determine the level of internal consistency among measurement items.

Table 10. Reliability Coefficient for Extrinsic Quality of the Retailer

Items for Extrinsic Quality of the Retailer	Cronbach's α if Item Deleted	Reliability Coefficient
Camera World website is visually attractive	0.9769	0.977
Camera World website is professional looking	0.9758	
Camera World website is creative	0.9771	
Camera World website provides good picture of Canon Power Shot S410 digital camera	0.9760	
Camera World website is easy to navigate	0.9758	
Camera World website is easy to find information	0.9763	
Camera World website recommends related products to Canon Power Shot S410 digital camera	0.9762	
Camera World website enables to upgrade the components of Canon Power Shot S410 digital camera	0.9757	
Camera World website presents in-depth information about Canon Power Shot S410 digital camera	0.9759	
Camera World website presents in-depth information about total price	0.9758	
Camera World website presents in-depth information about shipping/handling process	0.9754	
Camera World website presents in-depth information about payment methods	0.9757	
Camera World website presents in-depth information about return/refund policy	0.9755	
Camera World website presents in-depth information about customer service	0.9753	
Camera World website presents in-depth information about security protection	0.9754	
Camera World website presents in-depth information about privacy protection	0.9755	
Camera World website presents in-depth information about Camera World Company	0.9765	

Table 11. Reliability Coefficient for Intrinsic Quality of the Retailer

Items for Intrinsic Quality of the Retailer	Cronbach's α if Item Deleted	Reliability Coefficient
Camera World is likely to sell an authentic Canon Power Shot S410 digital camera	0.9836	0.984
Camera World is likely to charge a reasonable price for Canon Power Shot S410 digital camera	0.9836	
Camera World is likely to bill me without an error	0.9828	
Camera World is likely to securely process my payment	0.9831	
Camera World is likely to be willing to protect my privacy	0.9831	
Camera World is likely to charge me a reasonable shipping & handling prices	0.9833	
Camera World is likely to deliver the exact Canon Power Shot S410 digital camera I ordered from the website of Camera World	0.9829	
Camera World is likely to deliver the digital camera on time	0.9826	
Camera World is likely to package the digital camera well	0.9837	
Camera World is likely to inform me of the delivery status	0.9833	
Camera World is likely to response promptly to any inquiry	0.9829	
Camera World is likely to communicate in a friendly manner with me	0.9831	
Camera World is likely to make any return and refund easy	0.9834	

Table 12. Reliability Coefficient for Attitude toward the Retailer

Items for Attitude toward the Retailer	Cronbach's α if Item Deleted	Reliability Coefficient
I feel shopping at Camera World would be reliable	0.9800	0.983
I feel shopping at Camera World would be secure	0.9819	
I would feel comfortable shopping at Camera World	0.9804	
I feel Camera World would be a desirable retailer for my shopping needs	0.9791	
I feel Camera World would have the capacity to satisfy my shopping needs	0.9776	
I feel Camera World would fit my standards or demands of an online retailer	0.9784	

Table 13. Reliability Coefficient for Intention to Transact with the Retailer

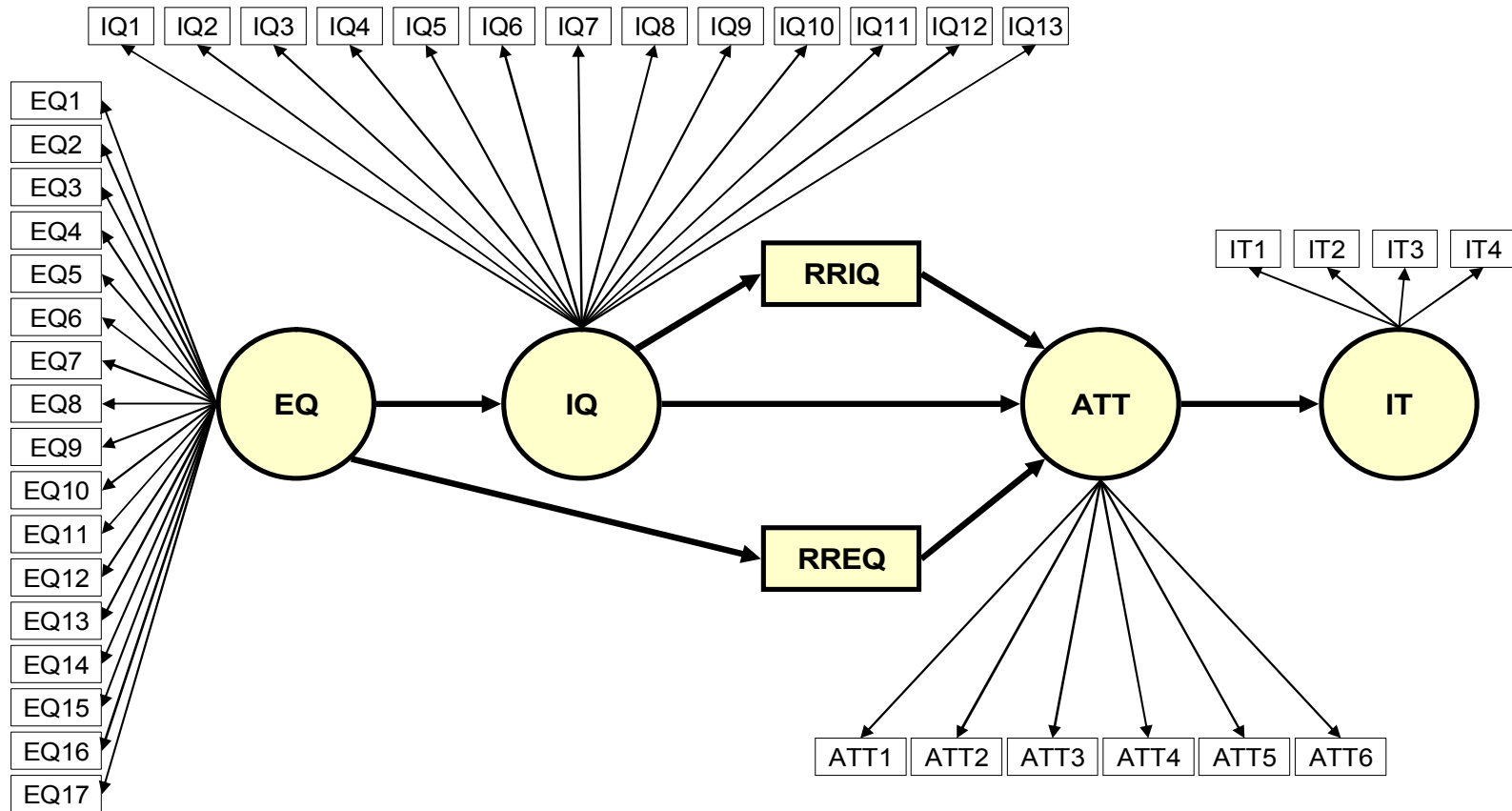
Items for Intention to Transact with the Retailer	Cronbach's α if Item Deleted	Reliability Coefficient
I would like to shop at Camera World	0.9685	0.979
I would like to build a relationship with Camera World	0.9775	
If I want to purchase Canon Power Shot s410 digital camera, I would make a purchase at Camera World	0.9708	
I would be willing to order the Canon Power Shot S410 digital camera through Camera World website	0.9726	

In addition, distributions of all items measured in this study are presented in Appendix 3.

Model Testing: Fitting the Proposed Conceptual Model

Before testing each hypothesis, the fit of the proposed conceptual model (See Figure 10) was tested to determine the ability of the predefined model to fit the data collected for this study. Among several fit measures, this study focused on Chi-square value (CMIN), goodness-of-fit index (GFI) as one of the absolute fit indices, the comparative fit indices (CFI) as one of comparative or increment indices, and root mean square error of approximation (RMSEA), because other indices were developed by slight modification of those above mentioned indices. Including those indices, the global fit of the proposed conceptual model is shown in Table 14.

First of all, the test of the conceptual model as depicted in Figure 10 yielded a chi-square value of 6596.093, with 814 degrees of freedom and a probability of less than .0001, suggesting that the fit of the data to the proposed model is not entirely adequate. However, a conclusion solely based on the Chi-square statistic is insufficient, because the Chi-square statistic is mainly based on the sample size (i.e., $\text{Chi-square statistic} = (N-1)F_{\min}$), so that it is highly sensitive to the sample size. Therefore, finding well-fitting hypothesized models (i.e., the Chi-square value approximates the degrees of freedom) have proven to be unrealistic in most Structural Equation Modeling (SEM) empirical research (Byrne, 2001). More commonly, a large Chi-square value relative to the degrees of freedom indicates a need to modify the model in order to fit the data better.



EQ: Extrinsic Quality of the Retailer
 RREQ: Reputation of Extrinsic Quality of the Retailer
 ATT: Attitude toward the Retailer

IQ: Intrinsic Quality of the Retailer
 RRIQ: Reputation of Intrinsic Quality of the Retailer
 IT: Intention to Transact with the Retailer

Figure 10. Proposed Conceptual Model

Table 14. Fit Indices for the Proposed Conceptual Model

Model	NPAR	CMIN	DF	P	CMIN/DF	GFI	CFI
Proposed Conceptual Model	89	6596.093	814	0.000	8.103	0.582	0.864
Saturated Model	903	0.000	0.000	N/A	N/A	1	1
Independence Model	42	43292.31	861	0.000	50.281	0.045	0.000

Model	RMSEA	LO 90	HI 90	PCLOSE
Proposed Conceptual Model	0.109	0.106	0.111	0.000
Independence Model	0.287	0.284	0.289	0.000

Next, the goodness-of-fit index (GFI) is a measure of the relative amount of variance and covariance in S (sample covariance matrix) that is jointly explained by Σ (calculated covariance matrix). GFI is classified as an absolute index of fit because they basically compare the hypothesized model with no model at all (Hu and Bentler, 1999). Although a GFI value can be overly influenced by sample size (Fan, Thompson, and Wang, 1999), it is generally known that a GFI value close to 1.00 is indicative of a good fit, so the GFI value of 0.582 in this study suggests a need of model modification for a better fit.

A comparative fit index (CFI) was also used in this study to find a better fit model. Different from GFI, CFI is classified within incremental or comparative indices of fit (Hu and Bentler, 1997), because this index is based on a comparison of the hypothesized model against some standard. CFI was originally developed from a normed fit index (NFI). But, compared to the NFI's tendency of underestimating fit in

small samples, CFI is advanced by taking a sample size into account (Bentler, 1990), and it is often suggested that CFI is a better index for choice of the model than NFI. Given the fact that the CFI value of greater than 0.90 is considered representative of a well-fitting model (Bentler, 1990), the CFI of the proposed model (0.864) in this study indicates a need of model modification for a better fit.

The last index included in this study was the root mean square error of approximation (RMSEA). This index has been recently recognized as one of the most informative criteria in covariance structure modeling (Byrne, 2001). The RMSEA takes into account the error of approximation in the population and asks the question, “How well would the model, with unknown but optimally chosen parameter values, fit the population covariance matrix if it were available?” (Brown and Cudeck 1993, pp.137-138).

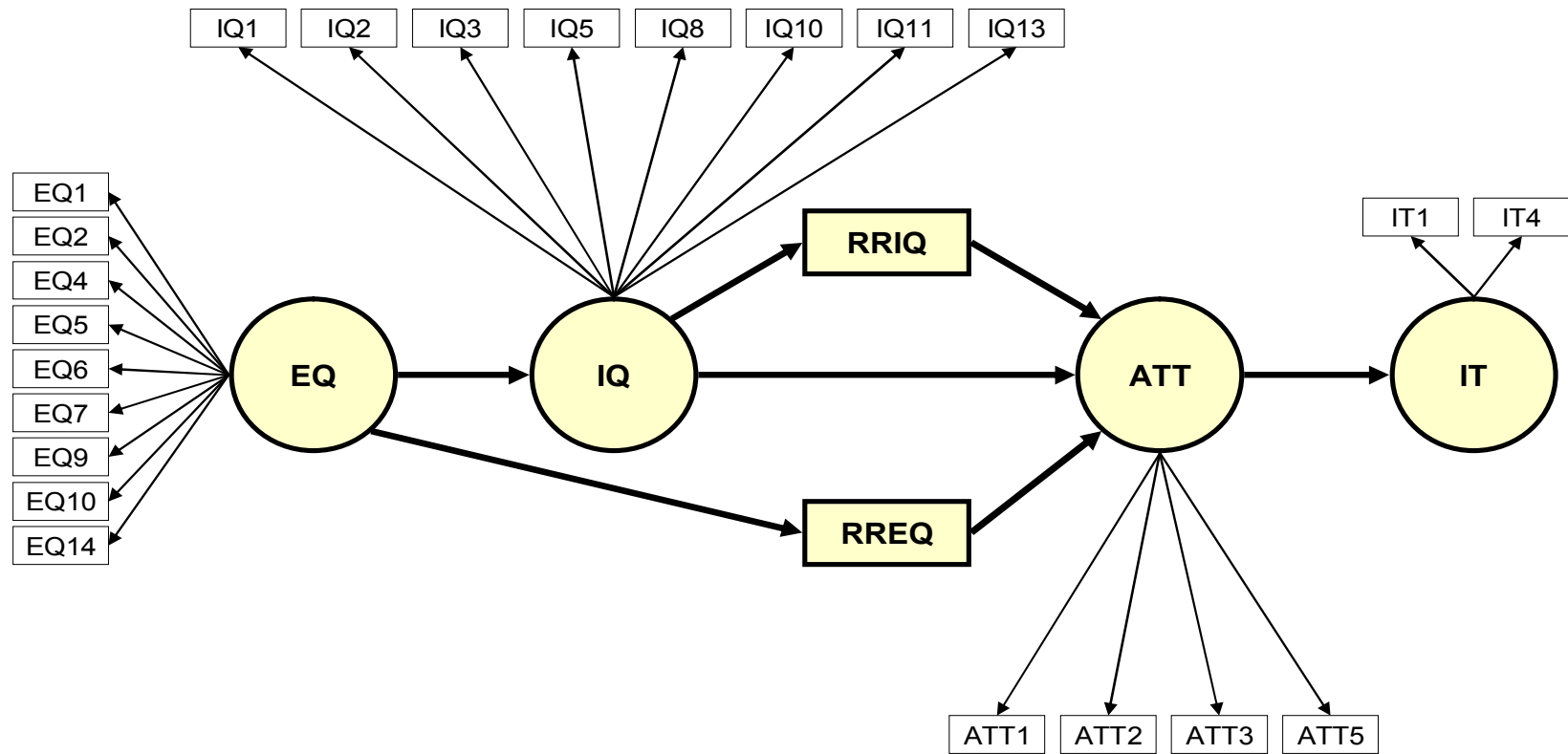
The discrepancy measured by RMSEA is expressed per degree of freedom, so that RMSEA is sensitive to the number of estimated parameters in the model (i.e., the complexity of the model). The most recent RMSEA cut-points are elaborated by MacCallum, Brown, and Sugawara (1996) and they suggested that RMSEA values ranging from 0.08 to 0.10 indicate mediocre fit, and those greater than 0.10 indicate poor fit. In addition, Hu and Bentler (1999) suggested a value of 0.06 or lower to be indicative of good fit, but they also cautioned that RMSEA tends to over-reject true population models when the sample size is small. Like the previous fit indices, RMSEA value of 0.109 of the proposed model in this study indicates a need of model modification for a better fit.

In summary, the proposed conceptual model was tested in SEM and all fit indices suggest that the proposed model should be specified and tested again. Therefore, a series of modifications were performed to find a better model by using path coefficient estimates, variance-covariance estimates, and modification indices (MI). The final chosen model is presented in the following section.

Final Model

The final model chosen through a series of modifications and fit indices is presented in Figure 11 and Table 15. The specification was made mainly based on the modification indices as long as the initial relationships among constructs were observed throughout the specification process. Most of the modifications occurred at the indicator items of extrinsic quality and intrinsic quality, which implies that the dropped items were too strongly correlated with the remaining items to maintain parsimoniousness of the model. As a result, the fit indices for the final model show that the model achieves a good fit to the data. Considering the previous discussion about fit indices and cut-off points to select a model, this model does not require any further modification. Items that were eliminated and those that remained in the final model are shown by each construct in Table 16.

First of all, only nine items remained of the 17 original items for extrinsic quality of the retailer. EQ3 (Camera World website is creative) highly correlated with EQ1 (Camera World website is visually attractive) and EQ4 (Camera World website is easy to navigate). EQ8 (Camera World website provides good picture of Canon Power Shot S410 digital camera) highly correlated with EQ1 and EQ9 (Camera World website



EQ: Extrinsic Quality of the Retailer
 RREQ: Reputation of Extrinsic Quality of the Retailer
 ATT: Attitude toward the Retailer

IQ: Intrinsic Quality of the Retailer
 RRIQ: Reputation of Intrinsic Quality of the Retailer
 IT: Intention to Transact with the Retailer

Figure 11. Final Model

Table 15. Fit Indices for the Final Model

Model	NPAR	CMIN	DF	P	CMIN/DF	GFI	CFI
Final Model	68	715.016	257	0.000	2.782	0.911	0.979
Saturated Model	325	0.000	0.000	N/A	N/A	1	1
Independence Model	25	21768.12	300	0.000	72.56	0.083	0.000

Model	RMSEA	LO 90	HI 90	PCLOSE
Final Model	0.055	0.05	0.059	0.058
Independence Model	0.345	0.341	0.349	0.000

Table 16. Items Eliminated and Remained in the Final Model

Construct	Eliminate or Finalized	Item No.	Items
Extrinsic Quality of the Retailer (EQ)	☒	EQ1	Camera World website is visually attractive
	☒	EQ2	Camera World website is professional looking
	X	EQ3	Camera World website is creative
	☒	EQ4	Camera World website is easy to navigate
	☒	EQ5	Camera World website is easy to find information
	☒	EQ6	Camera World website recommends related products to Canon Power Shot S410 digital camera
	☒	EQ7	Camera World website enables to upgrade the components of Canon Power Shot S410 digital camera
	X	EQ8	Camera World website provides good picture of Canon Power Shot S410 digital camera
	☒	EQ9	Camera World website presents in-depth information about Canon Power Shot S410 digital camera
	☒	EQ10	Camera World website presents in-depth information about total price
	X	EQ11	Camera World website presents in-depth information about shipping/handling process
	X	EQ12	Camera World website presents in-depth information about payment methods
	X	EQ13	Camera World website presents in-depth information about return/refund policy
	☒	EQ14	Camera World website presents in-depth information about customer service
	X	EQ15	Camera World website presents in-depth information about security protection
	X	EQ16	Camera World website presents in-depth information about privacy protection
	X	EQ17	Camera World website presents in-depth information about Camera World Company
Intrinsic Quality of the Retailer (IQ)	☒	IQ1	Camera World is likely to sell an authentic Canon Power Shot S410 digital camera
	☒	IQ2	Camera World is likely to charge a reasonable price for Canon Power Shot S410 digital camera
	☒	IQ3	Camera World is likely to bill me without an error
	X	IQ4	Camera World is likely to securely process my payment
	☒	IQ5	Camera World is likely to be willing to protect my privacy
	X	IQ6	Camera World is likely to charge me a reasonable shipping & handling prices
	X	IQ7	Camera World is likely to deliver the exact Canon Power Shot S410 digital camera I ordered from the website of Camera World
	☒	IQ8	Camera World is likely to deliver the digital camera on time
	X	IQ9	Camera World is likely to package the digital camera well
	☒	IQ10	Camera World is likely to inform me of the delivery status
	☒	IQ11	Camera World is likely to response promptly to any inquiry
	X	IQ12	Camera World is likely to communicate in a friendly manner with me
	☒	IQ13	Camera World is likely to make any return and refund easy

Table 16. Continued

Construct	Eliminate or Finalized	Item No.	Items
Attitude toward the Retailer (ATT)	☑	ATT1	I feel shopping at Camera World would be reliable
	☑	ATT2	I feel shopping at Camera World would be secure
	☑	ATT3	I would feel comfortable shopping at Camera World
	X	ATT4	I feel Camera World would be a desirable retailer for my shopping needs
	☑	ATT5	I feel Camera World would have the capacity to satisfy my shopping needs
	X	ATT6	I feel Camera World would fit my standards or demands of an online retailer
Intention to Transact with the Retailer (IT)	☑	IT1	I would like to shop at Camera World
	X	IT2	I would like to build a relationship with Camera World
	X	IT3	If I want to purchase Canon Power Shot s410 digital camera, I would make a purchase at Camera World
	☑	IT4	I would be willing to order the Canon Power Shot S410 digital camera through Camera World website

Note: ☑ ☐ Remained in the final model

X ☐ Eliminated from the final model

Also items in shaded rows remained in the final model

presents in-depth information about Canon Power Shot S410 digital camera). Therefore, EQ3 and EQ8 were eliminated.

EQ14 (Camera World website presents in-depth information about customer service) highly correlated with EQ11 (Camera World website presents in-depth information about shipping/handling process), EQ12 (Camera World website presents in-depth information about payment methods), EQ13 (Camera World website presents in-depth information about return/refund policy), EQ15 (Camera World website presents in-depth information about security protection), EQ16 (Camera World website presents in-depth information about privacy protection), and EQ17 (Camera World website presents in-depth information about Camera World Company). However, the model including EQ14 with the elimination of EQ11, EQ12, EQ13, EQ15, EQ16, and EQ17 showed a better model fit than the model including EQ11, EQ12, EQ13, EQ15, EQ16, and EQ17 with the elimination of EQ14. Therefore, EQ14 remained in the final model and EQ11, EQ12, EQ13, EQ15, EQ16, and EQ17 were eliminated.

Eight of the original 13 items remained for intrinsic quality of the retailer. IQ4 (Camera World is likely to securely process my payment) highly correlated with IQ3 (Camera World is likely to bill me without an error). IQ6 (Camera World is likely to charge me a reasonable shipping & handling prices) highly correlated with IQ2 (Camera World is likely to charge a reasonable price for Canon Power Shot S410 digital camera). IQ7 (Camera World is likely to deliver the exact Canon Power Shot S410 digital camera I ordered from the website of Camera World) highly correlated with IQ1 (Camera World is likely to sell an authentic Canon Power Shot S410 digital camera). IQ12 (Camera World is likely to communicate in a friendly manner with me) highly

correlated with IQ11 (Camera World is likely to response promptly to any inquiry). Therefore, EQ4, EQ6, EQ7, EQ9, and EQ12 were eliminated.

For attitude toward the retailer, both ATT4 (I feel Camera World would be a desirable retailer for my shopping needs) and ATT6 (I feel Camera World would fit my standards or demands of an online retailer) highly correlated with ATT5 (I feel Camera World would have the capacity to satisfy my shopping needs). Consequently, ATT4 and ATT6 were eliminated.

After a series of comparison of model fits, the model fit was the best when IT1 (I would like to shop at Camera World) and IT4 (I would be willing to order the Canon Power Shot S410 digital camera through Camera World website) remained for this construct. Therefore, IT1 and IT4 remained, and IT2 (I would like to build a relationship with Camera World) and IT3 (If I want to purchase Canon Power Shot s410 digital camera, I would make a purchase at Camera World) was eliminated for the construct, intention to transact with the retailer.

Hypotheses Testing: Test of Finalized Structural Model

The finalized structural model containing all of the hypothesized relationships was tested by using AMOS 5.0. As shown in Table 17, the result indicates a reasonable fit between the model and the observed data.

The standardized estimates for the hypothesized paths, along with fit statistics, are presented in Table 18 and Figure 12. As shown in Table 18, all hypothesized relationships except H4_a (Consumer's perceived 'Reputation of the extrinsic quality of

Table 17. Fit Indices for the Finalized Structural Model

NPAR	CMIN (χ^2)	DF	P	CMIN/DF	GFI	RMR	CFI	RAMSEA
68	715.016	257	0.000	2.782	0.911	0.086	0.979	0.055

Note) NPAR: Number of independent parameters

CMIN: Criterion value for minimization, same as χ^2 .

DF: Degree of Freedom P: Significance

CMIN/DF: If this value is closer to 0, reasonable fit between the model & the observed data

GFI: Goodness of fit index. This value should be over 0.9. If this value is closer to 1, reasonable fit between the model & the observed data

RMR: Root mean square residual. If this value is closer to 0, reasonable fit between the model & the observed data

CFI: Comparative fit index. If this value is closer to 1, reasonable fit between the model & the observed data

RAMSEA: Root mean square error of approximation. If this value is under to 0.06, reasonable fit between the model & the observed data.

Table 18. Standardized Path Coefficients and Hypotheses Test Results

	Hypothesized Paths	Expected Sign	Standardized Coefficient (<i>b</i>)	P-value	Results
H1	EQ $\rightarrow$ IQ	+	0.932	0.000	Supported*
H2	IQ $\rightarrow$ ATT	+	0.806	0.000	Supported*
H3a	EQ $\rightarrow$ RREQ	+	0.380	0.000	Supported*
H3b	IQ $\rightarrow$ RRIQ	+	0.236	0.000	Supported*
H3c	EQ $\rightarrow$ RREQ > IQ $\rightarrow$ RRIQ ⁺	N/A	N/A	N/A	Supported*
H4a	RREQ $\rightarrow$ ATT	+	-0.011	0.694	Not Supported
H4b	RRIQ $\rightarrow$ ATT	+	0.053	0.039	Supported**
H4c	RREQ $\rightarrow$ ATT < RRIQ $\rightarrow$ ATT ⁺⁺	N/A	N/A	N/A	Supported*
H5	ATT $\rightarrow$ IT	+	0.991	0.000	Supported*

⁺ EQ $\rightarrow$ RREQ (0.380) > IQ $\rightarrow$ RRIQ (0.236)

⁺⁺ RREQ $\rightarrow$ ATT (-0.011) < RRIQ $\rightarrow$ ATT (0.053)

* $p \leq 0.01$ ** $p \leq 0.05$

Note) EQ: Extrinsic Quality of the Retailer IQ: Intrinsic Quality of the Retailer

RREQ: Reputation of Extrinsic Quality of the Retailer

RRIQ: Reputation of Intrinsic Quality of the Retailer

ATT: Attitude toward the Retailer IT: Intention to Transact with the Retailer

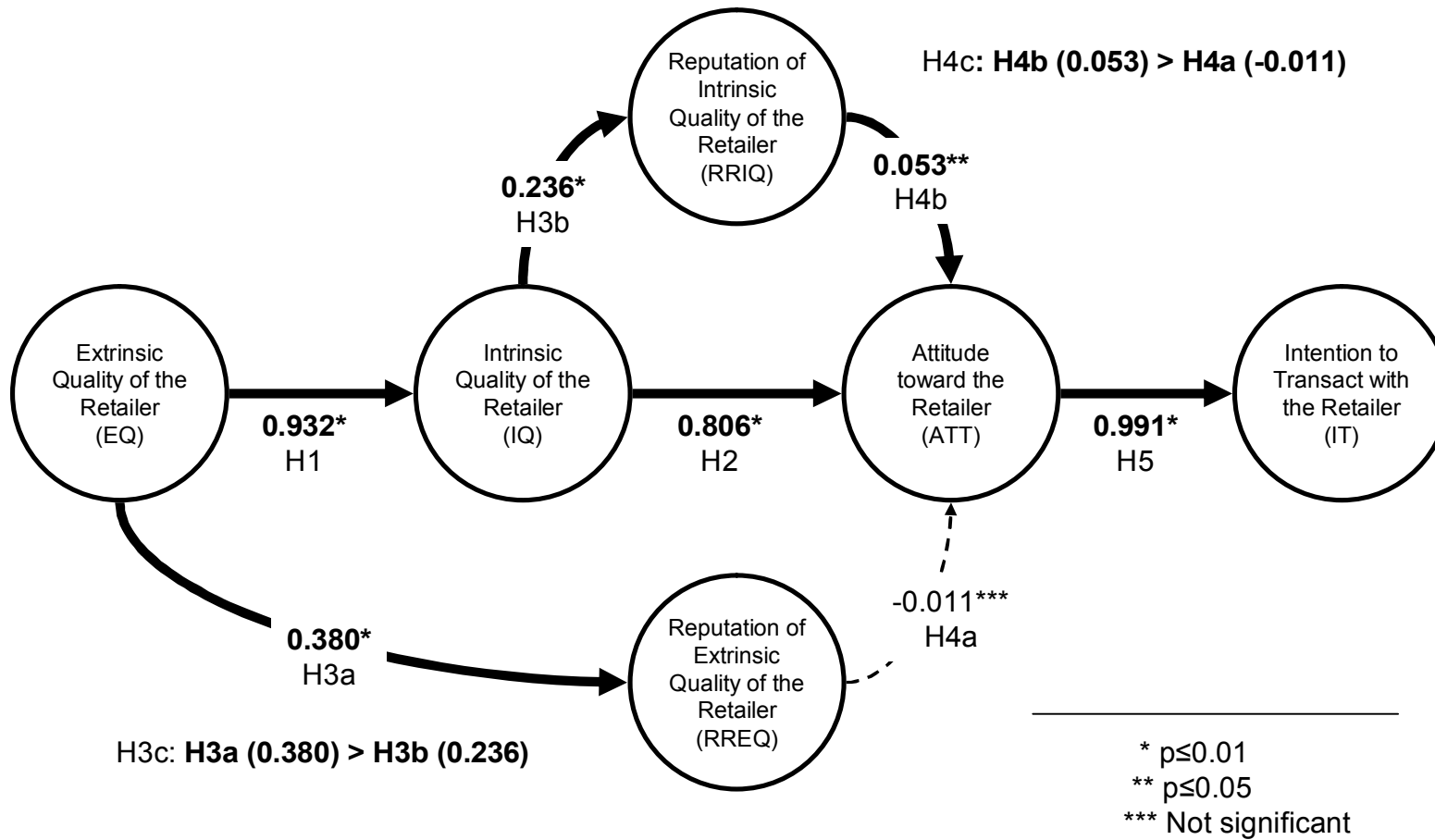


Figure 12. Standardized Path Coefficients and Hypotheses Test Results

the Retailer' positively influences consumer's 'Attitude toward the Retailer') were statistically significant in the hypothesized direction.

Specifically, three standardized path coefficients were significantly higher than other coefficients. At first, the standardized path coefficient ($b = 0.991$, $p \leq 0.000$) between ATT (Attitude toward the Retailer) and IT (Intention to Transact with the Retailer) was significantly higher than other path coefficients.

The standardized path coefficient ($\gamma = 0.932$, $p \leq 0.000$) between EQ (Extrinsic Quality of the Retailer) and IQ (Intrinsic Quality of the Retailer) was also significantly higher than others.

Although not as high as the above two, the standardized path coefficient ($b = 0.806$, $p \leq 0.000$) between IQ and ATT (Attitude toward the Retailer) was also considerably high.

Even though standardized path coefficient ($b = 0.053$, $p \leq 0.039$) between RRIQ (Reputation of the Intrinsic Quality of the Retailer) and ATT was significant, influence of consumer's speculation based on consumer's own observations of the retailer (EQ $\rightarrow$ IQ) proved to be more dominant in forming an attitude toward the retailer than that of other consumers' opinions (EQ $\rightarrow$ IQ $\rightarrow$ ATT $>$ RRIQ $\rightarrow$ ATT) on the basis of the size of path coefficient,.

Hypothesis 1 examined the relationship between consumer's perceived extrinsic quality of the retailer (EQ) and consumer's perceived intrinsic quality of the retailer (IQ). As the path coefficient ($\gamma = 0.932$, $p \leq 0.000$) between EQ and IQ indicated, these two constructs showed a highly significant positive linear relationship (i.e., the higher

EQ, the higher IQ). In other words, EQ has a significantly strong positive influence on IQ. Therefore Hypothesis 1 was supported.

Hypothesis 2 examined the relationship between consumer's perceived intrinsic quality of the retailer (IQ) and consumer's attitude toward the retailer (ATT). As the path coefficient ($b = 0.806$, $p \leq 0.000$) between IQ and ATT indicated, the two constructs showed a highly significant positive linear relationship (i.e., the higher IQ, the higher ATT). In other words, IQ has significantly strong positive influence on ATT. Therefore Hypothesis 2 was supported.

Hypothesis 3a examined the relationship between consumer's perceived extrinsic quality of the retailer (EQ) and consumer's perceived reputation of the extrinsic quality of the retailer (RREQ). As the path coefficient ($\gamma = 0.380$, $p \leq 0.000$) between EQ and RREQ indicated, the two constructs showed a significant positive linear relationship (i.e., the higher EQ, the higher RREQ). In other words, EQ positively influenced RREQ. Therefore Hypothesis 3a was supported.

Hypothesis 3b examined the relationship between consumer's perceived intrinsic quality of the retailer (IQ) and consumer's perceived reputation of the intrinsic quality of the retailer (RRIQ). As the path coefficient ($b = 0.236$, $p \leq 0.000$) between IQ and RRIQ indicated, the two constructs showed a significant positive linear relationship (i.e., the higher IQ, the higher RRIQ). In other words, IQ positively influenced RRIQ. Therefore Hypothesis 3b was supported.

Hypothesis 3c examined whether the relationship between EQ and RREQ is stronger than the relationship between IQ and RRIQ by comparing the size of path coefficients of the two relationships. As a result of comparison, the path coefficient

between EQ and RREQ ($\gamma = 0.380$, $p \leq 0.000$) was larger than the path coefficient between IQ and RRIQ ($b = 0.236$, $p \leq 0.000$). In other words, the influence of EQ on RREQ is larger than that of IQ on RRIQ. Therefore Hypothesis 3c was supported.

Hypothesis 4a examined the relationship between the consumer's perceived reputation of extrinsic quality of the retailer (RREQ) and consumer's attitude toward the retailer (ATT). As the path coefficient ($b = -0.011$, $p = 0.694$) between RREQ and ATT indicated, the two constructs did not show a significant positive linear relationship. In other words, RREQ did not influence ATT. Therefore Hypothesis 4a was not supported. One reason for a negative (-) path coefficient from RREQ and ATT is that the majority of the respondents perceived customer reviews on extrinsic quality of the retailer (RREQ) as positive whereas they showed a negative attitude toward the retailer due to negative perception of the customer reviews on intrinsic quality of the retailer (RRIQ). Therefore, this negative relationship is mainly due to this discrepancy between RREQ, RRIQ, and ATT caused by survey design. (See Table 19)

Hypothesis 4b examined the relationship between consumer's perceived reputation of intrinsic quality of the retailer (RRIQ) and consumer's attitude toward the retailer (ATT). Even though the path coefficient ($b = 0.053$, $p = 0.039$) between RRIQ and ATT was not as high as the path coefficient among other constructs, the two constructs showed a moderate significant positive linear relationship at the confidence level of 0.95. In other words, RRIQ moderately influenced ATT. Therefore Hypothesis 4b was supported.

Table 19. Mean Comparison among RREQ, RRIQ, and ATT

Construct	Mean	Standard Deviation	Possible Lowest Score (Negative)	Possible Highest Score (Positive)
Consumer's perceived postiveness of customer reviews on the extrinsic quality of Retailer	4.56	0.65	1	5
Reputation of Extrinsic Quality of the Retailer (RREQ)	14.75	6.53	1	25
Consumer's perceived postiveness of customer reviews on the intrinsic quality of the Retailer	2.09	0.91	1	5
Reputation of Intrinsic Quality of the Retailer (RRIQ)	7.62	3.68	1	25
Attitude toward the Retailer (ATT)*	2.79	1.32	1	5

* Average of all 6 items for construct, Attitude toward the retailer (ATT)

Hypothesis 4c examined whether the relationship between RRIQ and ATT is stronger than the relationship between RREQ and ATT by comparing the size of the path coefficients of the two relationships. As a result of comparison, the path coefficient between RRIQ and ATT ($b = 0.053$, $p = 0.039$) was larger than the path coefficient between RREQ and ATT ($b = -0.011$, $p = 0.694$). In other words, the influence of RRIQ on ATT is more significant and larger than that of RREQ on ATT. Therefore Hypothesis 4c was supported.

Hypothesis 5 examined the relationship between consumer's attitude toward the retailer (ATT) and consumer's intention to transact with the retailer (IT). As the path coefficient ($b = 0.991$, $p \leq 0.000$) between ATT and IT indicated, the two constructs showed a highly significant positive linear relationship. In other words, ATT has a strong influence on IT. Therefore Hypothesis 5 was supported.

CHAPTER V

CONCLUSIONS AND FUTURE RESEARCH

The following chapter summarizes the study in terms of its findings. The conclusions section begins with the findings and discussion based on the result of this study. Lastly, the implications of the study are presented followed by the limitations of this study and suggestions for future research.

Discussion of Findings

The findings primarily came from two analysis processes: finalizing the proposed conceptual model and hypotheses testing (i.e., tests of paths in the finalized structural model). Findings from the first process are mainly about the critical attributes constituting consumer's perceived extrinsic and intrinsic quality of the retailer in an online marketplace context. Findings from the second process are mainly about the causal relationships and influences among consumer's perceived extrinsic and intrinsic quality of the retailer, reputation of the extrinsic quality and intrinsic quality of the retailer, attitude toward the retailer, and intention to transact with the retailer in an online marketplace context.

Since this study was performed in sequence, the discussion of findings begins with the critical attributes of quality of the retailer in an online marketplace context.

Next, the discussion on the relationships and influences among major constructs in the model of this study is presented.

Findings from the Finalization of the Proposed Conceptual Model

Attributes for extrinsic quality of the retailer in an online marketplace context

Only nine items remained of the 17 original items for extrinsic quality of the retailer. The main reason for this, as this study assumes, may be related to the characteristics of the consumer's pre-purchase deliberation process in an online marketplace.

As already discussed, a consumer may find a variety of online retailers selling the product he/she wants to buy through an online marketplace. This suggests an increase of information that a consumer has to process for retailer choice. Therefore, it is highly possible that a consumer perceives the extrinsic quality of the retailer based on the first impressions of the website, rather than by knowledge gained from thorough observation of the entire website.

Items related to website design, navigational structure, and features/functions, that may impact the consumer's first impression on the website, remained, but items related to information, which is relatively hard for a consumer to understand without considerable attention to the descriptions on the web-pages, did not remain in the finalized model except for customer service, product, and price information. This result is consistent with that of Wolfinbarger and Gilly (2003).

This conclusion was also supported by the comparison of the scores of each item

related to information between the respondents who observed five or more web-pages (Group A) and respondents who observed less than five of the ten web-pages of Camera World (Group B). The mean scores of all items related to information were significantly higher in Group A than Group B (See Appendix 4). Therefore, if a consumer has an impression from the visually good/professional design of website, easy-to-navigate/use website structure/interface, and convenient features/functions, a consumer may perceive other attributes in extrinsic quality also as excellent, and *vice versa*.

If a consumer is highly likely to perceive the extrinsic quality of the retailer in the manner discussed above, it is natural that there are high correlations among items for extrinsic quality of the retailers. Consequently, this may be a significant reason why the items related to information were eliminated from the consumer's perceived extrinsic quality of the retailer in an online marketplace context. Even though, in general, online retailers indicate their policies on transaction security, privacy protection, shipping and handling, return/refund, and company reliability, the consumer may not thoroughly read all information on retailer's website.

Based on the results from the final model process, what consumers mainly focus on in the pre-purchase deliberation process is highly likely to be only product and product sales price information rather than billing, delivery, packaging, return/refund, and company reliability. Therefore, during the first encounter or experience with a certain retailer in an online marketplace, consumers seem to focus on product and price information rather than other information described or presented through the website of the retailer.

Even though assurance of the reliability of the retailer and fulfillment through information on the website are known to be critical to first time visitors to retailer's website in an online retailing environment (Zeithaml et al, 2000), the results of this study show greater importance of assurance for product and product sales price through the website, which are more product-specific attributes, rather than reliability of retailer and fulfillment issues. This might be explained, because this study assumed that consumers may put more emphasis on the economic value a retailer suggests and the completeness of product in the pre-purchase deliberation process.

Customers may not expect and desire to return and get a refund their purchased product, even though the retailer they purchased from provides a state-of-art return and refund service during the pre-purchase deliberation through online. Therefore, we can infer that the authentic and the best product with a competitive price may be of most concern at the pre-purchase deliberation stage to most consumers. This tendency seems to be more general among consumers who use online marketplaces, a third party online shopping organizer, to compare the prices of multiple retailers for the same product.

Because many online marketplaces guarantee the reliability of their listed retailers (often called 'merchants'), online marketplace users are likely to focus on product and price with relatively little concern for reliability of the retailer than other independent online store shoppers. So, confirming and checking if the product and sales price informed by an online marketplace are the same as those on the website of each independent retailer may be a priority in the consumer's experience with the website of each independent retailer. This tendency was also identified in the sample

of this study by additional cross-tabulation analyses (See Appendix 5)

In addition, this study also found from the results that consumers may perceive or regard the information about transaction security, privacy protection, shipping & handling process, return and refund, and company reliability as factors of customer service. Information on service was the only item that remained among information related to the after-purchase situation or process.

In conclusion, this study found that consumers may perceive the extrinsic quality of the retailer primarily based on the first impressions formed by website design, navigational structure, features/functions, and the product & product price information, which is the basic information for pre-purchase deliberation.

Attributes for intrinsic quality of the retailer in an online marketplace context

Eight of the original 13 items remained for intrinsic quality of the retailer. Based on the result, this study found, what consumers speculate on the basis of retailer's website are 'on time delivery', 'billing accuracy', 'quick response to inquiry', 'willingness for privacy protection', 'hassle-free return/refund', and 'reliability of product and price'³⁶.

For the intrinsic quality of the retailer, attributes related to fulfillment and after purchase process contributed more than attributes related to reliability of product and price, which can be easier to observe through the website than other attributes of intrinsic quality of the retailer. This inference is reasonable, because information related to the product and prices were the top contributing attributes to extrinsic quality

³⁶ By the order of the size of standardized coefficient of each attribute for Intrinsic Quality of the Retailer

of the retailer. That is, consumer's perceptions of the reliability of the product and prices are likely to be firmly formed before perceiving other intrinsic quality attributes at the stage of observing extrinsic quality.

Attributes for attitude toward the retailer in an online marketplace context

Based on the result of the finalization of the proposed conceptual model, the attitude a consumer may have toward the retailer can be expressed of feeling a capacity for the retailer to satisfy shopping needs, reliability of shopping at the retailer, comfortableness of shopping at the retailer, and security of shopping at the retailer.

Among those, feeling the capacity to satisfy shopping needs and reliability of shopping at the retailer contributed more to the attitude toward the retailer than the other two attributes.

Attributes for intention to transact with the retailer in an online marketplace context

Interestingly, this study found that there was little concept or meaning of 'willingness to develop a relationship with the retailer' underlying the construct, 'intention to transact with the retailer' in an online marketplace context.

Results from the finalization of the proposed conceptual model indicated a willingness to develop a relationship with the retailer and absolute purchase intention (*"If I want to purchase Canon Power Shot s410 digital camera, I would make a purchase at Camera World"*) were not appropriate for 'intention to transact with the retailer' construct in the sample of this study.

Rather than an enduring relationship, the intention to transact with the retailer in the pre-purchase deliberation process in an online marketplace context is related to a situational preference toward the retailer (*“I would like to shop at Camera World”*) or website of the retailer (*“I would be willing to order the Canon Power Shot S410 digital camera through Camera World website”*).

As already discussed in the Introduction and Literature Review of this study, above result is consistent with current studies (Kuttner 1998; Burke 2002; Parasuraman and Zinkhan 2002; Srinivasan et al. 2002; Noble and Philips 2004) that loyalty is hard to develop in consumers using online marketplaces.

Findings from Hypotheses Testing

Double-layered structure of quality of the online retailer

One of the critical findings from the final model testing is the multi-layered structure of quality of the online retailer. Most previous studies explaining online retailer’s quality (Dabholkar 1996; Alpar 2001, Chen and Wells 1999; Muylle et al. 1999; Liu and Arnett 2000; Montoya-Weiss et al. 2000; Novak et al. 2000; Szymanski and Hise 2000; Yang et al. 2000; Childers et al. 2001; Eroglu et al. 2001; Koufaris et al. 2001/2002; Schlosser and Kanfer 2001; Yoo and Donthu 2001; Zeithaml et al. 2000; 2002; Francis and White 2002; Loiacono et al. 2002; Rice 2002; Srinivasan et al. 2002; Gomez.com (Lovett) 2003; Wolfenbarger and Gilly 2003; Bizrate.com 2005) have not distinguished between extrinsic and intrinsic quality.

However, the final model testing process of this study suggested that extrinsic quality is distinguished from intrinsic quality of the online retailer. In the process of

the finalizing of the proposed conceptual model, several items in extrinsic and intrinsic quality were excluded. This is not because of high correlations between items in extrinsic quality and items in intrinsic quality but because of high correlation of items within extrinsic quality and items within intrinsic quality. In addition, there was little correlation between extrinsic quality and intrinsic quality items that remained in the final model.

Therefore, based on the results of this study, we can conclude that there is multi-layered structure in the quality of the online retailer. That is, there are two different constructs in the quality of the online retailer.

Influence of extrinsic quality on intrinsic quality of the online retailer

In addition to finding the double-layered structure, this study also empirically tested the conceptual relationship between website quality (extrinsic quality in this study) and service quality (intrinsic quality) raised by Khanh and Jay (2002). This conceptual relationship was strongly supported. That is, there is a construct playing the role of antecedent to another construct in the multi-layered structure of quality of the online retailer.

This study identified the strong positive influence of extrinsic quality on intrinsic quality. This finding implies that consumers are highly likely to judge or speculate about the quality of the business operation of the online retailer on the basis of quality of the website, rather than perceiving overall quality on the basis of the evaluation of all attributes of quality at once (i.e., rather than consider extrinsic and intrinsic quality altogether).

Specifically, this relationship may be more obvious in an online marketplace context. Consumers are more likely to encounter numerous unknown online retailers that they have no purchase experience with (Bakos 1997; Hauble and Triftly 2000; Smith 2002; Srinivasan et al. 2002). In this situation, consumers are more likely to depend on the website, which is almost the only resource consumers are able to observe and use for evaluating the quality of the online retailer. Therefore, this study argues that the larger the number of online retailers presented, the stronger the influence of extrinsic quality of the retailer in not only an online marketplace environment but also an online retailing environment.

Influence of consumer's own perceived quality V.S. Influence of reputation of the retailer on attitude toward the retailer

Another critical finding from the hypotheses testing (final model testing) is the significantly stronger influence of consumer's own perceived quality toward attitude than other consumer's opinions (i.e., reputation of the retailer).

In this study, the standardized path coefficient from intrinsic quality to attitude ($b = 0.806$, $p \leq 0.000$) was considerably higher than that from reputation of the intrinsic quality of the retailer ($b = 0.053$, $p \leq 0.05$). The standardized path coefficient from reputation of the extrinsic quality to attitude toward the retailer was not supported in the hypothesis test. This result means that consumers are likely to judge the quality of the online retailer based on their own experiences and observations, rather than depend on others' reviews, comments, or opinions, even though they have limited or no prior experience with the online retailer.

As already discussed, several recent studies (Schiffman and Kanuk 2000; Schindler and Bickert 2002; Senecal and Nantel 2004) conceptually argued that electronically published word of mouth (WOM) information plays a significant role in the online retailing environment. In addition, recent studies of which the context was an online marketplace (Gomez.com (Lovett) 2003; Bizrate.com 2005) conceptually indicated that user reviews on the retailer or the product greatly influenced consumer's choice of retailer or product in an online marketplace.

However, these previous studies have not empirically tested the influence of electronically published WOM or user reviews on attitude toward the retailer or purchase intention. In addition, these previous studies have not compared the influence of electronically published WOM or user reviews with the influence of a consumer's own perceived quality on attitude or purchase intention.

According to the major consumer's pre-purchase decision models, the outcomes from both sources, internal search (consumer's own perceived quality of the retailer) and external search (electronically published WOM or user reviews), influence attitude and purchase intention in consumer's pre-purchase deliberation process. It is possible for a consumer to have two contradictory sources (i.e., a consumer has positive WOM on the retailer in spite of having a negative perception of the retailer from own experience) in the pre-purchase deliberation process.

The results from the comparison between Hypothesis test 2 and 4 may contribute to solving the above-mentioned conceptual questions and arguments of previous studies. Even though the role of electronically published WOM information or user reviews (i.e., 'reputation of the retailer' in this study) has been recognized as

important in consumer's pre-purchase deliberation, according to the results of this study, its influence does not surpass the influence of a consumer's own perceived quality of the retailer on attitude toward the retailer, even in a situation when consumers have limited or no experience of transaction with the retailer.

Influence of consumer's own perceived quality on consumer's perceived reputation of the online retailer

Consumer's own perceived quality was found to significantly influence reputation of the retailer in the results of this study. This means, unlike the argument of previous studies (Schiffman and Kanuk 2000; Schindler and Bickert 2002; Senecal and Nantel 2004), consumer's own perceived quality plays a significant role as an antecedent to reputation of the retailer, rather than as a consequence of the reputation of the retailer.

Relationships between intrinsic quality of the retailer and attitude toward the retailer and intention to transact with the retailer in an online marketplace

Both the influence of intrinsic quality of the retailer on attitude toward the retailer (Hypothesis 2) and influence of attitude toward the retailer on intention to transact with the retailer (Hypothesis 5) are significantly high in the results of this study.

This study assumes that the reason for these strong influences may be the effect of a specific characteristic of an online marketplace. Since an online marketplace provides the list of retailers sorted by the lowest retailer suggested price for the same product, consumers may compromise less or have less dissonance between money-value and quality of the retailer than shopping online without the list.

Based on this speculation, we can infer that consumer's perceived quality is likely to greatly influence attitude toward the retailer and this attitude is likely to greatly influence intention to transact with the retailer as long as a consumer is able to get the list of retailers by the lowest suggested price in an online marketplace.

Implications

Academic Implications

This study attempted to develop a consumer's pre-purchase deliberation process model in an online marketplace context. Even though online (or Internet) is used not only for purchasing products but also for information search during the pre-purchase deliberation by consumers in an online retailing environment (Parasuraman and Zinkhan, 2002), previous studies have mainly focused on developing online (or the Internet) consumer decision process models covering the entire purchase experience (i.e., pre-purchase, purchase, and post-purchase experience such as satisfaction and loyalty) (Wolfenbarger and Gilly, 2003). As a result, there is no established model specifically focusing on consumer's pre-purchase deliberation process model in an online environment.

The online marketplace is a recent phenomenon facilitating consumer's pre-purchase deliberation process by making the consumer's information search and comparison process easier and more effective (Varadarajan and Manjit 2002; Gomez.com (Lovett) 2003; Bizrate.com 2005). An online marketplace environment can be regarded as the representative phenomenon of a consumer's pre-purchase

deliberation mechanism and process via online (or Internet). Therefore, the model developed for this study may contribute to the understanding of the consumer's pre-purchase decision mechanism and process in an online environment.

Technically speaking, the main difference between the pre-purchase deliberation process and the entire purchase experience model is a consequence construct in the model. Attributes, dimensions, roles, and causal relationships of a construct can vary, depending on the consequence in the model. The consequence of this study was the 'intention to transact with the retailer', which can be regarded as the ultimate outcome of pre-purchase deliberation. Thus, the results of the attribute structure within each construct and the causal relationships among the constructs in this study can be more relevant and representative of the consumer's pre-purchase deliberation process through online marketplaces than previous online consumer shopping behavior studies.

Reflecting more on the pre-purchase deliberation process in an online marketplace context, this study tried to examine whether extrinsic quality (quality related to website of the retailer) is a significantly different construct from intrinsic quality of the retailer (quality related to retail business operation of the retailer) in an online marketplace context. As a result of the examination, it was obvious that these two constructs were different from each other in the proposed model for this study.

Currently, the majority of previous studies on quality of the online retailer (Dabholkar 1996; Alpar 2001, Chen and Wells 1999; Muylle et al. 1999; Liu and Arnett 2000; Montoya-Weiss et al. 2000; Novak et al. 2000; Szymanski and Hise 2000; Yang et al. 2000; Childers et al. 2001; Eroglu et al. 2001; Koufaris et al. 2001/2002; Schlosser and Kanfer 2001; Yoo and Donthu 2001; Zeithaml et al. 2000; 2002; Francis and White

2002; Loiacono et al. 2002; Rice 2002; Srinivasan et al. 2002; Gomez.com (Lovett) 2003; Wolfinbarger and Gilly 2003; Bizrate.com 2005) have explained extrinsic quality as one of the dimensions under quality. There is no previous study considering a double-layered construct structure for quality of the retailer (i.e., most previous studies have regarded quality of the online retailer as one construct horizontally composed of multiple dimensions). Following the results from this study, a double-layered construct structure seems to be more appropriate for quality of the online retailer in the consumer pre-purchase deliberation process model in an online marketplace context (even in a general online retailing environment), where consumers have little or no prior experience with the retailer. In this environment, the website is the most obvious information source and intrinsic quality of the retailer is highly likely to be assumed on based on the website quality ('extrinsic quality' in this study).

This study also indicated a strong influence of extrinsic quality on the intrinsic quality of the retailer in the consumer pre-purchase deliberation process. This may be the first academic study to attempt to measure the quality of the online retailer in a consumer behavior context. Thus, this study empirically examined the causal relationship between extrinsic quality and intrinsic quality of the retailer as well as the multi-layered construct structure under the concept of quality of the online retailer. Therefore, this study may contribute to initiating the development of a model where the construct structure is more appropriate for the up-to-date online marketplace context and the current online retailing environment.

This study examined the influence of reputation of the retailer in the consumer pre-purchase deliberation process. Considering the reputation of the retailer has not

been empirically tested as an antecedent for attitude or as a construct in the consumer pre-purchase deliberation process online (or the Internet) in previous studies (Schiffman and Kanuk 2000; Schindler and Bickert 2002; Senecal and Nantel 2004), the results from this study may contribute considerably to understanding the role of reputation of the retailer in an online marketplace context. As a result of this research, only the reputation of intrinsic quality of the retailer slightly influenced attitude toward the retailer.

More interestingly, unlike previous studies (Schindler and Bickert, 2002), the influence of reputation of the retailer on the attitude toward the retailer was significantly smaller than the influence of the consumer's own perceived quality of the online retailer in an online marketplace context, where consumers have even little or no prior knowledge and experience with the retailer (Degeratu et al., 2000). This result contributes not only to the understanding the role of reputation of the retailer in an online marketplace but also the role of word-of-mouth in general consumer behavior models by contradicting existing conceptual thought on the role of the word-of-mouth (WOM) communication.

Managerial Implications

The ultimate purpose of this study is to provide strategic implications to retailers for increasing the possibility of being exposed to consumers, given attention to by consumers, and included in the consumers' pre-purchase deliberation process in an online marketplace.

Based on one of the findings of this study, the influence of extrinsic quality on the intrinsic quality of the retailer, retailers participating in an online marketplace should make efforts to improve their website quality as the first priority. According to the results from the process of finalizing the proposed conceptual model, attributes related to the website (extrinsic quality in this study) such as website design, navigational structure, convenient and reality features/functions, information about the product and price directly impact the website visitors' first impression or perception of quality. Therefore investing in improvement of website quality should be priority for the online retailer.

Investing in strengthening website quality can create another strategic advantage for retailers in an online marketplace. Based on the results from influence of extrinsic/intrinsic quality on reputation of retailer in the study, positive perceptions of extrinsic/intrinsic quality could strengthen the consumer's positive perceptions of other customers' reviews (reputation of the retailer) of the retailer. Considering that retailers have difficulty in controlling customer reviews as they intended or expected in an online marketplace, it may be a wise strategy to improve the extrinsic quality of the retailer (i.e., website quality) to create positive customer reviews rather than investing money on a buzz marketing campaign³⁷ in customer communities in online marketplaces. According to the result of this study, excellent extrinsic quality not only influences consumer's positive perceptions of extrinsic quality but also leads consumers to perceive customer reviews on extrinsic quality of the retailer more positively.

³⁷ Marketing communication campaign that spreads positive word-of-mouth purposely using a significant number of recruited people and a social network

The positive perception of intrinsic quality as a result of excellent extrinsic quality also leads consumers to perceive customer reviews on intrinsic quality more positively. Therefore, excellent extrinsic quality is a more essential and influential step than creating positive buzz in an online marketplace. Moreover, examining the slight influence of reputation of the retailer on the attitude toward the retailer identified in this study, buzz marketing seems to be an ineffective strategy for retailers in online marketplaces contrary to existing industry experts' advice in the current online retailing industry (Keller and Berry, 2003).

This study indicated that there was a considerably strong positive relationship between attitude toward the retailer and intention to transact with the retailer. This result implies the high possibility of converting a consumer who has a positive attitude toward the retailer to a customer who transacts with the retailer in an online marketplace. Consumers may be already satisfied with the prices of several top ranked retailers in the list of retailers sorted by the lowest retailer suggested price for the same product through an online marketplace. Therefore, as long as consumers have a positive attitude toward the retailer, developed by positive perceptions of quality of the retailer, consumers are more likely to have an intention to transact with the retailer than consumers who shop online stores without the help of the list of retailers an online usually provides.

In addition, consumers may have less dissonance between money-value and quality of the retailer, because an online marketplace is a third party connecting retailers to consumers with a certain level of assurance or control of the quality of retailers operating through an online marketplace. Thus, the possibility of converting a

consumer's positive attitude toward the retailer into an actual transaction with the retailer is expected to be higher than that of traditional retailing and general online retailing.

Considering the above-mentioned factors, a best practice for retailing in an online marketplace is, at first, to strengthen the capacity for providing the lowest price in comparison to other retailers for the same product, and then increase the website quality, which ultimately leads to a positive attitude toward the retailer. By implementing these best practice steps, a retailer in an online marketplace may easily achieve a considerably higher conversion rate from visitors to customers than retailers not operating through online marketplaces.

Limitations and Directions for Future Research

The following limitations may affect the generalizability of this study. The survey of this study was implemented through six steps. In the survey implementation process, the step asking a respondent to experience the website of the retailer preceded the step asking a respondent to review the customer reviews on the retailer due to technical problems of survey implementation. Therefore, it is not possible to examine the influence of customer reviews ('reputation of the retailer' in this study) on consumer's perceived extrinsic quality of the retailer in this study. Only the influence of the consumer's perceived extrinsic quality of the retailer on consumer's perceived reputation of the retailer was examined in this study.

In the reality of consumer's using an online marketplace, either observing the website before reading customer reviews on the retailer or reading customer reviews before observing the website of the retailer is possible. Therefore, in addition to the influence of consumer's perceived quality on consumer's perceived reputation of the retailer, it is also possible for the consumer's perceived reputation of the retailer to influence consumer's perceived quality of the retailer. Based on this limitation, caution should be taken regarding generalizing about the path coefficients among the constructs in this study. To overcome the above-mentioned limitation, a study testing an alternative model where interactions between consumer's perceived extrinsic/intrinsic quality of the retailer and consumer's perceived extrinsic/intrinsic reputation of the retailer could be hypothesized for future research (See Figure 13).

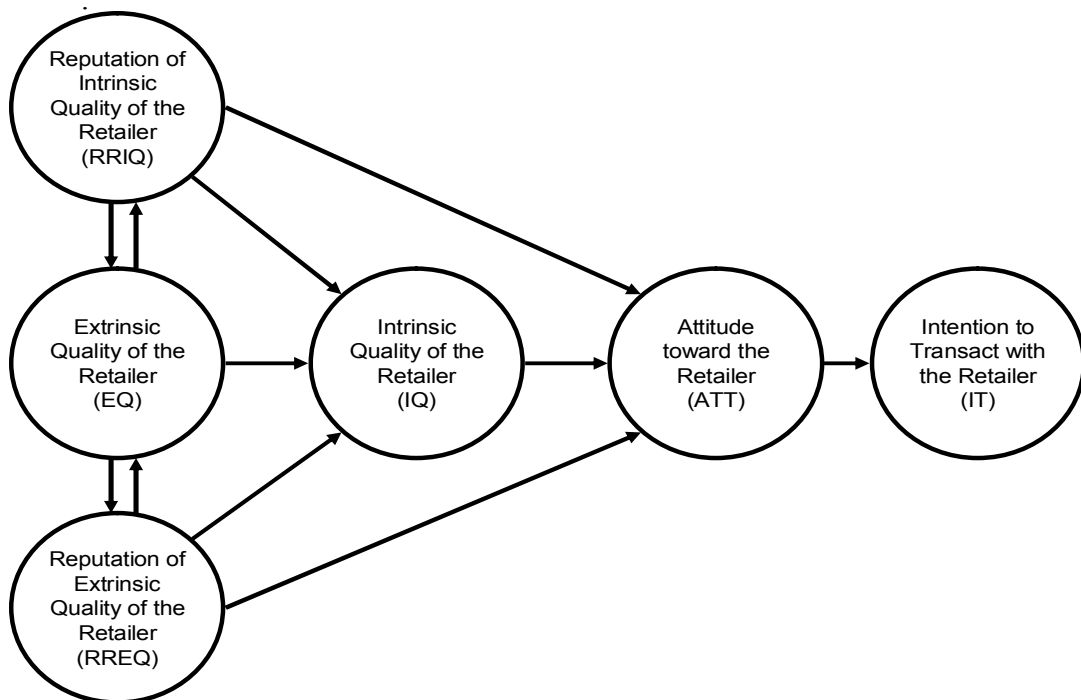


Figure 13. Alternative Model for Future Study

Demographics and previous online usage behaviors have been identified as potential antecedents to a consumer's pre-purchase deliberation process online. However, effects of these variables were not hypothesized and examined in this study. Therefore, a future study developing an expanded model including these variables from the finalized model of this study is expected to strengthen the managerial implications as well as academic implications.

REFERENCES

- Ajzen, I. (1985). From Intention to Action: A theory of planned behavior in J. Kuhl & J. Beckman (Eds.). *Action Control: From Cognitions to Behaviors*, New York, NY: Springer.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., Wood, S. (1997). Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces. *Journal of Marketing* 61 (July) 38–53.
- Alpar P. (2001). Satisfaction with a Web Site: Its Measurement, Factors and Correlates. Working Paper No. 99/01. Philipps-Universität Marburg, Institut für Wirtschaftsinformatik.
- Anderson J. C. and Gerbing D. W., Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin* 103(3), 411–423.
- Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research* 1 (August), 5-17.
- Bakos, Y. (1997). Reducing Buyer Search Costs: Implications for Electronic Marketplaces. *Management Science* 43 (12): 1676-1692.
- Bentler, P. M. (1990). Comparative Fit Indexes in Structural Models. *Psychometrika*, 107, 2, 238-246.
- Bizrate.com. (2005). Merchant Ratings FAQs.
Retrieved April 20, 2005, from http://www.bizrate.com/content/ratings_guide.html
- Bloch, P.H., Sherrell, D.L., Ridgeway, N.M. (1986) Consumer search: an extended framework. *Journal of Consumer Research*, 13, 119-126.
- Boston Consulting Group (2002). The State of Retailing Online 5.0.
Retrieved April 15, 2005 from
www.bcg.com/publications/files/State_Retailing_Online_v5_Rpt_Sep02.pdf
- Brown, M. W. and Cudeck, R. (1993). Alternative Ways of Assessing Model fit in K.A. Bollen & J.S. Long (Eds.), *Testing Structural Equation Models*, (pp. 445-455). Beverley Hills, CA: Sage.
- Brown, T. J., Barry, T. E., Dacin, P. A., Gunst, R. F. (2005). Spreading the Word: Investigating Antecedents of Consumers' Positive Word-of-Mouth Intentions and Behaviors in a Retailing Context. *Journal of Retailing*, 33(2), 123-138

- Burke, R. R. (2002). Technology and the Customer Interface: What Consumers Want in the Physical and Virtual Store. *Journal of the Academy of Marketing Science* 30 (4): 411-432.
- Byrne, B. M. (2001). *Structural Equation Modeling with AMOS: Basic concepts, Applications, and Programming*. Mahwah, New Jersey: Erlbaum.
- Cairncross, F. (1997). *The Death of Distance: How the Communication Revolution Will Change Our Lives*. Boston: Harvard Business School Press.
- Chen, Q. & Wells, W. D. (1999). Attitude toward the site. *Journal of Advertising Research*, 39 September/October, 27-37.
- Childers, T. L., Carr, C. L., Peck, J., Carson, S. (2001) Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77 (2001), 511-535.
- Claxton, J.D., Fry, J. N., Portis, B. (1974). A Taxonomy of Prepurchase Information Gathering Patterns. *Journal of Consumer Research: An Interdisciplinary Quarterly*, 1(3), 35-42
- Cohen B. J. & Areni S. C. (1991). 'Affect and Consumer Behavior' in Thomas S. Robertson and Harold H. Kassarian (eds.), *Handbook of Consumer Behavior*. Prentice-Hall Englewood Cliffs, NJ, 188-240
- Constant, D., Sproull, L. & Kiesler, S. (1997). The kindness of strangers: On the usefulness of electronic weak ties for technical advice. In S. Kiesler (Ed.) *Culture of the Internet*, (pp. 303-321). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cronin, J. J. & Taylor, S. A. (1992). Measuring Service Quality: A Reexamination and Extension, *Journal of Marketing*, 56, 55-68.
- Dabholkar, P. A. (1996). Consumer evaluations of new technology-based self-service options: An investigation of alternative models of service quality. *International Journal of Research in Marketing*, 13, 29-51.
- Degeratu, A., Rangaswamy, A., Jianan, W. (2000). Consumer Choice Behavior in Online and Traditional Supermarkets: The Effects of Brand Name, Price, and Other Search Attributes. *International Journal of Research in Marketing*, 17 (1), 55-78.
- Diehl, K., Kornish, J. L., Lynch, G. J. (2003) Smart Agents: When Lower Search Costs for Quality Information Increase Price Sensitivity. *Journal of Consumer Research*, 30 (2003), 56-71

- Dillman, D. A. (2000). *Mail and Internet Survey, The Tailored Design Method*, 2nd Ed., New York: John Wiley & Sons.
- eBay (2005) eBay 2005 Analyst Day,
Retrieved April 15, 2005, from
<http://investor.ebay.com/downloads/AnalystDay2005.pdf>
- Engel, J. F. & Blackwell, R. D. (1986). *Consumer Behavior* 5th. CBS College Publishing, NY
- Eroglu, S. A., Machleit, K.A., Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research* 54, 177–184.
- Evans, K. R., Christiansen, T., & Gill, J. D. (1996). The impact of social influence and role expectations on shopping center patronage intentions. *Journal of the Academy of Marketing Science*, 24 (3), 208–218.
- Fan, X., Thompson, B., & Wang, L. (1999). Effects of Sample Size, Estimation Methods, and Model Specification on Structural Equation Modeling Fit Indexes. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 56-83.
- Fishbein, M. A., & Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. MA: Addison-Wesley.
- Friedkin, N. (1982). Information flow through strong and weak ties in intra-organizational social networks. *Social Networks*, 3, 273-285.
- Francis, J. E. & White, L. (2002). PIRQUAL: A scale for measuring customer expectations and perceptions of quality in Internet retailing. In K. Evans & L. Scheer (Eds.), 2002 *Marketing educators' conference: Marketing theory and applications* (13), 263–270.
- Gomez.com (Lovett J.) (2003) How Site Performance Shapes Consumer Behaviors, Attitudes. *Gomez.com* White Paper Series
Retrieved March 15, 2005, from
http://www.gomez.com/performance_strategies/white_papers/how_site_performance_shapes_consumer_behaviors.html
- Hanson, W. (1999). *Principles of Internet Marketing*. OH, South-Western College Publishing.
- Haubl, G. & Trift, V. (2000). Consumer Decision Making in Online Shopping Environments, *Marketing Science*, Vol. 19 No.1 (Winter.), 4-21.

- Hauser, J. R. & Wernerfelt, B. (1990). An evaluation cost model of consideration sets. *Journal of Consumer Research*, 16 (March) 393–408
- Ho, J. K. (1997). Evaluating the World Wide Web: A Global Study of Commercial Sites. *Journal of Computer-Mediated Communication* (on-line), 3 (1).
- Hoffman, D L. and Novak, T. P. (1996). Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing*, 60 (July), 50-68.
- Howard, J. A. & Sheth, J. N. (1969). *The Theory of Buyer Behavior*. John Wiley, NY
- Hu, L. –T. & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1-55.
- Jacoby, J. & Chestnut, R. W. (1978). *Brand loyalty: Measurement and Management*. NY, John Wiley and Sons, Inc.
- Jaideep, S. & Gita, V. J. (2002). Effects of inconsistent attribute information on the perceive value of product attributes: Toward the resolution of opposing perspectives. *Journal of Consumer Research*, June 2002, 29
- Kalakota, R. & Whinston, A. B. (1997) *Electronic Commerce: A Manager's Guide*. Addison-Wesley, MA.
- Keller. E. B & Berry J. (2003) *The Influentials*. Free Press, NY
- Kennedy, J. M., Kuh, G. D., & Carini, R. (2000, May). Web and Mail Surveys: Preliminary Results of Comparisons Based on a Large-Scale Project. Paper presented at the meeting of the American Association for Public Opinion Research, Portland, OR.
- Khanh, V. L. & Jay, K. (2002). Electronic Retailing and Distribution of Services: Cyber Intermediaries That Serve Customers and Service Providers. *Managing Service Quality*, 12(2), 100-116
- Koufaris, M., Kambil, A., LaBarbera, P. A. (2001/2002). Consumer behavior in web-based commerce: An empirical study. *International Journal of Electronic Commerce*, 6(2), 131–154.
- Kuttner, R. (1998). The Net: A Market Too Perfect for Profits. *Business Week* (May 11), 20.
- Kwak, H., Zinkhan, G. M., Pitt, L. F. (2001). Global and Cultural Perspectives on Web-Based Chatting: An Exploratory Study. *Asia Pacific Advances in Consumer*

- Research*, 4, Paula M. Tidwell and Thomas E. Muller, eds. Provo, UT: Association for Consumer Research, 243-250.
- Liu, C. & Arnett, K. P. (2000). Exploring the factors associated with web site success in the context of electronic commerce. *Information & Management*, 38 (2000), 23–33.
- Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2002). WEBQUAL: A measure of website quality. In K. Evans & L. Scheer (Eds.), 2002 *Marketing educators' conference: Marketing theory and applications* (13), 432–437.
- MacCallum, R. C., Brown, M. W., & Sugawara, H. M. (1996). Power Analysis and Determination of Sample Size for Covariance Structure Modeling. *Psychological Methods*, 1, 130-149.
- Mandel, N. & Johnson, E. J. (2000) When Web Pages Influence Choice: Effects of Visual Primes on Experts and Novices. *Journal of Consumer Research*, 29, 235-245
- McKinsey (2002). Online Business to Consumer Models: 4C Perspective, McKinsey Quarterly, 2002 May, 12-23.
- Montoya-Weiss, M., Voss, G. B., & Grewal, D. (2000). Bricks to clicks: What drives customer use of the Internet in a multichannel environment. Working Paper, Carolina State University.
- Muylle, S., Moenaert, R., Despontin, M. (1999). Measuring web site success: An Introduction to Web Site User Satisfaction. *Marketing Theory and Applications* 10 (1999), 176–177.
- National Telecommunications and Information Administration (NTIA). (2002). *Nation online*. Washington, DC: U.S. Department of Commerce.
Retrieved on May 13, 2003, from http://www.ntia.doc.gov/ntiahome/dn/nationonline_020502.htm
- Nicosia, F. M. (1966). *Consumer Decision Process: Marketing & Advertising Implications*. Prentice-Hall, NJ
- Nielsen//NetRatings. (2005). Online Comparison Shopping Shows Strong Growth. Retrieved on April 12, 2005, from www.netratings.com/pr/pr_050213_us.pdf
- Noble, S. M. & Phillips J. (2004). Relationship Hindrance: Why Would Consumers Not Want a Relationship With a Retailer? *Journal of Retailing*, 80, 289–303

- Novak, T. P., Hoffman, D. L., Yung, Y. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1), 22–42.
- Nunnally, J.C. (1978). *Psychometric Theory*. New York: Mc Graw-Hill
- Olshavsky, R. W. (1985). Perceived Quality in Consumer Decision Making: An Integrated Theoretical Perspective. In J. Jacoby & J. Olson (Eds.), *Perceived Quality* (pp. 3-29). Massachusetts: Lexington Books.
- Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17, 460-469.
- Oliver, R. L. (1981). Measurement and Evaluation of Satisfaction Process in Retail Settings. *Journal of retailing*, 57, 25-48.
- Oliver, R. L. (1996). *Satisfaction: A behavioral perspective on the consumer*. NY: McGraw-Hill.
- Osgood, C. E., Suci, G. J., Tannenbaum, P. H. (1975). *The Measurement of Meaning* 9th Ed. University of Illinois Press, IL
- Parasuraman A, Zinkhan M. G. (2002) Marketing to and Serving Customers through the Internet: An Overview and Research Agenda. *Journal of the Academy of Marketing Science*, 30 (4), pp 286-295.
- Payne, J. W., Bettman, J. R., Johnson, E. J. (1993). *The Adaptive Decision Maker*. Cambridge University Press, Cambridge, UK.
- Pitt, L. F., Berthon, P. R., Watson, R. T., Zinkhan, G. M. (2002). The Internet and the Birth of Real Consumer Power. *Business Horizons*, 45 (July-August), 7-14.
- PricewaterhouseCoopers (2001). Governors of the World Economic Forum for Retail & Consumer Goods. World Economic Forum, *Davos, Switzerland* - 28-30 January 2001
Retrieved March 20, 2003 from
http://www.pwcglobal.com/gx/eng/about/ind/retail/wef_davos_2001_external.pdf
- Reibstein, D. J. (2002). What Attracts Customers to Online Stores, and What Keeps Them Coming Back?. *Journal of the Academy of Marketing Science* 30 (4): 465-473
- Reichheld, F. F. & Sasser, W. E. Jr. (1990). Zero defections: Quality Comes to Services. *Harvard Business Review*, 68 (September-October), 105–111.

- Reichheld, F. F. (1993). Loyalty Based Management, *Harvard Business Review* 71 (March-April), 64–73
- Rice, M. (2002). What makes users revisit a web site?. *Marketing News*, 31(6), 12.
- Robertson S. T. (1974). *A Critical Examination of Adoption Process, Model of Consumer Behavior*. NY, Harper & Row Publishers.
- Laczniak, R. N., DeCarlo, T. E., Motley, C. M. (1985) Retail equity perception and consumers' processing of negative WOM communication. *Journal of Marketing*
- Schiffman, L. G. & Kanuk, L. L. (2000). *Consumer behavior 7th Ed*. NJ: Prentice Hall.
- Schindler, R. M, & Bickart, B. (2002), "Published "Word of Mouth:" Referable, Consumer-Generated Information on the Internet", Working-paper, April 2002; Rutger University
Retrieved April 20, 2003, from elab.vanderbilt.edu/elib/upload/193/ACF1007.doc
- Schlosser, A. E., & Kanfer, A. (2001). Interactivity in commercial web sites: Implications for web site effectiveness. In S. Ratneshwar (Chair), Individual differences in consumer behavior on the web: Special topic session. *Society for Consumer Psychology*.
- Schonlau, M., Fricker, R. D. Jr., & Elliott, M. N. (2002). *Conducting Research Surveys via E-mail and the Web*. RAND.
- Senecal, S. & Nantel, J. (2004). The Influence of Online Product Recommendations on Consumer's Online Choices. *Journal of Retailing* 80 (2), 159-169
- Shim, S., & Drake, M. F. (1990). Consumer intention to utilize electronic shopping. *Journal of Direct Marketing*, 4 (Summer), 22–33.
- Shim, S., Eastlick, M. A., Lotz, S. A., Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. *Journal of Retailing* 77 (2001) 397–416
- Smith, M. D. (2002). The Impact of Shopbots on Electronic Markets. *Journal of the Academy of Marketing Science*, 30 (4), 446-454.
- Smith, M. D. & Brynjolfsson, E. (2001). Customer Decision-Making at an Internet Shopbot: Brand Matters. *Journal of Industrial Economics*, 49 (4), 541-558.
- Srinivasan S. S., Anderson, R., Ponnayolu, K. (2002) Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing* 78, pp. 41–50.

- Stores (2000). VeriFone and Russell Reynolds Associates Top 100 Internet Retailers: Comprehensive study tracks the nation's biggest on-line retailers.
Retrieved on March 5, 2004, from <http://www.stores.org/archives/sept00cover.asp>
- Szymanski, D. M. & Hise, R. T. (2000). e-Satisfaction: An initial examination. *Journal of Retailing*, 76 (3), 309-322
- Tam, P. (2002, September 16). *Grading the graders*. Wall St. Journal Online.
Retrieved October 20, 2002, from
http://www.sciencedirect.com/science?_ob=RedirectURL&_method=externObjLink&_locator=url&_cdi=6568&_plusSign=%2B&_targetURL=http%253A%252F%252Fonline.wsj.com%252Farticle%252F0,SB10317918047323533075.djm.00.html.
- Timmers, P. (1998) Business Models for Electronic Markets. *Electronic Markets*, 8: 2,
from http://www.electronicmarkets.org/netacademy/publications.Nsf/all_pk/949
- Timmers, P. (2000) *Electronic Commerce: Strategies and Models for Business-to-Business Trading*, John Wiley & Sons, West Essex, U.K.
- Trochim, W & Linton, R. (1986). Conceptualization for Evaluation and Planning.
Evaluation and Program Planning 9 (1986), 289–308.
- U.S Census Bureau. (2003, March 21). E-STATS Statistical Methodology - ARTS.
Retrieved April 17, 2005, from <http://www.census.gov/eos/www/papers/arts.pdf>
- U.S. Census Bureau. (2005, February 24). Quarterly Retail E-Commerce Sales.
Retrieved April 17, 2005. from
<http://www.census.gov/mrts/www/data/pdf/04Q4.pdf>
- Varadarajan, P. R., & Manjit S. Y. (2002). Marketing Strategy and the Internet: An Organizing Framework. *Journal of the Academy of Marketing Science* 30 (4): 296-312.
- Winer, R. S., Deighton, J., Gupta, S., Johnson, E. J., Mellers, B., Morwitz, V. G., O'Guinn, T., Rangaswamy, A., Sawyer, A. G. (1997). Choice in computer-mediated environments. *Marketing Letters*. 8 (3) 287–296.
- Wolfenbarger, M. & Gilly, M. C. (2003). eTailQ: Dimensionalizing, Measuring and Predicting eTail Quality. *Journal of Retailing* 79 (2003), 183-198.
- Yang Z., Peterson T. R. and Huang L. (2000). Taking the pulse of Internet pharmacies. *Marketing Health Services*, 21(2), 4–10.

- Yoo, B., & Donthu, N. (2001) Developing a Scale to Measure the Perceived Quality of an Internet Shopping Site (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2 (1), 31-46.
- Zeithaml, V. A., Berry, L.L., Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60, April 31-46
- Zeithaml V. A., Parasuraman A, Berry L.L. (1988) SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perception of Service Quality. *Journal of Retailing*, 64 (1), 12-40
- Zeithaml V. A., Parasuraman A, Berry L.L. (1991) Refinement and Reassessment of the SERVQUAL Scale, *Journal of Retailing*, 67 (4), 420-450
- Zeithaml V. A., Parasuraman, A., & Malhotra A. (2000). *A Conceptual Framework for Understanding e-Service Quality: Implications for Future Research and Managerial Practice*. Working Paper No.00-115. Marketing Science Institute, Cambridge, MA.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge. *Journal of the Academy of Marketing Science*, 30, 362-375.
- Zinkhan, G. M., Kwak, H., Morrison, M., Peters, C. O. (2003). Web-Based Chatting: Consumer Communication in Cyberspace. *Journal of Consumer Psychology*, 13 (1-2), 17-27.

APPENDIX

Appendix 1: Invitation Letter and Web-based Survey Questionnaire



UNIVERSITY OF TENNESSEE

Department of Retail and Consumer Sciences

110 Jessie Harris Building
1215 West Cumberland Avenue
Knoxville, Tennessee 37996
(865)974-2141
Fax (865) 974-5236

June 10, 2004

Dear Respondent:

I am writing to ask your help in a study of online consumers being conducted by University of Tennessee Department of Retail and Consumer Sciences. This study is part of an effort to learn what attracts consumers to shop online via online marketplaces, and what makes you satisfied as you shop online via online marketplaces.

You are the one of a carefully selected sample of consumers being asked to give their opinion about this topic. I would greatly appreciate it if you would complete the linked questionnaire. It will take approximately 5 to 10 minutes to complete this questionnaire.

Your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified.

If you have any questions or comments about this study, please contact me at hpark@utk.edu, or you can write us at the address on the letterhead.

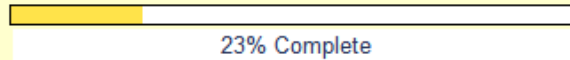
Thank you very much for helping with this important study.

Sincerely,

Hyungchul Park
Doctoral Candidate

Please click the link below to go to the survey
<http://www.Surveyz.com/TakeSurvey?id=29254>

Items Marked With * Are Required.



This survey needs you to read the brief directions to complete. Please **read the direction by clicking the link below.**

- When you read the direction, please follow all steps
- After reading the directions, please return to this window, and then answer the questions

[Please click here to read the Directions for completing the survey](#)

After looking at the introduction, scenario, and websites of Camera World, please answer the following questions.

Please select **ALL websites** of 'Camera World'.com you've looked at.

1. Product Main-Gate Page

6. Customer service/care information Page

2. Package description / Large Product Picture Page

7. Order placing Process / Security and privacy protection information Page

3. In-detail Product specification description Page

8. Refund/Return policy information Page

4. Product Technological features description Page

9. Company information Page

5. Product Upgrade and Recommendation information Page

10. Shopping cart/Payment/Delivery information Page

Continue

Please contact hpark@utk.edu if you have any questions regarding this survey.

Online Surveys Powered By www.SurveyZ.com

1.How Strongly do you agree or disagree with each of the following?
(Please select only ONE answer for each question)

1.1.Camera World's Websites are

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

1.2.Camera World's websites

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

1.3.Camera World's website presents in-depth information about

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
the Canon Power Shot S410 digital camera *				
☐	☐	☐	☐	☐
total price *				
☐	☐	☐	☐	☐
shipping & handling process *				
☐	☐	☐	☐	☐
payment methods *				
☐	☐	☐	☐	☐
return and refund policy *				
☐	☐	☐	☐	☐
customer service *				
☐	☐	☐	☐	☐
security protection *				
☐	☐	☐	☐	☐
privacy protection *				
☐	☐	☐	☐	☐
Camera World company *				
☐	☐	☐	☐	☐

2.Overall, how would you rate Camera World's websites?

*

Poor				Excellent
☐	☐	☐	☐	☐

Continue

Please contact hpark@utk.edu if you have any questions regarding this survey.

Online Surveys Powered By www.SurveyZ.com

Items Marked With * Are Required.

32% Complete

**1. How Strongly do you agree or disagree with each of the following?
(Please select only ONE answer)**

Camera World is likely to

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

2. How would you expect the potential purchase experience with Camera World to be?

*

Poor	Excellent
☐	☐

Continue

Please contact hpark@utk.edu if you have any questions regarding this survey.

Online Surveys Powered By www.SurveyZ.com

Items Marked With * Are Required.

56% Complete

You may want to compare your impressions and opinions about 'Camera World' with those of other purchasers, since you have no prior purchase experience with 'Camera World'

Please [click the link below](#) in order to review other shoppers' impressions and opinions about 'Camera World'

[Click here to Look at User Reviews about 'Camera World'](#)

After looking at the user reviews about Camera World, please answer the following questions

1. Overall, I feel user reviews on the websites of Camera World are

*

Negative					Positive
☐	☐	☐	☐	☐	☐
Useless					Useful
☐	☐	☐	☐	☐	☐

2. Overall, I feel user reviews on the purchase experience with Camera World are

*

Negative					Positive
☐	☐	☐	☐	☐	☐
Useless					Useful
☐	☐	☐	☐	☐	☐

3. Overall, how would you rate Camera World's websites?

*

Poor					Excellent
☐	☐	☐	☐	☐	☐

4. How would you expect the potential purchase experience with Camera World to be?

*

Poor					Excellent
☐	☐	☐	☐	☐	☐

5. How Strongly do you agree or disagree with each of the following?
(Please select only ONE answer for each question)

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
I feel shopping at Camera World would be reliable *				
☐	☐	☐	☐	☐
I feel shopping at Camera World would be secure *				
☐	☐	☐	☐	☐
I would feel comfortable shopping at Camera World *				
☐	☐	☐	☐	☐
I feel Camera World would be a desirable retailer for my shopping needs *				
☐	☐	☐	☐	☐
I feel Camera World would have the capacity to satisfy my shopping needs *				
☐	☐	☐	☐	☐
I feel Camera World would fit my standards or demands of an online retailer *				
☐	☐	☐	☐	☐
I would like to shop at Camera World *				
☐	☐	☐	☐	☐
I would like to build a relationship with Camera World *				
☐	☐	☐	☐	☐
If I want to purchase Canon Power Shot s410 digital camera, I would make a purchase at Camera World *				
☐	☐	☐	☐	☐
I would be willing to order the Canon Power Shot S410 digital camera through Camera World website *				
☐	☐	☐	☐	☐

Continue

Please contact hpark@utk.edu if you have any questions regarding this survey.

Online Surveys Powered By www.SurveyZ.com

Items Marked With * Are Required.

100% Complete

This is the last step of this survey. Please be patient for just 5 more minutes. Thanks

1. The following questions are about your online comparison shopping engine use experience in general.

1) (Choose ONE) Typically, you use online comparison shopping engines to *

- ☐ search and compare products to find the best product for my needs/wants
- ☐ search and compare retailer's prices to find the best deal for the product I want to buy
- ☐ search and compare retailers to find the best retailer for my needs/wants
- ☐ look at the user reviews on products I want to buy
- ☐ look at the user reviews on retailers I want to purchase from

2) (Choose ONE) Many consumers use online comparison shopping engines for various reasons. What is the most frequent way you sort information provided by online comparison shopping engines? *

- ☐ Total price from the lowest to the highest
- ☐ Total price from the highest to the lowest
- ☐ Retailer's rating from the lowest to the highest
- ☐ Retailer's rating from the highest to the lowest
- ☐ Don't sort

3) (Choose THREE) Please select the THREE product categories you search and compare the most through online comparison shopping engines. *

- ☐ Books
- ☐ Music/CDs/Movie/Video Tapes/DVDs
- ☐ Computer Hardware
- ☐ Computer Software
- ☐ Home Electronics/Appliances
- ☐ Small/Potable/Personal Electronics (Camera, MP3 player, Mobile Phone, etc)
- ☐ Furniture/Home Furnishing
- ☐ Sporting Goods
- ☐ Toys/Hobby Goods/Games
- ☐ Food/Beer/Wine
- ☐ Groceries
- ☐ Drugs/Health Aids/Beauty Aids
- ☐ Office Equipment and Supplies
- ☐ Clothing/Clothing Accessories (includes footwear)
- ☐ Automobile/Automobile Parts
- ☐ Tour Package/Hotel room rates / Air-fare / Rent-a-car rates
- ☐ Movie/Event/Sports Game Tickets
- ☐ Other

4) (Choose ONE) The last time you visited an online comparison shopping engine, how many retailer websites did you visit via a hyperlink from the list of retailers in an online shopping search engine?

- ☐ 1
- ☐ 2~5
- ☐ 6~10
- ☐ 11 or above

5) (Choose ONE) Approximately, how long have you used online comparison shopping engines for online shopping? *

- ☐ Less than 6 months
- ☐ 6 to 11 months
- ☐ 1 to 2 years
- ☐ 3 to 4 years
- ☐ 5 years or above

6) In the past six months, what percent (%) of your online shopping starts with the use of an online comparison shopping engine? (Please do not include the '%' in the box) *

7) How Strongly do you agree or disagree with each of the following?

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
Search results (list of retailers) from online comparison shopping engines are useful for my online shopping *	☐	☐	☐	☐	☐
User reviews from online comparison shopping engines are useful for my online shopping *	☐	☐	☐	☐	☐
Online comparison shopping engines are useful for my online shopping *	☐	☐	☐	☐	☐
Online shopping engines are more reliable than dealing directly with online retailers *	☐	☐	☐	☐	☐
Overall, I am satisfied with my experience using online comparison shopping engines *	☐	☐	☐	☐	☐
I'll definitely keep using online comparison shopping engines for shopping online *	☐	☐	☐	☐	☐

2. The following questions are about your online shopping experience in general.

1) (Choose ONE) Approximately, how often did you make a purchase online, in the past six months? *

- ☐ None
- ☐ Once
- ☐ 2~3 times
- ☐ 4~5 times
- ☐ 6 times (at least once a month)
- ☐ 7 times or more

2) (Choose ONE) Approximately, how often did you visit online stores, in the past six months? *

- ☐ None
- ☐ Once
- ☐ Once a month
- ☐ Once a week
- ☐ Once a day
- ☐ Once an hour

3) (Choose ONE) Approximately, how much would you estimate you have spent online (on the Internet), in the past six months? *

- ☐ Less than \$50
- ☐ Between \$50 and \$100
- ☐ Between \$101 and \$150
- ☐ Between \$151 and \$200
- ☐ Between \$201 and \$300
- ☐ Between \$301 and \$400
- ☐ Between \$401 and \$500
- ☐ More than \$501

4) Please select the ONE category that best explains your online shopping behavior *

- ☐ I usually visit several online stores before buying something
- ☐ I usually visit one specific online store for buying a specific product

5) Please select the ONE category that best explains your shopping behavior *

- ☐ Mostly, I search for information online and buy online
- ☐ Mostly, I search for information online but buy at local stores
- ☐ Mostly, I get information via people I know or commercials/advertisements and buy at local stores
- ☐ Mostly, I get information via people I know or commercials/advertisements then buy online

3. The following questions are about your basic demographic information.

1) What is your gender? *

- ☐ Female
- ☐ Male

2) Please indicate the highest level of education completed. *

- ☐ Some High School
- ☐ High School or equivalent
- ☐ Some College
- ☐ College Graduate
- ☐ Master's Degree
- ☐ Doctoral Degree
- ☐ Professional Degree (MD, JD, etc.)

3) Approximately what was the total annual income for your household during 2004? *

- ☐ Less than \$15,000
- ☐ \$15,000 - \$24,999
- ☐ \$25,000 - \$34,999
- ☐ \$35,000 - \$49,999
- ☐ \$50,000 - \$74,999
- ☐ \$75,000 and above

3) Approximately what was the total annual income for your household during 2004? *

- ☐ Less than \$15,000
- ☐ \$15,000 - \$24,999
- ☐ \$25,000 - \$34,999
- ☐ \$35,000 - \$49,999
- ☐ \$50,000 - \$74,999
- ☐ \$75,000 and above

4) What is your age? *

- ☐ Under 18
- ☐ Between 18 and 23
- ☐ Between 24 and 30
- ☐ Between 31 and 40
- ☐ Between 41 and 50
- ☐ Between 51 and 60
- ☐ Between 61 and 70
- ☐ Over 70

Complete the Survey

Please contact hpark@utk.edu if you have any questions regarding this survey.

Online Surveys Powered By www.SurveyZ.com

Appendix 2-1: Camera World Website – Product Main Gate Page

** This is not actual but fictitious website just for this research*

**CAMERA WORLD.com**
The CAMERA WORLD Online Store



TO ORDER
BY PHONE CALL
1-800-617-4686



Canon – Power Shot S410 Digital Camera..... \$228.99
Catalog # 541167037
ü In stock - usually ships on the next business day (Mon. - Fri.)
ü Free Shipping & Handling when order total is \$100 or over

FREE DELIVERY by **FedEx** on every order.

No Sales Tax
USA Warranty / Low Prices & Satisfaction Guaranteed
Enjoy No Payment for 90 days on purchase over \$200
and Payment as low as \$10.00 per Month with

 [Click for detail](#)

[enlarge](#)

ADD TO CART 

Total: \$ 228.99
• S&H: Free
• TAX: \$0.00

24/7 Customer Support

Transaction Process Privacy Protection

Return/Refund Policy

Company Info.
About Camera World

CREDENTIALS


TESTED 22-MAY

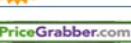

GOLD MEDAL


cnet


DEALTIME CERTIFIED


YAHOO! FEATURED


Shopping.com Certified Store


PriceGrabber.com


BBB RELIABILITY PROGRAM
BBBONLINE


BizRate.com customer certified

Store Rating:  As of: 05/21/05
[Click to Verify](#)

For your satisfaction.....

- We provide 24 hours live customer support by e-mail, instant chatting, and call center everyday throughout the year.
- We provide secured and risk-free payment process to protect your valuable money
- We value and protect your privacy and information.
- We provide hassle-free return and refund process
- We are highly trusted and certified retailer by major shopping sites

[Click buttons in the bar for more information](#)

• Condition: Brand New / 1 Yr Warranty
ALL ITEMS ARE BRAND NEW, FACTORY FRESH AND INCLUDE FULL MANUFACTURERS USA WARRANTY UNLESS OTHERWISE STATED.

• Product Description
Sleek, powerful and eminently portable, Power Shot S410 offers the ultimate in contemporary style. Memorable images are a click away, with a high-resolution sensor, 3x optical zoom lens, and impressive capabilities that are as easy to use as they are advanced. Elegantly designed and super compact, the S410 has a protective stainless steel shell with a celabrite finish, which mixes metals and ceramics to produce a tough cool-toned exterior that is visually stunning. It also features high-resolution video capture, and Canon's new Print/Share button, which helps you quickly connect directly to a printer or send an image via e-mail.

• Product Features

- Next Generation Digital ELPH with 4 Mega-pixel CCD Sensor 
- 3x Optical / 3.6x Digital / 11x Combined Zoom 
- Exclusive Canon DIGIC Image Processor and iSAPS Technology for superior image quality and faster processing speed 
- New Print/Share Button for easy direct printing and downloads, plus ID Photo Print and Movie Print; print direct to any Canon Direct Photo Printer or PictBridge-supported Printer 
- High-precision, 9-point AiAF and Intelligent Orientation Sensor 
- High-quality movies with sound
- Direct Print Mode with Canon Direct Photo Printers and PictBridge-compatible Printers 

[Click the arrow button for more information about each feature](#) 

• What's in the package? 

1. Power Shot S410
2. Battery Charger CB-2LS
3. Wrist Strap WS-300
4. Compact Flash Card CF-32M
5. ArcSoft Camera Suite CD-ROM
6. Digital Camera Solution CD-ROM
7. Battery Pack NB-1LH
8. Interface Cable IFC-400PCU
9. AV Cable AVC-DC300

For more product specifications

[Click the button](#)

Upgrade & Customize this product package

[Click the button](#)

Appendix 2-2: Camera World Website – Product Picture & Package Description Page



Picture of Canon Power Shot s410 and items in the Package

[Canon Power Shot S410](#)



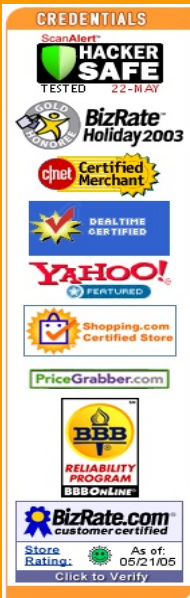
[BACK TO MAIN PAGE](#)

[24/7 Customer Support](#)

[Transaction Process](#)
[Privacy Protection](#)

[Return/Refund Policy](#)

[Company Info.](#)
[About Camera World](#)



[Items in Canon Power Shot S410 Package](#)



1. Power Shot S410
2. Battery Charger CB-2LS
3. Wrist Strap WS-300
4. Compact Flash Card CF-32M
5. ArcSoft Camera Suite CD-ROM
6. Digital Camera Solution CD-ROM
7. Battery Pack NB-1LH
8. Interface Cable IFC-400PCU
9. AV Cable AVC-DC300



BACK TO
[Power Shot S410 Product Main Page](#)

Appendix 2-3: Camera World Website – In Detail Product Specification Page

**CAMERAWORLD.com**
The CAMERA WORLD Online Store



TO ORDER
BY PHONE CALL
1-800-617-4686

Power Shot S410 Product Specifications

- **Type of Camera:** Compact digital still camera with built-in flash and 3.0x Optical / 3.6x Digital / 11x Combined Zoom
- **Image capture device:** 4.0 MP 1/1.8" CCD
- **ISO sensitivity:** Auto, or User Set ISO 50, 100, 200, 400
- **Image quality modes (JPEG):** Normal, Fine, Superfine
- **File format:** Design rule for Camera File System, DPOF Ver. 1.1 (Digital Print Order Format)
- **Image recording format:** Still Image: JPEG or RAW; Movie: AVI.
- **Recording media:** Compact Flash (CF) Card, Type I
- **Shooting modes:** Auto, Manual, Stitch Assist, Movie, Continuous (Approx. 2.2 fps)
- **Photo effects:** Vivid, Neutral, Low Sharpness, Sepia, B/W
- **Playback modes:** Single, Index (9 Thumbnails), Magnification (Approx. 2x~10x) or Slide Show, Movie
- **Erase mode:** Single Images, All Images
- **Interfaces:** USB; AV Output (NTSC/PAL Selectable, monaural audio) & CF Card slot (Complied w/ Type I Standard), Direct Connection to Canon Direct Photo Printers & PictBridge compatible Printers
- **Lens:** 3x Optical, 3.6x Digital. 11x Combined Zoom (equiv. to 36-108mm in 35mm format)
- **Shutter speed:** 15-1/2000 sec. slow shutter of 1.3 sec. and more operates w/ noise reduction
- **Focus range:** Normal AF: 18 in. (46cm)~infinity; Macro AF: 2~18 in. (5~46cm) (WIDE), 12~18 in. (30~46cm) (TELE)
- **Light metering method:** Evaluative Metering, Center-weighted average metering or Spot metering
- **Exposure control:** Program AE; AE Lock is available
- **Compensation:** +/-2.0 EV in 1/3 step increments
- **White balance control:** TTL Auto White Balance, Preset White Balance (Avail. settings: Daylight, Cloudy, Tungsten, Fluorescent or Fluorescent H), & Custom White Balance
- **Optical viewfinder:** Real-image optical zoom viewfinder
- **LCD:** 1.5" low-temperature polycrystalline silicon TFT color LCD
- **Power:** Rechargeable lithium ion battery (NB-1LH) or AC Adapter Kit ACK500, Car Battery Carger CBC-NB1
- **Dimensions (W x H x D):** 3.4" x 2.2" x 1.1"/ 87.0 x 57.0 x 27.8mm
- **Weight:** Approx. 6.5 oz./185g (camera body only)

BACK TO MAIN PAGE

24/7 Customer Support

Transaction Process
Privacy Protection

Return/Refund Policy

Company Info.
About Camera World

CREDENTIALS

ScanAlert
HACKER SAFE
TESTED 2-2-MAY

GOLD
BizRate
Holiday2003

certified
Merchant

DEALTIME
CERTIFIED

YAHOO!
FEATURED

Shopping.com
Certified Store

PriceGrabber.com

BBB
RELIABILITY PROGRAM
BBBONLINE

BizRate.com
customer certified

Store Rating: As of: 05/21/05
Click to Verify

**BACK TO**
Power Shot S410 Product Main Page

Appendix 2-4: Camera World Website – Product Technology Guide Page

**CAMERA WORLD.com**
The CAMERA WORLD Online Store



TO ORDER
BY PHONE CALL
1-800-617-4686

**Next Generation Digital ELPH
with 4 Mega-pixel CCD Sensor**



36 mm



108 mm

3x Optical / 3.6x Digital / 11x Combined Zoom



**Advanced Imaging Technology Improves Every Photo:
DIGIC Image Processor and iSAPS Technology**



**Advanced Features
Make It All Easy:
9-point AiAF, Intelligent Orientation Sensor**



Easv. Flexible Direct Printing Options: Print/Share Button



CONNECT

Connect the camera to the printer or computer.



PRESS

Press the **LIGHTED** Print/Share Button.



PRINT/SHARE

You'll have quick and easy prints or share them across the internet.



**BACK TO
Power Shot S410 Product Main Page**

BACK TO MAIN PAGE

24/7 Customer Support

Transaction Process Privacy Protection

Return/Refund Policy

Company Info.
About Camera World

CREDENTIALS

ScanAlert™
HACKER SAFE
TESTED 22-MAY

BizRate
Holiday 2003

cjnet Certified Merchant

DEALTIME CERTIFIED

YAHOO! FEATURED

Shopping.com Certified Store

PriceGrabber.com

BBB RELIABILITY PROGRAM
BBBONLINE

BizRate.com customer certified
Store Rating: As of: 05/21/05
Click to Verify

Appendix 2-5: Camera World Website – Product Upgrade & Recommendation Page

**CAMERAWORLD.com**
The CAMERA WORLD Online Store



TO ORDER
BY PHONE CALL
1-800-617-4686

Upgrade and Customize your Power Shot S410 Product Package

[BACK TO MAIN PAGE](#)

24/7 Customer Support

Transaction Process
Privacy Protection

Return/Refund Policy

Company Info.
About Camera World

CREDENTIALS









Store Rating: As of: 05/21/05
Click to Verify

Recommendation 1: Canon Power Shot S410 Digital Camera Executive Kit

- Sandisk Extreme 256MB Compact Flash Memory Card [QNTY 1]
- DigPro Ultra-Compact Digital Camera Deluxe Carrying Case - DP800 [QNTY 1]
- Sakar 3pc. Lens Cleaning Kit [QNTY 1]

Original Price \$314.99 Final Price \$285.99 You save \$29.00

[Upgrade NOW](#)

Recommendation 2: Canon Power Shot S410 Digital Camera Upgrade Executive Kit

- High-Speed 512MB Compact Flash Memory Card (A Necessity) [QNTY 1]
- DigPro Ultra-Compact Digital Camera Deluxe Carrying Case - DP800 [QNTY 1]
- Sakar 3pc. Lens Cleaning Kit [QNTY 1]

Original Price \$329.99 Final Price \$299.99 You save \$30.00

[Upgrade NOW](#)

Recommendation 3: Advanced Super Accessory Bundle for Power Shot S410

- High-Speed 512MB Compact Flash Memory Card (A Necessity) [QNTY 1]
- Special High Speed Compact Flash Card Reader [QNTY 1]
- Sakar NB-1L 850MAH LITHIUM ION REPLACEMENT BATTERY [QNTY 1]
- DigPro Ultra-Compact Digital Camera Deluxe Carrying Case - DP900 [QNTY 1]
- Sakar 3pc. Lens Cleaning Kit [QNTY 1]

Original Price \$407.99 Final Price \$339.99 You save \$68.00

[Upgrade NOW](#)

Recommendation 4: Special Pro Accessory Bundle for Power Shot S410

- High-Speed 1GB Compact Flash Memory Card (A Necessity) [QNTY 1]
- Special High Speed Compact Flash Card Reader [QNTY 1]
- Sakar NB-1L 850MAH LITHIUM ION REPLACEMENT BATTERY [QNTY 1]
- Sakar Universal AC/DC Battery Charger for Lithium Batteries [QNTY 1]
- DigPro Ultra-Compact Digital Camera Deluxe Carrying Case - DP900 [QNTY 1]
- Sakar DIGITAL CONCEPTS CAMERA SCREEN PROTECTORS [QNTY 1]
- Sakar 3pc. Lens Cleaning Kit [QNTY 1]

Original Price \$486.99 Final Price \$414.99 You save \$72.00

[Upgrade NOW](#)

Recommendation 5: Canon Powershot S410 Camera and CP-400 Printer Upgrade Executive Kit

- Canon Selphy CP-400 Compact Photo Printer [QNTY 1]
- Canon Color Ink/Paper Set KP-36 IP 36-sheet, size 4X6 for CP-220/330 [QNTY 1]
- High-Speed 512MB Compact Flash Memory Card (A Necessity) [QNTY 1]
- DigPro Ultra-Compact Digital Camera Deluxe Carrying Case - DP800 [QNTY 1]
- Sakar 3pc. Lens Cleaning Kit [QNTY 1]

Original Price \$475.99 Final Price \$437.99 You save \$38.00

[Upgrade NOW](#)

**BACK TO**
Power Shot S410 Product Main Page

Appendix 2-6: Camera World Website – Customer Service Information Page



CAMERA WORLD.com
The CAMERA WORLD Online Store



TO ORDER
BY PHONE CALL
1-800-617-4686

24/7 Customer Service



BACK TO MAIN PAGE

24/7 Customer Support

Transaction Process
Privacy Protection

Return/Refund Policy

Company Info.
About Camera World

CREDENTIALS












Store Rating: As of: 05/21/05
Click to Verify

If you have a question about a purchase you have made or encounter a problem, we are here to help. Our staffs are available to serve you Monday thru Sunday for 24 hours. For real-time customer support, please call us **1-800-617-4686**. If you prefer communicating with us through online, please log onto the Live Chat service.



If you want to comment or complaint about our service, please leave a message through the completion of 'Contact US' form. We'll try to reflect your voice on improvement of our service.



Once we read your comments and complaints, we'll keep you posted how we'll reflect your comments on our service through e-mails as possible as we can.

We also provide value-added services for your convenience.

1) Account Management Service	→	 YOUR ACCOUNT	
2) Order Status	→	 ORDER STATUS	
3) Delivery Tracking (via Fedex.com)	→	 TRACK PACKAGES	
4) Return/Refund through Internet	→	 RETURN AN ITEM	

Our service has been rated mostly positively by bizrate.com, cnet.com, smarter.com, yahoo.com, and epinion.com users. Bizrate.com, yahoo.com, and Cnet.com certified us as a reliable retailer in 2003



BACK TO
Power Shot S410 Product Main Page

Appendix 2-7: Camera World Website – Return/Refund Policy Information Page

**CAMERAWORLD.com**
The CAMERA WORLD Online Store

**TO ORDER
BY PHONE CALL
1-800-617-4686**

Returns/Refunds Policy 
RETURN AND ITEM

[BACK TO MAIN PAGE](#)

[24/7 Customer Support](#)

[Transaction Process
Privacy Protection](#)

[Return/Refund Policy](#)

[Company Info.
About Camera World](#)

CREDENTIALS









Store Rating:  As of: 05/21/05
[Click to Verify](#)

A defective item may be returned to us for replacement up to 30 days from the date of shipment, with the exception of those from certain manufacturers who have requested that returns for their products go directly to them. You are asked to exchange defective items directly with these manufacturers, even within our 30 day return period. We will inform you if you wish to return an item from a manufacturer that enforces this policy.

You may exchange most defective or unopened products for a different item of equal or greater value. You may elect to return authorized items for a refund. We always make every effort to approve a return for a refund when requested, but due to contractual guidelines with many vendors, we reserve the right to limit any return including unopened products to exchange only.

Most opened products that are not defective cannot be returned, and we may prohibit the return of an opened, non-defective product. We make no assurance that any product(s) we sell will be compatible with your computer system or another product.

Manufacturers provide full warranty coverage on every product we sell after and during our 30-day courtesy return period. To determine a product's warranty, review a product's specifications, contact us, or contact the product's manufacturer.

Discontinued products that no longer appear on our web site are not returnable.

The product you wish to return must arrive in its original carton with all parts, manuals, software, and accessories that were originally included. If necessary items are missing, we will return the product to you.

If you return a non-defective item reported as defective or an opened box reported as unopened, we may return the item to you.

All products being returned require an RMA (Return Merchandise Authorization) number. We assume no liability for items returned without an RMA number on the package. Shipping charges are not refundable. Returns must be shipped postage-paid. The cost to ship a replacement product to you will be absorbed by Upgrade Source.

A nominal 12% restocking fee applies when a product is returned for credit (refund).

* Batteries and videotapes opened or used are not refundable

Available Return Options:

- **Credit** - A full refund minus a 12% restocking fee and your original shipping charges (if any).
- **Exchange** - A replacement product will be shipped to you after our receipt of the defective product. Please allow up to 21 days for an exchange to be processed and shipped to you.
- **Cross-Shipment** - A replacement product will be shipped to you within 2 business days once your RMA is approved. The cost of the replacement will be billed to your credit card temporarily as a security deposit, and refunded once your defective product is received. There is a 3% convenience charge for cross-shipment service.

[Place your request for return and refund](#) 
RETURN AND ITEM

**BACK TO
Power Shot S410 Product Main Page**

Appendix 2-8: Camera World Website – Order Processing, Security, and Privacy Protection Information Page

**CAMERAWORLD.com**
The CAMERA WORLD Online Store

**TO ORDER
BY PHONE CALL
1-800-617-4686**

Placing an order/Security and Privacy Protection

BACK TO MAIN PAGE

24/7 Customer Support

Transaction Process
Privacy Protection

Return/Refund Policy

Company Info.
About Camera World

CREDENTIALS









Store Rating:  As of: 05/21/05
[Click to Verify](#)

PRIVACY PROTECTION

We do not Sell Exchange, and/or Distribute your e-mail address or personal data to anyone without your permission.

When you decide to place an order, you are asked to complete an order form. This form requires your name, billing and shipping address, credit card number and expiration date. You should also include other information such as your telephone number to make it easy to contact you regarding your order if necessary. We use this information to make your shopping experience as hassle-free and pleasant as possible. We do not share this information with any third party.

CREDIT CARD CHARGE/SHIPPING PROCESS & POLICY:

After submitting your order to us :

1. Order is reviewed/verified by management for legitimacy.
2. Provided the items you want are in stock, your credit card is then charged, credit card authorization and verification are placed on the order from our credit card processor.
3. We then proceed to pick and pack your order.
4. Once your order has been entered thru our carriers shipping computer, a tracking number is then allocated to your order.
5. The tracking number is then automatically e-mailed to you and after the package leaves our warehouse, you may check with FEDEX directly on line at www.fedex.com (we also provide the link to Fedex on our delivery tracking site) or via phone at 1800 GO FEDEX.
6. If a product runs out of stock, we will give you the option to either wait a short period until the items is received, we will then upgrade your shipping to the next quickest method, or offer you to adjust the shipping method , to your needs and ship your order ASAP. Our intention is to provide the best service to you before and after the sale. If you need to contact us you may call our customer service department at 1800 617 4686 you must press 2 to receive our customer service department.
7. No Returns, or Exchange for All Compaq products. If Retail Box has been Opened, Customer should Contact Compaq Corporation directly for repairs.



Camera World's website is secure site by **VeriSign**. We can protect your information and secure the order you make from us

**BACK TO**
Power Shot S410 Product Main Page

CAMERAWORLD.com
 The CAMERA WORLD Online Store

Company Info.: About *CAMERA WORLD*

Our headquarter and the main shop is located at
313 Harris Rd. Los Angeles CA 90011



50 sales representatives and 20 service
representatives for serving you

Welcome to Camera World (since 1985) and Cameraworld.com (since 2003) where all your digital needs are met.

With over 20 years of camera products experience, you can trust us to help you with all your digital needs.

Shop with confidence all products sold by Camera World comes complete with a full USA warranty and includes all manufactures accessories.

Choose from a large selection of Digital Cameras, Digital Camcorders, Digital 8mm, Printers, Car Audio and more. Don't forget our Closeouts section for the latest in technology and great deals.

You can buy with confidence because Camera World sells only brand name merchandise direct from the manufacturers with confidence.

Camera World uses the latest VeriSign Technology to ensure your private Information is secure. Our goal is to ship and deliver your equipment in a timely and safe fashion. Join our thousands of satisfied customers.

- We use the latest technology of VeriSign, and proved to be hacker-safe site by Scan Alert
- Customer reviews on us in the leading comparison shopping engines are highly positive
 - **Bizrate.com certified retailer**
 - **CNET certified retailer**
 - **Pricegrabber certified retailer**
 - **Shopping.com certified retailer**
 - **Member of BBB Reliability Program**



BACK TO
[Power Shot S410 Product Main Page](#)

Appendix 2-10: Camera World Website – Shopping Cart, Payment Option, and Delivery Information Page

**CAMERAWORLD.com**
The CAMERA WORLD Online Store



TO ORDER
BY PHONE CALL
1-800-617-4686



YOUR CART

Total: \$ 228.99

- Canon Power Shot S410: \$228.99.....Qty. 1
- S&H: Free
- TAX: \$0.00

[BACK TO MAIN PAGE](#)

[24/7 Customer Support](#)

[Transaction Process](#)
[Privacy Protection](#)

[Return/Refund Policy](#)

[Company Info.](#)
[About Camera World](#)

Complete order

[Click the button to proceed an order](#)

PAYMENT OPTIONS

- VISA, MASTER, AMERICAN EXPRESS, DISCOVER
- CASHIER'S CHECK
- MONEY ORDER
- BANK CHECK
- * Sorry. We do not accept personal check

Delivery Policy

- All items in stock ship within 48-72 hours. Once the order has been processed.
- Due to verification process we are required to ship to the address where you receive your monthly credit card statements.
- In the event that you would like to ship to your business address, we require the company name and phone number and we would be able to ship there, provided this is the same state as your billing address and the business is verifiable.
- Additional information may be required if the billing and shipping addresses are in two different states.
- We do not ship outside of the U.S.





CREDENTIALS
CanAlert
HACKER SAFE
TESTED 22-MAY



BizRate
Holiday 2003



CNET Certified Merchant



DEALTIME CERTIFIED



YAHOO! FEATURED



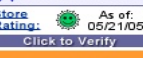
Shopping.com
Certified Store



PriceGrabber.com



BBB
RELIABILITY PROGRAM
BBBONLINE



BizRate.com
customer certified

Store Rating:  As of: 05/21/05
[Click to Verify](#)



BACK TO
Power Shot S410 Product Main Page

Appendix 3: Distributions of All Items Measured in this Study

Construct	Item No.	Items	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Extrinsic Quality of the Retailer	EQ1	EQ - Design/Aesthetic - visual attractiveness	1	5	3.463	1.177	-0.411	-0.789
	EQ2	EQ - Design/Aesthetic - professional looking	1	5	3.764	1.353	-0.784	-0.658
	EQ3	EQ - Design/Aesthetic - creativity	1	5	2.942	1.315	-0.051	-1.057
	EQ4	EQ - Layout/Structure - easiness for navigation	1	5	3.962	1.203	-1.068	0.166
	EQ5	EQ - Layout/Structure - easiness for finding information	1	5	3.732	1.245	-0.808	-0.347
	EQ6	EQ - Feature/Function - recommendation for related products	1	5	3.341	1.409	-0.441	-1.144
	EQ7	EQ - Feature/Function - customization (allowing upgrade of components of product)	1	5	3.141	1.471	-0.299	-1.316
	EQ8	EQ - Info - product picture	1	5	3.799	1.193	-0.799	-0.313
	EQ9	EQ - Info - product	1	5	4.193	1.055	-1.110	0.168
	EQ10	EQ - Info - price	1	5	3.740	1.166	-0.731	-0.361
	EQ11	EQ - Info - shipping & handling process	1	5	3.463	1.288	-0.506	-0.794
	EQ12	EQ - Info - payment methods	1	5	3.632	1.230	-0.690	-0.464
	EQ13	EQ - Info - return and refund policy	1	5	3.203	1.355	-0.296	-1.013
	EQ14	EQ - Info - customer service	1	5	3.285	1.366	-0.422	-0.995
	EQ15	EQ - Info - security protection	1	5	3.358	1.394	-0.434	-1.057
	EQ16	EQ - Info - privacy protection	1	5	3.101	1.390	-0.201	-1.179
	EQ17	EQ - Info - company	1	5	3.409	1.602	-0.412	-1.430
Intrinsic Quality of the Retailer	IQ1	IQ - Product - Likelihood of selling an authentic product	1	5	4.030	1.113	-0.838	-0.495
	IQ2	IQ - Price - Likelihood of charging a reasonable price	1	5	3.536	1.154	-0.541	-0.512
	IQ3	IQ - Transaction Process - Likelihood of billing without an error	1	5	3.426	1.224	-0.572	-0.695
	IQ4	IQ - Security - Likelihood of processing payment with security	1	5	3.349	1.277	-0.507	-0.815
	IQ5	IQ - Privacy - Likelihood of protecting customer privacy	1	5	3.035	1.256	-0.299	-0.916
	IQ6	IQ - Fulfillment - Likelihood of charging reasonable shipping & handling prices	1	5	3.636	1.301	-0.673	-0.698
	IQ7	IQ - Fulfillment - Likelihood of delivering the exact product customer ordered from the website	1	5	3.722	1.312	-0.779	-0.605
	IQ8	IQ - Fulfillment - Likelihood of delivering on time	1	5	3.255	1.230	-0.532	-0.752
	IQ9	IQ - Fulfillment - Likelihood of packaging the product well	1	5	3.364	1.361	-0.525	-0.909
	IQ10	IQ - Fulfillment - Likelihood of informing the delivery status	1	5	3.030	1.233	-0.288	-0.916
	IQ11	IQ - Customer Service - Likelihood of responding promptly to any inquiry	1	5	2.993	1.271	-0.319	-1.037
	IQ12	IQ - Customer Service - Likelihood of communicating in a friendly manner with customers	1	5	3.145	1.323	-0.419	-1.034
	IQ13	IQ - Customer Service - Likelihood of making any return and refund easy	1	5	2.897	1.215	-0.227	-0.889
Attitude toward the Retailer	ATT1	Attitude toward retailer - Feeling Reliability	1	5	2.867	1.287	-0.104	-1.202
	ATT2	Attitude toward retailer - Feeling security	1	5	2.860	1.301	-0.090	-1.204
	ATT3	Attitude toward retailer - Feeling comfortability	1	5	2.632	1.321	0.095	-1.337
	ATT4	Attitude toward retailer - Feeling desirability for shopping needs	1	5	2.651	1.298	0.059	-1.293
	ATT5	Attitude toward retailer - Feeling possession of capacity to satisfy shopping needs	1	5	2.780	1.346	0.022	-1.291
	ATT6	Attitude toward retailer - Feeling fitness with your standards or demands of an online retailer	1	5	2.940	1.393	-0.064	-1.291
Intention to Transact with the Retailer	ITT1	Intention to Transact - I would like to shop at this retailer	1	5	2.732	1.342	0.070	-1.303
	ITT2	Intention to Transact - I would like to build a relationship with this retailer	1	5	2.298	1.208	0.312	-1.198
	ITT3	Intention to Transact - I would make a purchase at this retailer. if I have to buy something	1	5	2.507	1.282	0.155	-1.364
	ITT4	Intention to Transact - I would like to order through this retailer's website	1	5	2.850	1.393	0.069	-1.296
Reputation of the Retailer	RRREQ1	Reputation of Retailer - Extrinsic Quality	2	5	4.561	0.653	-1.414	1.636
	RRREQ2	Usefulness of User Reviews on EQ	1	5	3.200	1.304	-0.605	-0.870
	RRRIQ1	Reputation of Retailer - Intrinsic Quality	1	5	2.092	0.911	0.482	-0.517
	RRRIQ2	Usefulness of User Reviews on IQ	1	5	3.869	1.345	-1.010	-0.156

Appendix 4: Comparison of Consumer's Perceived Quality of Information-related Attributes on the Website between Two Groups

Table A. Comparison of mean scores of consumer's perceived quality of attributes related to information on the website between two groups

Items	Group A (A)	Group B (B)	(B) – (A)
EQ - Info - product picture	3.02	4.57	1.55
EQ - Info - product	3.53	4.86	1.33
EQ - Info - price	3.01	4.47	1.45
EQ - Info - shipping & handling process	2.67	4.25	1.58
EQ - Info - payment methods	2.92	4.34	1.42
EQ - Info - return and refund policy	2.34	4.07	1.73
EQ - Info - customer service	2.41	4.16	1.75
EQ - Info - security protection	2.44	4.27	1.83
EQ - Info - privacy protection	2.21	3.99	1.78
EQ - Info - company	2.45	4.36	1.91

Table B. MANOVA Hotelling's T Test (Mean difference significance Test)

	Value	F	Hypothesis df	Error df	Sig.
Hotelling's Trace	1.112775	65.65375	10	590	0.00

Table C. Comparison of mean scores of consumer's perceived quality of attributes related to information on the website between four groups

Group by # of reviewed web pages	Group reviewed 1~4 web pages		Group reviewed 5~10 web pages	
Group by scores of first impressions	Group A	Group B	Group A	Group B
Information-related item scores				
EQ - Info - product picture	2.70	4.47	3.80	4.59
EQ - Info - product	3.19	4.74	4.34	4.88
EQ - Info - price	2.72	4.19	3.74	4.52
EQ - Info - shipping & handling process	2.32	3.89	3.53	4.32
EQ - Info - payment methods	2.55	4.02	3.83	4.40
EQ - Info - return and refund policy	1.94	3.53	3.31	4.17
EQ - Info - customer service	2.01	3.62	3.37	4.26
EQ - Info - security protection	2.05	3.51	3.40	4.41
EQ - Info - privacy protection	1.85	3.28	3.08	4.12
EQ - Info - company	2.00	3.40	3.55	4.54

NOTE:

- 1) Group A: Respondents whose first impressions from Camera World's website are not positive
- 2) Group B: Respondents whose first impressions from Camera World's website are positive
- 3) First Impression Score = $(EQ1 + EQ2 + EQ3 + EQ4 + EQ5 + EQ6) / 6$
MIN=1 ~ MAX=5

The mean scores of all items of consumer's perceived quality of attributes related to information on the website are significantly higher in Group B than in Group A. (As shown in Table A & B)

The above results suggest consumer whose first impressions from the website are positive may also perceive quality of information-related attributes as positive, even though they did not review or read the information completely. (As shown in Table C)

**Appendix 5: Comparison of Observed Web-page
(Group who feel online marketplace useful VS Group who feel online marketplace
not useful)**

Cross Tabulation Table

		Company Information web-page		Product Picture & Package Description web-page		In Detail Product Specification web-page		Product Technology Guide web-page		Total #
		NO	YES	NO	YES	NO	YES	NO	YES	
Group A	#	272	233	159	346	216	289	234	271	505
	%	53.9	46.1	31.5	68.5	42.8	57.2	46.3	53.7	100
Group B	#	34	62	54	42	58	38	62	34	96
	%	35.4	64.6	56.3	43.8	60.4	39.6	64.6	35.4	100

NOTE: Group A: Respondents who feel online marketplace useful
Group B: Respondents who feel online marketplace not useful

YES: Visited / No: Not Visited

The ratios of respondents who observed the product related web-pages of Group A (Respondents feeling online marketplace useful) are significantly larger than those of Group B (Respondent feeling online marketplace not useful)

On the contrary, the ratio of who observed the company information web-page of Group A is significantly smaller than that of Group B.

Group A seems to focus more on product information, whereas Group B seems to focus more on company (retailer) information.

VITA

Hyung Chul Park was born in Seoul, Korea in 1970 and graduated from Yoido High School in 1989. He received a Bachelor of Arts in Sociology from Yonsei University in 1995. After completing his undergraduate degree, he began his MBA with a specialization in marketing strategy in the Graduate School of Business at Yonsei University. He completed his MBA in 1997 with a thesis titled, "Empirical Research on determinants of consumers' adopting and reinforcing the use of Internet as a business channel." During this time he participated in the national project on the Korean multi-media industry and consumers' multi-media adoption behavior. In 1997, he began to work for Daewoo Economic Research Institute, one of the leading economic and management research firms in Korea, as a business analyst and completed various projects and research regarding management and competition strategy for Korean companies. From 1999 to 2002, he started to work for Arthur Andersen as a management consultant. During working for Arthur Andersen, he completed more than 20 projects regarding new business planning, organization restructuring, and e-business implementation strategy for Fortune global 500 companies. Especially, he was specialized in the industries of e-business, telecommunication, retail and hotel business, and media companies. From fall 2002, he began his doctorate in the Department of Retail and Industry Services Management at the University of Tennessee, Knoxville. During his doctoral course, he conducted not only academic research but also empirical projects for improving strategic advantages of hotels, restaurants, and theme parks in south-eastern areas of the U.S. He completed his doctoral program with a major in Industry Services Management, and his doctoral degree was conferred in December 2005.