An examination of consumer e-loyalty to online travel intermediaries

Gregory E Dunn
University of Nevada, Las Vegas

Follow this and additional works at: https://digitalscholarship.unlv.edu/rtds

Part of the Higher Education Commons

Repository Citation
https://digitalscholarship.unlv.edu/rtds/2630

This Dissertation is brought to you for free and open access by Digital Scholarship@UNLV. It has been accepted for inclusion in UNLV Retrospective Theses & Dissertations by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.
AN EXAMINATION OF CONSUMER E-LOYALTY TO ONLINE TRAVEL
INTERMEDIARIES

by

Gregory E. Dunn

Bachelor of Arts
Webster University
1992

Masters of Business Administration
University of Denver
1995

A dissertation submitted in partial fulfillment
of the requirements for the

Doctor of Philosophy Degree in Hotel Administration
William F. Harrah College of Hotel Administration

Graduate College
University of Nevada, Las Vegas
December 2005
INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI

UMI Microform 3215872
Copyright 2006 by ProQuest Information and Learning Company.
All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346
Dissertation Approval
The Graduate College
University of Nevada, Las Vegas

August 11, 2005

The Dissertation prepared by

Gregory E. Dunn

Entitled

An Examination of Consumer E-Loyalty to Online Travel Intermediaries

is approved in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Hotel Administration

Examination Committee Chair

Dean of the Graduate College

Examination Committee Member

Examination Committee Member

Graduate College Faculty Representative

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
ABSTRACT

An Examination of Consumer E-Loyalty to Online Travel Intermediaries

by

Gregory E. Dunn

Dr. Pearl Brewer, Examination Committee Chair
Professor of Hotel Administration
University of Nevada, Las Vegas

Online travel intermediaries such as Expedia, Travelocity and Orbitz have controlled the lion’s share of the transactions over the Internet in terms of travel search and purchase by offering low prices, increased consumer choice, and enhanced shopping efficiency. Travel suppliers have been fighting harder than ever to keep up with the online travel intermediaries in terms of technology infrastructure and added-value content to re-capture the customers whose loyalty they spent so much time and money cultivating in the first place.

The purpose of this research was to identify the antecedents of customer e-loyalty and examine the effects of these loyalty drivers on consumers’ loyalty to online travel intermediaries. An integrated structural model was introduced that showed the relationships between e-loyalty, perceived e-quality, perceived e-value, and consumer attitudes toward shopping online. Data collection was conducted via a self-reported online survey sent as an email attachment to a randomized sample of customers of an independent online travel intermediary. Respondents were asked discuss their attitudes 

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
and behaviors in regards to shopping online for travel. As hypothesized, perceived value, perceived quality, and consumer attitudes toward shopping online had significant and positive effects on e-loyalty. An examination of the effects on e-loyalty among the three components revealed that perceived e-quality had the strongest effect on consumer’s attitudinal and behavioral e-loyalty.

This study was the first effort to comprehensively examine and test the determinants of loyalty in an online travel context. This research expanded the body of knowledge in services marketing and hospitality information technology as well as provided a new model of service e-loyalty. This study also extended the use of the e-SERVQUAL instrument to the travel market and developed a multidimensional instrument to measure service quality, value, and attitude towards shopping online.

Findings from the study provided insights for online travel intermediaries in identifying important e-loyalty drivers, understanding consumer needs, and improving their online performance. Customer e-loyalty is a good indicator of company profit and therefore understanding the drivers and dimensions is important to online travel intermediaries. Strategies may be developed to improve customer e-loyalty by addressing the gaps among the quality, value, and consumer attitudes toward shopping online attributes. Managers can use the framework and model to improve e-service performance, retain customers, and improve profitability.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER 1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>The Purpose of the Study</td>
<td>12</td>
</tr>
<tr>
<td>Research Questions</td>
<td>12</td>
</tr>
<tr>
<td>Research Contribution</td>
<td>13</td>
</tr>
<tr>
<td>Outline of the Study</td>
<td>14</td>
</tr>
<tr>
<td>CHAPTER 2 REVIEW OF RELATED LITERATURE</td>
<td>16</td>
</tr>
<tr>
<td>Perceived Value, Quality, and Attitudes toward Shopping Online</td>
<td>26</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>50</td>
</tr>
<tr>
<td>E-Loyalty</td>
<td>58</td>
</tr>
<tr>
<td>CHAPTER 3 METHODOLOGY</td>
<td>99</td>
</tr>
<tr>
<td>Sampling and Data Collection</td>
<td>99</td>
</tr>
<tr>
<td>Data Analysis Method</td>
<td>113</td>
</tr>
<tr>
<td>CHAPTER 4 FINDINGS OF THE STUDY</td>
<td>120</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>120</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>126</td>
</tr>
<tr>
<td>CHAPTER 5 CONCLUSIONS</td>
<td>142</td>
</tr>
<tr>
<td>Discussion of Findings</td>
<td>142</td>
</tr>
<tr>
<td>Limitations and Recommendations for Further Research</td>
<td>150</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>152</td>
</tr>
<tr>
<td>Normality Check for Raw Data and Normal Scores</td>
<td>153</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>157</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>170</td>
</tr>
<tr>
<td>VITA</td>
<td>190</td>
</tr>
</tbody>
</table>
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Incidence of Internet Use</td>
<td>10</td>
</tr>
<tr>
<td>Table 2</td>
<td>Summary of Research Hypotheses</td>
<td>13</td>
</tr>
<tr>
<td>Table 3</td>
<td>Antecedents and Consequences of Perceived Service Quality</td>
<td>34</td>
</tr>
<tr>
<td>Table 4</td>
<td>Recent Studies Related to E-Quality</td>
<td>39</td>
</tr>
<tr>
<td>Table 5</td>
<td>Drivers of E-Loyalty</td>
<td>61</td>
</tr>
<tr>
<td>Table 6</td>
<td>Conceptual Foundations Related to E-Loyalty</td>
<td>65</td>
</tr>
<tr>
<td>Table 7</td>
<td>Summary of Research Hypotheses</td>
<td>82</td>
</tr>
<tr>
<td>Table 8</td>
<td>Measurement of the E-Loyalty Variables</td>
<td>107</td>
</tr>
<tr>
<td>Table 9</td>
<td>Measurement of the E-Value Variable</td>
<td>108</td>
</tr>
<tr>
<td>Table 10</td>
<td>Measurement of the E-Quality Variable</td>
<td>109</td>
</tr>
<tr>
<td>Table 11</td>
<td>Measurement of the Attitude towards E-Shopping Variable</td>
<td>111</td>
</tr>
<tr>
<td>Table 12</td>
<td>Measurement of the Demographic Variables</td>
<td>112</td>
</tr>
<tr>
<td>Table 13</td>
<td>Summary of Research Hypotheses</td>
<td>119</td>
</tr>
<tr>
<td>Table 14</td>
<td>Sample Characteristics</td>
<td>121</td>
</tr>
<tr>
<td>Table 15</td>
<td>Preferred Online Travel Websites</td>
<td>123</td>
</tr>
<tr>
<td>Table 16</td>
<td>Travel Products Most Often Purchased Online</td>
<td>123</td>
</tr>
<tr>
<td>Table 17</td>
<td>Types of Travel Websites Used to Purchase Travel</td>
<td>125</td>
</tr>
<tr>
<td>Table 18</td>
<td>Money Spent on Online Travel over the Past 12 Months</td>
<td>126</td>
</tr>
<tr>
<td>Table 19</td>
<td>Results of the Exploratory Factor Analysis- Perceived E-Value</td>
<td>127</td>
</tr>
<tr>
<td>Table 20</td>
<td>Results of the Exploratory Factor Analysis- Perceived Technical Quality</td>
<td>128</td>
</tr>
<tr>
<td>Table 21</td>
<td>Results of the Exploratory Factor Analysis- Perceived Service Quality</td>
<td>129</td>
</tr>
<tr>
<td>Table 22</td>
<td>Results of the Exploratory Factor Analysis- Attitudes toward E-Shopping</td>
<td>130</td>
</tr>
<tr>
<td>Table 23</td>
<td>Results of the Exploratory Factor Analysis- Perceived E-Loyalty</td>
<td>131</td>
</tr>
<tr>
<td>Table 24</td>
<td>Scale Reliabilities</td>
<td>132</td>
</tr>
<tr>
<td>Table 25</td>
<td>Model Correlation Matrix</td>
<td>139</td>
</tr>
<tr>
<td>Table 26</td>
<td>Normality Check for Raw Data and Normal Scores</td>
<td>153</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Integrative Model of E-Loyalty</td>
<td>14</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Technology Adoption Model</td>
<td>70</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Means-End Chain Model</td>
<td>72</td>
</tr>
<tr>
<td>Figure 4</td>
<td>An Extension of Gutman's Means-End Chain Model to E-Loyalty</td>
<td>74</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Quality-Value Chain Model</td>
<td>75</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Service–Profit Chain Model</td>
<td>77</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Conceptual Model of Quality, Value, Satisfaction, and Behavioral Intention</td>
<td>79</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Integrative Model of E-Loyalty</td>
<td>81</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Integrative Model of E-Loyalty</td>
<td>118</td>
</tr>
<tr>
<td>Figure 10</td>
<td>The Effects of E-Quality, E-Value, and ATES on E-Loyalty</td>
<td>141</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENT

I would like to first thank my advisor, Pearl Brewer, for her guidance, support, and patience throughout this dissertation process. Her willingness to share her knowledge and skills made this work come to fruition. I would also like to thank my committee members, Seyhmus Baloglu, Andy Feinstein, and Michael LaTour for their time, insight, and knowledge. Each positively influenced this work and contributed to my growth as a researcher. I also thank the University of Nevada Las Vegas and specifically the Graduate College and the William F. Harrah College of Hotel Administration for their support and education.

I would be remiss without acknowledging my family and friends who helped me through thick and thin to complete this education and research. I thank Gary, Susan, Matthew, and Cris whose love, support, and sense of humor kept me moving forward, in the right direction, and reminded to enjoy what I do. Finally, I thank Jane whose love and kindness I carry and whose dreams I am blessed to live.
CHAPTER 1

INTRODUCTION

The purpose of this research was to examine the critical components of consumers' perceptions of value, quality, and attitudes towards e-shopping (ATES) with online travel intermediaries and evaluate the impact of these factors on the formation of e-loyalty. This chapter first provides a discussion of the Internet and its impact on the travel and the tourism industry. Second is an outline of the research purpose, research questions, and hypotheses. Finally, the potential contributions of this study to services marketing and hospitality information technology are proposed.

The Impact of the Internet on Travel

The Internet has dramatically impacted the way we do business in the travel industry. One of the most influential characteristics of the Internet is its ability to store, organize, and disseminate vast amounts of information at different virtual locations with minimal cost. With this capability, the Internet provides greater efficiency in performing common marketing functions within the channel activities of product distribution, transaction, and communication (Peterson, Sridhar, & Bronnenberg, 1997). The Internet serves as a distribution channel for information goods (e.g., software, music, news) as well as for services (e.g., travel, banking, and real estate) as the characteristics of these types of products/services do not require a physical distribution method. The Internet can
also increase the efficiency of communication by informing buyers about sellers’ offerings and facilitating the communications among the buyers and sellers (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer, & Wood, 1997). The Internet can also function as a transaction channel by bringing buyers and sellers together in a “marketspace” where the geographic location and time zones are no longer important (Rayport & Sviokla, 1994).

The Internet serves three major functions: (1) transactions, (2) customer service, and (3) self help such as information search (Meuter, Ostrom, Roundtree, & Bitner, 2000). Most internet travel companies utilize all three of these. The Internet facilitates millions of transactions, provides content delivery, and communications medium and avenues for real-time customer service. Online travel agencies on the web can attract customers who seek a rapid and convenient completion of a whole procurement transaction cycle from searching, sourcing, ordering, payment, and handling requests for after sales services. Managers of online travel businesses can also employ their Web sites as information sources and channels for customer service, including help and order status, even when physical travel supplier location serves as the primary channel employed to generate good customer relationships.

There are three major advantages of Internet commerce. The first and foremost advantage appears to be the convenience and availability of Internet transactions. The relative irrelevance of physical separation between customers and companies enables companies to more readily and efficiently increase the number of customers and services. Furthermore, the borderless space may allow companies to expand their business globally without being obliged to invest large amounts of money on new customer service or travel agency locations. The potential of 24/7/365 service provides flexibility for
customers to perform transactions with travel suppliers. The convenience saves customers time in terms of driving, parking, and queuing during shopping trips.

A second benefit of Internet commerce is value-added information. The Internet adds value by combining real-time audio communication aspects of the telephone and adds video capabilities (active pictures- streaming video) and text based communications information about travel products and services (Nichovich & Cornwell, 1998; Ubaczewski, Leonard, & Wheeler, 1998). The Internet can also provide relevant, customized, and personalized information to their customers (e.g. weather, travel deals, retail ideas). Furthermore, the online content of a travel site can be updated continuously and instantly to every Internet customer they choose while customers can view relevant account information and track historical data via the web. The Online bulletin boards, discussion forums, and web blogs provide a place for customers to exchange travel and tourism information.

A third benefit of the Internet lies in its ability to facilitate customer relationships. An Internet travel company has the potential to solidify and extend relationships with its customer base because it brings services directly to a customer – including a home, office, or portable communications device. Knowing that customers desire custom services and have little incentive to spend hours on visiting travel agency stores or travel company service branches, many companies have implemented advanced information technologies such as analytical customer relationship marketing (CRM). Travel companies first establish a customer data warehouse by recording transactions, demographic data, and soliciting inputs of customer’s preferences, and provide
customers’ tailor-made travel offers and services without coming into personal touch with them.

The number of Internet travel customers and suppliers has increased thanks to the enhanced adoption of Internet technology by young and old buyers and the entrance of both Internet-pure online travel intermediaries and clicks and mortar travel agency retailers attempting to capitalize on the cost-effective marketing and distribution platform. Moreover, powerful search engines and possibilities for instant price comparisons on the Web force online travel suppliers to assess competitive prices and provide high product quality and value (Hof, McWilliams, & Saveri, 1998). Non-price competitive advantages such as those derived from excellent customer services have become critical for Internet customer satisfaction and loyalty.

Internet commerce has been defined as purchasing over the internet, email, fax, electronic data interchange, and electronic payments (Gazis, 1988). In a commerce capability, and there are two critical factors that have fundamental effects on hospitality Internet commerce. First, competition is just a click away. Second, most travel-related companies also tend to publish price information and conduct heavy advertising campaigns that emphasize pricing. Therefore, customers are often fully informed of the best prices for typical travel products or services. Hospitality businesses have three primary strategies to offset this price-transparency disadvantage: (1) geographic differentiation, (2) service quality differences, and (3) modest levels of switching costs (Chen & Hitt, 2000). The Internet has dramatically reduced the role of geography in consumers’ choice of products and services while also reducing the switching costs associated with the changing of providers (Chen & Hitt, 2000). This includes both
implicit and explicit costs of changing providers (i.e. offer monetary incentives to open a bank account, or provide more loyalty points/rewards to do business with a hospitality provider).

There still lies confusion and uncertainty as to how to fully leverage the power of the Internet as a distribution channel for travel products. In reality, service quality in Internet commerce has received lower ratings from customers (Rubino, 2000). Often customers have not formed clear expectations for online retailers. Internet companies have not clearly understood what customers really want from their services, and therefore cyber consumer behavior has not been really understood (Zeithaml, Parasuraman, and Malhotra, 2000; Peterson et al., 1997). The web-based transaction is a complicated process, compared to that of traditional markets. For instance in traditional markets, customers often directly and interpersonally contact suppliers and most transactions, except in direct marketing, are completed via face to face interactions. Alternatively, in Internet markets, transactions are completed using various Internet-related hardware and software. All product information is stored in an information system and customers often actively retrieve desired information from a company or third party website. Also, traditional goods and products have to be physically delivered to customers either by companies themselves or by third party logistics companies. Logistics is still important in Internet commerce for services businesses and typically, the more complicated the process, the more problems come about. For instance, the 365/24/7 service availability challenges every Internet travel company in every aspect such as technical reliability, information system quality, and service consistency.
The Internet has clearly changed the way we do business in the hospitality industry. On the one hand, the Internet empowers the consumer with real-time, comprehensive information and now consumers are spending more online. On the other hand, the advancements in Web technology and the relentless pursuit for control of the customer have intensified the competition in the hospitality industry. There are tremendous benefits of the Internet to consumers. Web shopping is convenient and time-saving. The huge amount of free information allows customers to easily compare prices and product features across travel suppliers. But from a strategic perspective, the impact of the Internet to travel firms is not always positive. Despite the new business opportunities enabled by the Internet, competition in the travel industry has become fiercer than it was before. The Internet continues to be a double-edged sword.

Researchers have predicted that the use of the Internet for marketing purposes will not increase overall consumer spending (Peterson et al., 1997). The implication here is that in spite of growth in online spending, the total consumer expenditure for travel has not increased dramatically. The Internet itself will not cause consumers to spend more, but what is likely to happen is that there will be a redistribution of revenues among channels or among members of a channel (Hagel & Eisenmann, 1994).

There are two facts that contribute to the increased competitive online travel market. First, there are low entry and establishment costs associated with online travel and these characteristics have attracted more players into the already crowded marketplace. Travel suppliers find incentives to sell directly to consumers via the Internet due to the lower cost of a transaction as compared to transactions through a customer service office or call center. Pure online travel intermediaries take advantage of their
superior technological infrastructure and focus on navigation and content. Recently, traditional travel suppliers have begun to fight back to win the repeat-business and loyalty of online consumers. Another factor is the relatively low cost of providing information and therefore the Internet reduces the information asymmetry between buyers and sellers and increases consumers’ bargaining power (Alba et al., 1997; Amit & Zott, 2001). As sellers imitate each other, many companies will end up doing the same thing in the same way. For products lacking differentiation (e.g., airline seats or car rentals), consumers will make purchase decisions based on price, resulting in the acceleration of the commoditization process (Porter, 2001).

Hospitality and travel suppliers have learned the lessons from recent e-failures and loss of power to third party online travel intermediaries. They are now more familiar with Internet technology and are rapidly deploying competitive e-business applications in order to re-capture customers and profit. As is the case with online consumer goods retailer, the Internet is increasingly being viewed by consumers as a preferred channel to search and purchase travel products. The implication of this trend is that travel suppliers will have to demonstrate that they provide real value in order to successfully compete with the powerful third party online intermediaries who control the channel- and more importantly- control the customers.

Customer loyalty and customer retention is a hot topic for Internet commerce companies (Reichfeld & Schefter, 2000). The combination of increasing customer demands for service quality and competitive challenges facing hospitality companies makes it necessary to understand what attributes customers use in their evaluation of service quality, value, and overall satisfaction. Hospitality management needs to know
what and how quality and value attributes and an individual’s shopping attitudes can
directly and indirectly affect customer loyalty.

In online travel retailing, customer loyalty depends on a supplier’s ability to
consistently deliver quality and value. The importance of each of these factors in
affecting consumer responses such as positive word-of-mouth, partnership activities, and
future purchases is supported by a substantial body of industry and academic research.
The development of e-commerce and the unique characteristics of shopping online have
stimulated new interest in understanding the nature of relationships between quality,
value, consumer attitudes toward shopping online and loyalty in an online environment.
For example, research has focused on what specific service quality, technical quality,
value and product attributes form the basis of consumers’ perception of quality and value
when shopping online (Zeithaml et al., 2000). More specifically, in what way do
consumer characteristics, such as individual’s attitudes toward shopping online, affect
their perceptions of quality and value regarding shopping online (Dahholkar, 2000). Also,
how do the technological aspects of online shopping alter individuals’ assessments of
satisfaction and loyalty (Bitner, Brown, & Meuter, 2000). Most importantly is the
question of what drives customer loyalty for shopping online (Meuter et al., 2000).

The Tourism Industry and Online Travel

The tourism industry is currently the third largest retail industry in the United
States, just behind the automotive and food store industries (AHLA, 2005). Tourism is
also the nations largest services export industry and one of the largest employers. There
are fifteen different interrelated types of businesses in the tourism industry including
lodging, airlines, restaurants, cruise lines, car rentals, travel agents, and tour operators to name a few. In 2003, the tourism industry generated $552 billion in sales (AHLA, 2005). Tourism now directly supports 7.4 million travel and tourism jobs in the United States (U. S.). Furthermore, PhoCusWright (2005) estimates that U. S. leisure/unmanaged business online travel sales for 2004 were $52.8 billion and that more than one third of all U. S. travel will be booked online by leisure and unmanaged business websites in 2006—compared to 20% in 2003 and 15% in 2002.

The Internet is the perfect vehicle for the travel industry as it provides consumers with a quick and easy way to book travel and allows travelers more power over their travel planning and purchases. A recent study found that over half of Americans age 18 or older (56%) claimed they currently used the Internet, either at home, work/school, or both (Travel Industry of America [TIA], 2004). This equates to over 120 million adult Americans who currently use the Internet, an increase of 5.3% over 2003. Moreover, the study found that almost half (44%) of travelers use the Internet for travel planning, while 30% use it to make travel reservations (see Table 1). A traveler is defined as an adult who took at least one trip 50 plus miles away from home, one-way, in the past year (not including commuting to/from work or school).
Table 1

*Incidence of Internet Use*

<table>
<thead>
<tr>
<th></th>
<th>Among U.S. Adult Population</th>
<th>Among Traveling Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Travelers</td>
<td>46%</td>
<td>67%</td>
</tr>
<tr>
<td>Use the Internet and searched for travel online</td>
<td>30%</td>
<td>44%</td>
</tr>
<tr>
<td>Use the Internet and made travel plans online</td>
<td>21%</td>
<td>31%</td>
</tr>
<tr>
<td>Use the Internet and traveled for business</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>Use the Internet and traveled for leisure</td>
<td>43%</td>
<td>63%</td>
</tr>
<tr>
<td>Use the Internet and traveled frequently (took more than five trips in the past year)</td>
<td>21%</td>
<td>31%</td>
</tr>
</tbody>
</table>

\(^a\) Among U.S. Adult Population was 213.9 million; \(^b\) Among traveling population was 147.7 million. From: AHLA (2005).

TIA (2004) also found that out of 213.9 million adults: 68% were considered travelers, and of those who traveled; 26% were business travelers, 94% were leisure travelers; and 42% were frequent travelers. Moreover, TIA found that the online traveler market consists of more than 98.3 million travelers who currently use the Internet. Of these online travelers: 65% use the Internet for travel; 45% use the Internet for travel reservations/bookings; 40% claim to make all of their travel reservations online; 83% use the Internet to do at least half of their travel booking; and the percentage of lookers, who do not book online, declined to 30%.

The most popular type of website used by consumers to make travel plans is the online travel portal. In fact, 70% of users go to online travel portal websites (e.g.}
Expedia.com, Travelocity.com, or Priceline.com); 60% of users go to corporate brand owned websites (e.g. airlines, hotels, car rental, or cruise line); and 59% of users go to search engine websites (e.g., Yahoo, Google, AOL). In terms of the most popular travel planning activities performed online, TIA found that the variety of travel planning activities performed over the Internet includes searching for: airfares and schedules (69%); maps/driving directions (70%); rental cars (41%); places to stay hotel rooms (67%); cruise lines (8%); travel packages (35%); places to go to destinations (34%); things to do (49%); discounts or promotions (42%); dining/entertainment (40%); and local calendars (35%).

Airline tickets remain as the top travel product booked online. Of the online travel booker population, 82% book airline tickets, 67% book hotel rooms, and 40% book car rentals, 16% book travel packages, 11% tours and excursions, and 8% book cruises. Moreover, of the online travel bookers, 69% booked via online travel agency, 54% via a travel company corporate website, 31% via a destination website, 22% via a state, city or country destination site, 9% use travel guide sites, 5% special interest sites, 4% newspaper/magazine sites, and 3% community sites (TIA, 2004).

The number of consumers using the Internet to purchase products continues to grow and the demographic profile of online shoppers shifts toward the middle class of consumers (Ernst & Young, 2001). Consumers are making more purchases online and the actual dollars spent continues to grow. More types of types of travel products can be purchased online. Commodity products like airline seats are still the top purchases, but more complex and involved purchases such as travel packages are beginning to receive increased shopper attention.
The Purpose of the Study

There has not existed an integrated model of e-loyalty tested in the context of consumer shopping behavior and online travel intermediaries. The purposes of the study were to: (1) identify the drivers of consumer e-loyalty to online travel intermediaries and examine the effects of these drivers on customer e-loyalty and; (2) propose and test a conceptual model of e-loyalty that assesses the simultaneous effects of e-quality, e-value, and attitudes toward e-shopping on customer e-loyalty.

Research Questions

The specific research objectives of this study were to:

(1) Develop an integrated conceptual framework to facilitate scale development of perceived e-quality, perceived e-value, ATES, e-loyalty.
(2) Develop a reliable and valid measurement instrument of perceived e-quality, perceived e-value, ATES, and e-loyalty.
(3) Identify the salient attributes of e-quality, e-value, ATES, and e-loyalty.
(4) Examine and test the relationships of perceived e-quality, perceived e-value and ATES on customer attitudinal and behavioral e-loyalty.

In particular, this research answered the following questions.

(1) What e-quality, e-value, ATES, and e-loyalty attributes and their key items can be discerned from the literature?
(2) What were the most influential e-quality, e-value, and ATES attributes needed to attain high levels of service e-loyalty?

(3) What were the most important attitudinal and behavioral e-loyalty dimensions?

Research Hypotheses

Based on the conceptual foundation and literature review, an integrated model of e-loyalty was proposed and four hypotheses were explored (see Table 2).

Table 2

Hypotheses of Consumers' E-Loyalty towards Online Travel Intermediaries

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Antecedents of E-Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1:</td>
<td>Consumers' positive perception of the e-quality of an OTI will positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H2:</td>
<td>Consumers' positive perception of the e-value of an OTI will positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H3:</td>
<td>Consumers' positive attitude toward e-shopping will positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H4:</td>
<td>Consumers' positive attitudinal loyalty toward an OTI will positively predict their behavioral e-loyalty.</td>
</tr>
</tbody>
</table>

Research Contribution

This research contributed both academically and practically. First, this study was the first effort to comprehensively examine and test the determinants of e-loyalty to
online travel intermediaries. Second, this study expanded the body of knowledge in services marketing and hospitality information technology by providing a new model of e-loyalty, and enhanced the understanding of the relationships among perceived e-quality, perceived e-value, ATES and e-loyalty to online travel intermediaries. Third, it extended the use of the e-SERVQUAL instrument to the travel market and developed a multidimensional instrument to measure perceived e-quality, perceived e-value, and ATES.

Practically, the findings from this study provided valuable insights for online travel intermediaries and suppliers in identifying important drivers of e-loyalty, understanding consumer needs, and improving their online performance. First, customer e-loyalty, measured multi-dimensionally, is a good indicator of company profit and therefore understanding the drivers and dimensions is important to online travel intermediaries. Second, strategies may be developed to improve customer e-loyalty by addressing the gaps among the e-quality, e-value and trust attributes. Third, this measurement instrument of Internet e-loyalty can be applied by other online travel organizations or service businesses to assess e-quality, e-value, ATES, and e-loyalty. Fourth, managers can use this framework and model to improve e-service performance, retain customers, and improve profitability.

Outline of the Study

This study was designed to promote a better understanding of the factors that drive customer loyalty to online travel intermediaries. Specifically, this study examined the interrelationships between perceived e-quality, perceived e-value, attitudes toward e-
shopping, and customer e-loyalty. This dissertation contains five chapters. Chapter 2 reviews the relevant literature in services marketing and information technology and presents the theoretical framework which formed the basis for this study. Chapter 3 describes the qualitative and quantitative methodology. The qualitative analysis was aimed at exploring the underlying e-quality, e-value, and ATES attributes and e-loyalty dimensions. A questionnaire was developed based on the literature review. A review of the sample, data collection, and data analysis methods is provided. Chapter 4 provides the data analysis and results in terms of sample characteristics, preliminary reliability analysis, and structural equation modeling. Chapter 5 presents the conclusions of the study including the theoretical and managerial implications, limitations, and direction for future research.

**Chapter Summary**

Chapter 1 provided an outline of the research purpose, questions, and hypotheses. Chapter 2 presents a review of the literature drawn from the extant work of information technology and services marketing in respect to the evolution of the online travel intermediary, customer attitudes toward shopping online, and the concepts of perceived value, perceived quality, and customer loyalty which form the background for constructing the e-loyalty model and advancing the hypotheses.
CHAPTER 2

REVIEW OF THE LITERATURE

When the Internet was new, consumers valued the technical and content features that made it different. Now that shopping online for travel has become prevalent, online travel shoppers have higher expectations of travel intermediaries and suppliers than before. To consumers, the Internet is just another way to acquire goods or book services. They expect as much from online travel shopping as they would expect from other travel channels. With more choices available online and offline, consumers are empowered with information and the tools that enable greater bargaining power and fewer obstacles in terms of switching costs. The problem of retaining customers has become increasingly challenging for online retailers. Therefore, the purpose of this research was to establish a theoretical framework identifying important e-loyalty drivers, their antecedents and the relationships between them. The e-loyalty drivers were investigated from the perspective of perceived e-quality, perceived e-value, and attitudes toward e-shopping (ATES) in the context of shopping for travel using online travel intermediaries.

The review of the literature drew from the extant work of information technology and services marketing in respect to the evolution of the online travel intermediary, customer attitudes toward shopping online, and the concepts of perceived value, perceived quality, and customer loyalty which form the background for constructing the e-loyalty model and advancing the hypotheses.
Online Travel Intermediaries

Before discussing the value and quality attributes of an online travel intermediary, it is necessary to provide a clear definition of the central tenet of this study—the online travel intermediary. In this study, an online travel intermediary is conceptualized as an Internet-based transaction or travel retail site that engages in the direct sales of travel products to consumers. Only online travel intermediaries whose primary offerings are travel products (e.g., airline tickets, hotel rooms, car rentals, cruise line berths or travel packages) will be studied in this work. The following two sections will describe the e-business travel models and channel strategies in travel e-distribution and explain how the scope of an online travel intermediary and e-loyalty is defined.

Online Intermediary e-Business Models

Business models are intended to describe the roles and relationships among a firm's consumers, customers, allies, and suppliers that identify the major flows of product, information, money, and key benefits to participants (Weill & Vitale, 2001). The business models in e-commerce have been classified differently among researchers mainly due to the use of different classification schemes (Brown, Tilton & Woodside, 2002; Calskins, Farello & Shi, 2000; Rayport & Sviokla, 2001). Based on the summary of previous work, Business to Consumer (B to C) e-commerce can be classified into four categories according to the nature of an e-business' core offering and revenue source. The classifications include: transaction sites, service sites, intermediary, and portal/vortal.

Transaction sites, also called commerce sites (e.g., Amazon.com, Marriott.com, Hertz.com, Delta.Com, Carnival.com) concentrate on the sales of specific products.
and/or services in the digital marketplace (Brown et al., 2002). Alternatively, service sites use the website as a place to provide their services to their customers and charge a fee related to the service (Brown et al., 2002, Weill & Vitale, 2001). An online financial service provider (e.g., Schwab.com), an online bank (e.g., WellsFargo.com), an e-brokerage firm (e.g., E*Trade.com), or an online travel agency (e.g., LibertyTravel.com, CarlsonTravel.com, Key2Travel.com) are examples of e-services using this model.

An intermediary brings together buyers and sellers by concentrating information (Weill & Vitale, 2001). Intermediaries can include online wholesalers, auctions, electronic mail, and online shopping agents. Auction sites (e.g., e-Bay.com, Expedia.com, Travelocity.com, Hotwire.com, Priceline.com) generate income through the listing of product offerings and receiving commission fees charged to sellers (Calskins et al., 2000; Brown et al., 2002; Rayport & Sviokla, 1995; and Weill & Vitale, 2001). Online auctions have flourished due to Internet technology that allows them to efficiently and effectively aggregate the fragmented buyer and seller market. Similar to its physical counterpart, an electronic travel shopping mall (e.g., AOL Netmarket, AOL Travel) is a single site concentrating a variety of businesses that gather together to benefit from sharing infrastructure expenses and their proximity to each other (Weill & Vitale, 2001). Online shopping agents or bots capitalize on consumers’ need of searching for the best deal. Travel shopping agents such as Travelaxe.com, Sidestep.com, and Kayak.com allow consumers to easily compare prices and features of a product across the vendors listed on their sites.

An Internet portal, sometimes called a content site, is an Internet site that provides in-depth information search service on a variety of subjects via the Internet. Portals such
as Yahoo!, AOL, or Google, can provide free information services to consumers while generating revenue by charging advertising fees and referral fees to firms who value their tremendous user base. A variation of a portal is a vertical portal (or vortal) which specializes in information services in a specific product category. Examples of a vortal can be Espn.com for sports news or Yahoo.com Travel for travel.

Traditional travel agency retailers have focused on facilitating the transaction of travel services from travel suppliers, service providers, or wholesalers to end users (consumers). In an e-commerce context, transaction sites fulfill the same function in a virtual interface as opposed to in a physical store. Transaction sites can be further divided into two types of operations on the basis of the tangibility of the products sold (Peterson et al., 1997). The two types are: (a) tangible or physical product, and (b) intangible or information products. The reason that this classification is the characteristic of intangible or information products that allows the Internet to serve not only as a transaction channel, but also as a distribution channel. In other words, consumers may receive the product instantly after the transaction. Products such as airline tickets, event tickets, hotel room confirmations, car-rental reservations and cruise line berth confirmations can be received instantly after the transaction.

Although service sites also deal with consumers, their core offering is service products. For instance, for online travel agencies, factors influencing consumers’ repeat purchase intentions will differ substantially (e.g. Liao & Cheung, 2002; Shapiro & Varian, 1999). For example, consumers’ decision to stay with the same online travel intermediary is subjected to the lock-in technique or switching cost- while in the context of consumer goods markets where switching costs are minimal. For the purposes of this study, the
focus was on consumers’ e-loyalty and perceived quality and value of online travel intermediaries selling travel products directly to consumers.

*Consumer Travel Websites and the Merchant Model*

Because there are so many websites that sell hotel rooms, airline tickets, rental cars, cruise line berths and a myriad of travel packages, it is essential to understand the differences between them. First, there are many sites referred to as “online travel agencies”. These sites offer thousands of airlines, hotels, cars, cruises and travel packages in a wide range of geographic locations. Over the last five years, there has been considerable online travel industry shakeout, and now there are sites that represent well over 90% of the non-branded volume. Some critics argue that it is the emergence of these online 3rd party travel sites that are to blame for the drop in overall average room rate we have experienced since the economic slowdown of 2001. Still others argue that these same sites are the reason that travel is now finally up to its pre-2001 levels due to the millions of dollars spent on consumer advertising. Based on PhoCusWright (2005) projections, IAC is reported to conduct almost 90% of its volume via the merchant model (e.g., buying hotel room at net rates provided by hotels at 18-35 % discount and then marked up for sale to consumers), compared to Travelocity and Orbitz that started in the retail model (e.g., they charged recipient hotels 10% commission on retail rates but have more recently added merchant type programs). In addition to the consumer-based travel websites, there are also websites meant for business use to book business related travel.

There are many ways to group consumer-oriented Internet sites including the merchant, opaque/auction, retail travel, airline, corporate, niche and the travel
intermediary sites. The merchant model contains sites that primarily employ net
wholesale rates. They operate as a traditional wholesaler from a rate and mark up
perspective, but they are very different in that they communicate and relay reservations
entirely online. Whenever anyone mentions “merchant model” they mean that a hotel,
airline, cruise line, or car rental company gives them a net rate that is often 20-35%
below retail levels. The merchant model website (it is most like an online wholesale
travel agency) then decides what rate to post on their site to sell to the consumer. While,
some hotels, airlines, cruise, or car rental companies have negotiated limits on mark-up
for different rooms at different times, others have not made any prior arrangement with
the website when they sold them the net rates. Normally, the merchant model is
employed as a primary business and these sites often offer retail type sales. Therefore,
hotels are that are not willing to offer net rates online can still take advantage of the
distribution through these sites. One note of caution for travel suppliers is that the
products in the merchant program are likely to be more visible and be more prominently
featured than those in the retail programs. The merchant model is often more lucrative to
vendors and the merchants want to provide incentives to suppliers to increase
participation. Expedia and Hotels.com are some of the most well-known merchant model
sites. Another important and little known fact that about these high volume sites is that a
large percentage of the business they book is handled off-line through 800 number
customer service call centers. For instance, Expedia and Travelocity have reported at
industry conferences that upwards of 40% their volume passes through an 800 number
call center.
Of all the third party intermediary sites, the second type described as “opaque/auction” are price driven sites and come a close second to the merchant model in terms of volume in the consumer markets. They are called “opaque” because the consumer who is shopping makes a commitment to purchase based on general location and rate and may not know the brand or the hotel name until after the purchase is consummated. Transactions on these sites are normally non-refundable and sometimes the consumer knows only a rate range- that would be “price opaque”. In this case, consumers indicate how much they are willing to spend and the vendor matches the request to a hotel in the specified destination and based on meeting on the price, the sale is made. These types of sites are popular with price-sensitive travelers who are not concerned about the brand they use. The most well known opaque/auction sites are Priceline.com and Hotwire.com.

Most of the opaque inventory is sold using net rates (merchant model) but there is some retail inventory also available on these sites as an alternative. Similar to the opaque model in that price is the primary variable driving the sale, a popular online travel intermediary, Lastminute.com, has dominated the European market with a web offering that gives consumers “deals” by selling distressed inventory. In the cases of distressed inventory, when travel vendors expect to lose an airline seat, hotel room, or car rental day, they find it better to sell it a lower price than to lose the sales opportunity altogether. This model has been successful. Lastminute.com has been rapidly acquiring smaller websites in Europe and has a very strong foothold amongst third party players in that market. While opaque sites do not usually reveal a hotels or brands name, in the case of a travel package sale (e.g., air, hotel, car rental), its name will be known, but the rate that is bundled into the package will not be known. In this case, it will be deemed “rate opaque”.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
This option makes the opaque sites more attractive to an airline, hotel, rental car company or cruise line- and often, also to a wider range of consumers. This rate opaque approach to packages is offered by most major travel sites including the merchant model sites.

A third type of online travel intermediary is that of retail travel websites. There are two main types of retail websites. There are those retail travel sites that have been online-only and those that started as brick and mortar agencies and have since moved their operation online and continued to service clients both ways (e.g., Carlson Travel, Liberty Travel, and American Express Travel). In this model, the travel suppliers provide retail rates and inventory, bookings are made, and the suppliers pay the usual commissions (normally in the 10% range) based on the room rate booked. Many of these online travel agencies are becoming hybrids and now offer merchant programs in addition to their retail models. Likewise, the merchant sites are now adding retail components. As these intermediaries move toward offering all things to all people, the lines are beginning to blur as the different web models begin to offer variations on their base service. For instance, Orbitz (started as a joint ownership by most U. S. air carriers) and Travelocity (a spin off company from Sabre which was originally part of American Airlines) both started with a retail business model. Orbitz is one of the largest retail web sites and the Orbitz founders decided to offer airline seats collectively since the third party merchant model sites were so successful. While they do not sell inventory (e.g. merchant net rate model) they sell more rated rooms and receive commissions on the retail sale.

The fourth type of consumer travel intermediary websites are the are dozens of specialty “niche websites” meant to attract the skier, the fisherman, the hunter, the
outdoorsman, and the golfer. Besides merchandise, these sites often offer transportation, hotels or resorts, or activities that feature the specialty of the site. For a resort property, these sites are an essential part of a Web distribution strategy. Convention and visitor bureaus are another type of niche website that feature hotels and local activities but also exist to promote a destination to visitors and residents alike. In addition, destination specific travel directories are becoming more useful to provide business for hotels, airlines and car companies. Participation with directories can be paid by commission or through a fee for listing. These smaller niche sites are often “powered” by channel leaders such as Pegasus, Expedia, World Choice Travel, or Priceline. In addition to the above, there are also niche websites like www.wowtraveler.net that attempts to help the luxury traveler by selecting the ‘wow’ hotels they have experienced so that an overwhelming range of choices can be narrowed down and the search process made to be more manageable.

The fifth type of travel website consists of the airlines or other non-travel sites. Some of these other airline-specific sites generate significant volume for complimentary travel businesses such as hotels, car rentals, tours etc. Delta is one example of an airline headed toward a goal of booking $2 billion in travel. Still other sites such as Yahoo, MSN, and CNN are information portals that offer travel including hotel reservations, car rentals, and cruise line and travel packages. In this model, a GDS and/or switch like Pegasus is used to relay their rates, inventory and product information power to most of these sites. Since many of these airlines used to own GDS systems, they still maintain their historical links to them. For instance, American Airlines, who built Sabre, still uses its hotel inventory. Alternatively, United, who’s CRS was the precursor of Galileo, still
uses Galileo for its hotel and car inventory. Some of these sites have supplemented their inventory with hotel switch inventory (e.g., Continental’s use of the Pegasus database).

The last type of consumer travel website, and arguably, the most important website, is that of an airline, hotel, car, or cruise lines own individual or corporate brand site. These sites are where consumers can go to find detailed travel product information or make a direct booking. Many of the larger scale, more geographically dispersed travel brands believe that they have a centralized site for their hotels or car rental locations and therefore their members do not need to have their own site. At one time, this was true. Now, with the huge increase in search engine driven bookings, it appears that many individual hotels and car rental locations do not register very high on search engine driven bookings. This is often due to the way in which the text on the site is written and their approach to seeking links from other sites. For smaller chains or independent hotels, developing a highly functional website is crucial to a successful distribution strategy.

In spite of this fact, while some chains have been supportive of their individual hotels online efforts, many have been considered individual hotel sites to be competing with the chain site and some cite as redundant to the larger effort made by the corporate interactive marketing department. In the best scenarios, the corporate web executives utilize the individual sites as part of a pull through strategy to draw traffic into the chains influence, and gain greater aggregated success within the chain. The central site is made more powerful by the additional attraction of many individual sites each pulling toward the same end. That is, if the individual sites are working in concert with the chain. There are ways a chain site can be most effective and different ways an individual hotel can optimize its presence on the Web. Chains will continue to require a structure that will
support huge volume. While, this may limit their ability to optimize search engine marketing, the individual hotels can be utilized to support search engine marketing as part of an overall brand strategy.

Perceived Value

The study of perceived value originates from a much broader concept— that of value. Values have been shown to be a key factor in driving individual behaviors (Gutman, 1982; Rokeach, 1968, 1973). Values are extensively studied in the areas of psychology, sociology, economics, and marketing. Value has also been explained differently in different contexts for different purposes. Values have been defined as ideals in the form of preferred modes of behavior or end states (Rokeach, 1973), while value have also been thought of as a cognitive assessment of the net gains associated with an exchange (Oliver, 1997). Alternatively, according to Payne & Holt (2001), the term “customer value” has been used in at least three different contexts in marketing strategy: (1) how firms create and add value, (2) value of the customer (e.g. customers’ lifetime value to a firm), and (3) perceived customer value, that is the desired and received value at purchase and in use. Understanding that value means different things to different people, Zeithaml (1988) organized responses from an exploratory study into four consumer definitions of value: (1) value is low price, (2) value is the benefit or usefulness the consumer hopes to derive from the product, (3) value is quality for the price paid, and (4) value is the full set of benefits received for the costs incurred. Integrating these definitions, Zeithaml (1988) proposed that “perceived value is the consumer’s overall
assessm ent o f the utility o f a product based on perceptions of what is received and what is given” (p.14).

The concept of perceived value is based in the understanding of consumer needs and expectations. Past studies in the area of shopping behavior and services marketing have shown ample evidence of perceived value as an important determinant of purchase decisions, loyalty intention, and even market share (e.g. Dodds, Monroe, & Grewal, 1991; Grewal, Monroe, & Krishnan, 1998b; Parasuraman & Grewal, 2000; Reichheld, 1996; Zeithaml, Berry, & Parasuraman, 1996; Zeithaml, 2000). In spite of the substantial work, the concept of perceived value is often used in place of other value concepts in consumer and market research, such as consumer value, consumption value, and perceived value. Although these concepts are all related to one another in the sense they are all values, they are also different in that each emphasizes a different perspective of value.

Perceived value takes the consumer’s perspective and examines both the gain and loss components of acquiring and using a product. The perceived value approach assumes that consumers are rational and sovereign. They spend their income to maximize or optimize the satisfaction they get from products (Bowman & Ambrosini, 1998). Typically, purchase decisions are based on an overall evaluation of trade-offs between the give and receive components in a transaction. As posited by Zeithaml (1988), the overall assessment of the utility of a product is based on what is received and what is given. Perceived value is superior to consumer value and consumption value in studying behavioral intentions because it is more observable than consumer values and more
thorough in analyzing a realistic situation than consumption values (Payne & Holt, 2001; Woodruff, 1997; Gale, 1994).

Some researchers contend that value, not satisfaction, is a key driver of customer loyalty (Neal, 1999; Parasuraman & Grewal, 2000). For example, Neal (1999) notes that while a minimum level of satisfaction is required to keep a product or service in the consideration set, it is value that predicts customer loyalty. In this view, customers tend to select the alternative that is at the top of a hierarchy of products or service providers based on value perceptions.

There are both antecedents and benefits to the concept of value. For instance, according to Darden and Dorsch (1990), shoppers develop strategies so the costs of shopping are minimized relative to the benefits received. In other words, people form a shopping plan based on an evaluation of the expected benefits to be derived in respect to the resources spent (e.g., time, energy and money). This view of value as a relative assessment of benefits and costs is well grounded in the marketing literature (Downs, 1961; Monroe, 1990; Thaler, 1985; Zeithaml, 1988). In addition, judgments of value vary across consumers as each person brings their own criteria to bear in the evaluation. The personal differences in customer characteristics has been empirically investigated in the services marketing literature and shown to have an important influence on the assessments of value (Bolton & Drew, 1991).

The benefits of value include salient intrinsic attributes, extrinsic attributes, and other relevant mid-level abstractions such as quality and convenience (Zeithaml, 1988). For example, consumers’ perceptions of non-product related store cues (e.g. store cleanliness, friendliness of personnel, and check-out waiting times) were found to play an
important role in affecting store value perceptions both directly and indirectly via price and merchandise quality perceptions (Kerin, Jain, & Howard, 1991).

In respect to the value and quality relationship, there has been a significant portion of the literature that emphasized the role of quality as a benefit. More personal and individualistic than quality, value is considered to be a higher order concept in that it takes into account the tradeoff between benefits and sacrifices (Zeithaml, 1988). Using a means-end approach, Zeithaml (2000) offered a conceptual framework for understanding the relationships among quality, value, and loyalty in an online context. Specifically, perceived e-service quality and perceived price are conceptualized as antecedents of perceived value, which in turn, is posited to be the key driver of purchase/ re-purchase behavior online. There remains controversy as to the causal nature of the value-quality-loyalty relationship. For instance, Chen, Card, and Cole (2003) found that perceived quality was not a significant antecedent of value, but it remained a significant indicator of repurchase intent.

Perceived Quality

Perceptions of quality play a central role in a consumers’ evaluative process and perceived service quality is considered an essential determinant of success and survival in today’s competitive environment (Dodds et al., 1991; Kerin et al., 1991; Zeithaml, 1988; Dawkins & Reichfeld, 1990). It is widely recognized to have a strong effect on behavioral intentions towards service providers and many studies have taken an effort to determine what is the exact relation between service quality and loyalty as well as what aspects of service quality are considered by customers when evaluating service
performance. Research has demonstrated that the effect of perceived quality on customer loyalty is direct (Cronin, Brady, & Hult, 2000) as well as indirect through perceived value (Cronin et al., 2000; Sirohi, MacLaughlin, & Wittink, 1998; Sweeney, Soutar, & Johnson, 1999) and satisfaction (Andreassen & Lindestad, 1996; Ennew & Binks, 1999; Fornell, Johnson, Anderson, Cha, & Bryant, 1996).

There is an important distinction between objective quality and perceived quality (Holbrook & Corfman, 1985; Oliver, 1997; Zeithaml, 1988). Objective quality implies the existence of pre-determined technical standards or specifications of which excellence or superiority may be compared (Monroe & Krishnan, 1985; Oliver, 1997; Zeithaml, 1988). Alternatively, perceived quality is a consumers' evaluation of superiority or excellence (Zeithaml, 1988). Research indicates that perceptions of quality may differ substantially from technical specifications (Oliver, 1997).

The need for a special construct to assess service quality stems from the specific nature of a service, which is characterized- in contrast to goods- by three unique characteristics (1) intangibility, (2) heterogeneity (performance varies across times, deliveries, and customers), and (3) inseparability of production and consumption. Due to these characteristics and the absence of objective measures, the most appropriate method to evaluate the service quality is to evaluate consumer's perceptions. Consumers use product-specific intrinsic cues to assess product quality. Intrinsic cues are an inseparable and highly integral part of the product (e.g., color or flavor) (Olson, 1977; Olson & Jacoby, 1972). Consumers also rely on relevant extrinsic product cues such as price, brand name, and store name, as indicators of product quality (Dodds & Monroe, 1985; Dodd et al., 1991; Rao & Monroe, 1989; Teas & Agarwal, 2000; Zeithaml, 1988). In
other words, cues that are related to, but not parts of, the actual physical product are used as signals to infer product quality (Zeithaml, 1988).

Parasuraman, Zeithaml, & Berry (1985) attempted to analyze the construct of service quality and the essential theme was that service quality perceptions result from a comparison of consumer expectations with actual service performance. Their conceptualization was strongly related to one for satisfaction in that it pertained directly to the disconfirmation paradigm, whereby they proposed that the level of perceived service quality can be defined as the discrepancy between expectations and perceived performance- in terms of satisfaction (e.g., when expectations are met with performance, service quality is perceived as satisfactory). They performed focus group interviews which resulted in discovering 10 common types of service criteria which consumers use to assess perceived service quality. The criteria include reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles.

Parasuraman, Zeithaml, & Berry (1988) provided further refinements of the concept, as well as to the measurement instrument. These authors made a more clear distinction between the two constructs arguing that perceived quality is a form of general and durable attitude towards the firm, whereas satisfaction is only related to a particular transaction, evolving in perceptions of service quality over time. The relationship to the disconfirmation paradigm was conceptualized in a different way than in the prior satisfaction literature. In this case, they emphasize that to assess service quality, consumers expectations reflect their desires or wants (should), whereas in the satisfaction literature, expectations are viewed as consumers predictions of how the delivery of the
service is likely to look like (would expectations) (Bitner, 1990; Bolton & Drew, 1991). In line with this assumption is that encounter specific satisfaction is in the long run an antecedent of service quality.

Perceived service quality is also described as the consumer’s judgment about an entity’s overall excellence or superiority and can be viewed as a form of attitude resulting in comparison of expectations and perceptions of the service performance (Zeithaml, 1988; Parasuraman et al., 1988). Parasuraman et al. (1988) argue that incidents of (transaction-specific) satisfaction over time result in perceptions of service quality. They demonstrate that the notion of expectations is different in the concepts of satisfaction and service quality. In the satisfaction literature, customer’s expectations are viewed as their predictions of how the service delivery will look like and what is likely to happen during the exchange. Unlike in the service quality literature, expectations are viewed as desires or wants of customers (should vs. would).

Parasuraman et al. (1985) also developed the first instrument to assess the customers perceived service quality. This landmark study was based on the focus group interviews that revealed that customers tend to evaluate the performance of service companies across 10 dimensions. In a follow up to the initial study, Parasuraman et al. (1988) identified five dimensions that were considered adequate for most service industries: reliability, responsiveness, assurance, empathy, and tangibles of the service. The SERVQUAL instrument is still the most recognized and verified measure of service quality. In particular, the instrument treats the difference between scores for expectations and perceived performance as the determinants of overall service quality. It has been
successfully tested in many studies and can be applied with minor modifications to measure perceived quality in most types of services.

The concept of service quality proposed by Parasuraman et al. (1988), implicitly embraces its antecedents of reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer, and tangibles. In regards to consequences, Cronin and Taylor (1992) have demonstrated that service quality is an antecedent of overall satisfaction and has a less significant effect on purchase intention than satisfaction, while Zeithaml et al. (1996) investigated the effects of overall service quality assessments on behavioral intentions with respect to three levels of quality scores: below the adequate level, within the zone of tolerance, and above it. The research found that there exists a positive relation between service quality and loyalty and willingness to pay more and negative and less significant association for the propensity to switch and external response. Most researchers agree that perceived service quality results over time in overall satisfaction. Satisfaction thus was found to mediate the link between quality and behavioral consequences of loyalty (Oliver, 1993; Rust and Oliver, 1994; Cronin & Taylor, 1992; Zeithaml, 2000). Table 3 identifies some of the key antecedents and consequences of perceived service quality.
### Table 3

**Antecedents and Consequences of Perceived Service Quality**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Dependent Variables</th>
<th>Antecedents</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zeithaml, Berry, &amp; Parasuraman, 1996</td>
<td>Service Quality</td>
<td>Reliability, responsiveness, access, communication, security</td>
<td>Loyalty (e.g., Propensity to switch, willingness to pay more, external response to a problem)</td>
</tr>
<tr>
<td>Parasuraman, Zeithaml, &amp; Berry, 1985</td>
<td>Service Quality</td>
<td>Reliability, responsiveness, access, courtesy, communication, creditability, security, and understanding/knowing the customer</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>Zeithaml, Parasuraman, &amp; Malhotra, 2000</td>
<td>e-Service Quality</td>
<td>Access, ease of navigation, flexibility, reliability, efficiency, security/privacy, responsiveness, assurance/trust, site aesthetics, and price/knowledge</td>
<td>Loyalty</td>
</tr>
</tbody>
</table>

**E-Quality**

Most of the studies that have been identified in the existing literature on online transactions deal, in one sense or another, with the issue of quality. Even though there exist differences in the literature between the authors of what e-service quality really means (Zeithaml, et al., 2000). For example, some researchers have utilized a too technical and thus too narrow view of the issue of quality, and they consider more the quality of the website itself (Liu & Arnett, 2000). Some have used a quality picture of the entire service delivered through the electronic medium (Gronroos, Heinonen, Isoniemi &
Lindholm, 2000), while others argue that most of the dimensions and items of the famous SERVQUAL framework developed for physical service environments, are not relevant to assess quality in virtual environments related to e-commerce (Cox & Dale, 2001). Finally, Zeithaml et al. (2000) offers the tool of e-SERVQUAL, a battery of dimensions along which web users evaluate websites. In further research, Zeithaml et al. (2000) found that customer characteristics such as age, gender, income, and experience and technology readiness could influence customer perceptions and evaluations of service delivery through websites.

While the Internet is an innovative form of information technology, most commercial travel websites work as well-defined information systems. The technology infrastructure of Internet travel commerce is composed of Internet and Web-based information technology, which include browsers, search engines, encryption, and other kinds of e-commerce software, and databases. The quality of an online travel site can be divided into technical quality and service quality. Technical (or sometimes called system) quality refers primarily to the quality of software development. Service quality as measured in this study includes an information quality component. Information quality has been defined as the accuracy, timeliness, and reliability of information (DeLone & McLean, 1992).

To measure end users’ satisfaction with an information system, Doll and Torkzadeh (1988) have developed a 12 item scale that gauges five quality dimensions that influence end-user satisfaction. These are content, accuracy, format, ease of use, and timeliness. The reliability and validity of this scale has been verified in other studies (Doll, Xia, & Torkzadeh, 1994; Hendrickson & Collins, 1996). Once travel information
is stored in a system, customers can readily retrieve it. The design of a travel information
system or database should be timely, informative, and user-friendly (Wigand, 1997).
Besides the five attributes noted above, other attributes unique to Internet commerce
include security and privacy (Giannakoudi, 1999).

Perceived web quality is considered a user’s evaluation of web site features
meeting user’s needs and reflecting overall excellence of the web site. They found four
factors of perceived web quality: (1) technical adequacy (including specific terms such as
security, ease of navigation, personalization, speed of loading), (2) specific content (e.g.
details about products, customer support), (3) content quality (information usefulness and
accuracy), (4) and appearance (e.g. attractiveness, organization, proper use of fonts,
colors and graphics). A new quality evaluation tool, WEBQUAL, focuses on the
technical quality of the website rather than on the quality provided to customers. An
extension of the WEBQUAL scale incorporates usefulness, entertainment, and response
time as primary factors predicting the reuse of a website, whereas ease of use and trust
are less important.

The first study that attempted to define e-service quality in a broader sense, states
that e-service quality is “the extent to which a Web site facilitates efficient and effective
shopping, purchasing, and delivery” (Zeithaml et al., 2000). They bring evidence that
online exchanges do obey their own specific rules. They identify eleven dimensions
along which users evaluate service quality being delivered by online retailers. This
includes 5 SERVQUAL dimensions (reliability, responsiveness, empathy, assurance,
tangibles) and ease of navigation, flexibility, efficiency, site aesthetics, and price
knowledge as specific for online service quality. Kaynama and Black (2000) go further
and propose seven dimensions of e-service quality derived from the SERVQUAL model: responsiveness, content and purpose, accessibility, navigation, design and presentation, background, personalization, and customization.

Zeithaml et al. (2000) claim to know that e-service quality is multifaceted and include dimensions such as ease of use, privacy/security, fulfillment/reliability, graphic style, and information availability and content. Bauer and Hammerschmidt (2002) developed and validated a quality assessment scale for web portals in particular. They concluded that Internet users perceive three generic services delivered through a web portal. These services serve as the key dimensions for evaluating portal quality. (1) Security/trustworthiness and basic services represented as the portals hardware and the basic demands of portal users in the sense of minimal conditions. (2) Attractive cross-buying services and added value make up the second dimension representing the software (additional services) around the core products. (3) The third dimension used for quality assessment is transaction support and relationship building services that have to be facilitated via personalized offers and contents and interactive decision tools.

Chen et al., (2003) performed a study that focused on attributes of websites and their relation to loyalty: relative price, merchandise quality, e-tailer reputation, customer service, safety, order fulfillment, information quality, and website navigation. In summary, apart from the above criteria, there are more specific items identified in studies such as ease of navigation (Zeithaml et al., 2000; Gommans, Krishnan, and Scheffold, 2001); ease of use and graphic style including layout, color, and graphics (Ariely, 2000, Hoffman & Novak, 1996a; Hoque & Lohse, 1999); and privacy and security (Hoffman & Novak, 1996b).
Website quality is more important for vendors selling high-touch rather than low touch goods, while others found that website performance with respect to responsiveness, personalization, and the amount of information and graphics is not linearly related to overall perceived service quality, but there exists optimal level of delivery for these dimensions, below and above which service quality decreases. Website quality positively affects consumers' purchase, repeat purchase, and loyalty and e-service quality will influence purchase intentions and other forms of loyalty (Bansal & Voyer, 2003). Some specific dimensions or attributes of websites will also influence other constructs. For example, usefulness, entertainment, and response time were the most important factors predicting re-use, whereas ease of use and trust are less important. Common outcomes of e-service quality were also found to include word of mouth communication, purchase intentions, price sensitivity, repeat patronage, and complaint behavior (Bloemer & de Ruyter, 1999). In a seminal article, Oliver (1980) reported that the willingness to recommend, or word of mouth communication behavior, reflects post purchase communication by consumers as volitional information dissemination. Table 4 lists a number of recent studies that attempted to address the key attributes of quality that are related to Internet commerce in general.
Table 4

*Recent Studies Related to E-Quality*

<table>
<thead>
<tr>
<th>Study</th>
<th>Topic</th>
<th>Relevance to E-Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armstrong &amp; H. Hagel, 1996</td>
<td>Real value of online communities</td>
<td>Consumer needs and the value of virtual communities</td>
</tr>
<tr>
<td>Berthon, Pitt, &amp; Watson, 1996</td>
<td>The Web site as part of the marketing communications mix</td>
<td>Communication effectiveness of the Web site on the consumer buying process</td>
</tr>
<tr>
<td>Quelch &amp; Klein, 1996</td>
<td>The effect of the Internet on international marketing</td>
<td>Different languages, access limitations</td>
</tr>
<tr>
<td>Grover, Hall &amp; Rosenberg, 1998</td>
<td>Web privacy of the individual consumer, business and government</td>
<td>Privacy of consumer personal information</td>
</tr>
<tr>
<td>Rowley, 1996</td>
<td>Challenges that retailing and shopping on the Internet pose for the retail industry</td>
<td>Online marketing must place emphasis on promotion, one to one contact, and order fulfillment</td>
</tr>
<tr>
<td>Deighton, 1997</td>
<td>Commentary on the work of Peterson et al 1997</td>
<td>Access to the Internet; information transmission congestion; security and privacy</td>
</tr>
<tr>
<td>Peterson, Balsubramanian, &amp; Bronnenberg, 1997</td>
<td>The implications of the Internet for consumer marketing</td>
<td>Consumer decision sequences (e.g. consumer begins with a brand choice or category choice)</td>
</tr>
<tr>
<td>Rice, 1997</td>
<td>What makes users revisit a website</td>
<td>The most important design features and emotional experience are content, enjoyable, layout, ease of finding info, exciting visit, and easy to navigate.</td>
</tr>
<tr>
<td>Balfour, Farquhar, &amp; Langmann, 1998</td>
<td>Consumer needs in global e-commerce</td>
<td>Transaction security and information privacy</td>
</tr>
<tr>
<td>Aldridge, 1998</td>
<td>Opportunity and Threats on purchasing on the Net</td>
<td>Transaction security</td>
</tr>
<tr>
<td>Study</td>
<td>Topic</td>
<td>Relevance to E-Quality</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Griffith &amp; Krampf, 1998</td>
<td>Web-based strategic objectives of the top 100 US retailers</td>
<td>Majority of retailers using Websites for customer service had poor performance, email responsiveness was a concern</td>
</tr>
<tr>
<td>Palmer &amp; Griffith, 1998</td>
<td>Understand website design based on informational intensity paradigm</td>
<td>Online sales are suitable for high information intensity of products and or a value chain.</td>
</tr>
<tr>
<td>Dellaert &amp; Kahn, 1999</td>
<td>Consumers evaluation of websites based on information download time</td>
<td>Delay can negatively affect evaluation of websites if waiting time is uncertain. The potential negative effects of delay can be neutralized by effectively managing waiting experiences.</td>
</tr>
<tr>
<td>Doherty, Ellis-Chadwick &amp; Hart, 1999</td>
<td>Factors affecting the application of the Internet as a channel for direct sales</td>
<td>Technical capacity</td>
</tr>
<tr>
<td>Strader &amp; Shaw, 1999</td>
<td>Consumer cost differences for traditional and Internet markets</td>
<td>Product price, search costs, and sales tax are lower while risk costs, distribution costs, and market costs are higher for online consumers compared to traditional consumers</td>
</tr>
<tr>
<td>Liu &amp; Arnett, 2000</td>
<td>Factors determining website success</td>
<td>System use, system quality, service quality, information quality, learning capacity, and playfulness are major ingredients for the website success</td>
</tr>
<tr>
<td>Zeithaml, Parasuraman, &amp; Malhotra, 2000</td>
<td>Conceptual framework for understanding e-service quality</td>
<td>Identified eleven dimensions: reliability, responsibility, access, flexibility, ease of navigation, efficiency, assurance trust, security, price knowledge, site aesthetics, and customization/ personalization</td>
</tr>
</tbody>
</table>
In an attempt to clarify the traditional service quality versus e-service quality attributes, Jun & Cai (2001) established three conceptual categories to classify all key attributes related to service quality and Internet commerce: (1) customer service; (2) information systems; (3) service portfolio. The three categories are not mutually exclusive as some service attributes may cross over to the other categories.

Four major service attributes in the customer service category have been frequently mentioned in both Internet and traditional retail settings. They are reliability, responsiveness, personalization/customization and trust. Reliability refers to the ability to perform the promised service accurately, dependably, and consistently. One important aspect of reliability is fulfillment of promises related to the core product or service being fulfilled. In this regard, customers are very concerned that they receive the quality and the quantity of transactions that they ordered. This is not so much a problem with traditional brick and mortar firms where customers can ensure reliability via interpersonal contact with firm personnel. In Internet commerce, in addition to unreliable online systems (e.g. server shut down or freeze), many problems are similar to those found in traditional services, such as inaccurate records, billing, and personal information.

Responsiveness is another key attribute associated with customer service. It refers to the speed and timeliness of service delivery. This includes real-time interactions with customers in order to provide prompt service and help resolve customers’ problems. It is related to transaction speed, delivery time, and rapid response. In contrast to physical travel agencies, Internet online travel intermediaries have previously lacked real time interaction with customers- but this is changing. Griffith & Krampf (1998) have mentioned that the lack of prompt responsiveness, especially to email inquiries, was the
most common negative phenomenon for consumers in cyberspace. For instance, a study conducted by Wilcox (1999) indicates that 42% of the top-ranked websites took longer than five days to respond to customer’s email inquiry, never responded, or were not accessible by email. With the advent of live chat and enhanced 800 number customer service, online travel intermediaries are now providing better real-time interactivity in terms of customer service.

Another unique and significant aspect of responsiveness is the time spent waiting for download of information. Delleart and Kahn (1999) conducted laboratory experiments to gain insights on how the waiting time of information negatively affected consumers’ perception of website performance. Similar to studies on consumer wait time in bank, theme park, or restaurant lines, the authors found that waiting can affect evaluations of websites negatively if (1) there is uncertainty about the duration of wait, (2) a countdown and/or duration time information is not provided, and (3) waiting occurs in unexpected situations. However, the negative effects can be offset by indicating where and how long a download process will take.

Even though the Web is categorized as a dynamic but impersonal media, personalization/customization is one of the more desirable qualities for Internet firms to employ as a means of materializing the Internet as a unique consumer market (Hoffman & Novak, 1996b). Studies on self-service technology also show that customization plays a critical role in getting customers to complete transactions (Bitner et al., 2000).

Considered as one of the most critical concepts in relationships, trust has been defined as a willingness to rely on an exchange in which one has confidence (Moorman, Deshpande, & Zaltman, 1993). Morgan and Hunt (1994, p.23) define trust as the
perception of “confidence in the exchange partner’s reliability and integrity.” In the Internet markets, consumers’ trust is often manifested in a company’s reputation, employees attitudes reflected in customer interactions, and past experiences with the company. Although there is less person to person contact in Internet markets, employees still have a key role to play in generating customer loyalty. This premise is supported by recent claims of an OTI that at some point or another, over 40% of all travel booking customers contacted their customer service departments for inquiries or concerns.

Information systems quality is the second group of Jun & Cai’s (2001) service quality attributes. The three primary systems quality attributes are: ease of use, accessibility, and security/privacy. Ease of use is an important predictor of customers’ choice in adopting new information technology (Davis, 1989). Rice (1997) has examined what made users revisit a website and discovered that the most important variables were design features such as content, layout, ease of finding information, ease of navigation, and emotional experiences (e.g., enjoyable and exciting visits). Liu and Arnett (2000) have identified system use, system design quality, information quality and playfulness as four major ingredients for website success. Two important aspects of ease of use are adequate functions and user-friendly design. Some useful functions, such as those included in search and download, are necessary for customers to smoothly move through the process. Furthermore, it is a major challenge for online travel merchants to design their websites with virtual product layouts and prompt service standards in order to optimize consumers’ search and fulfillment behaviors (Hoffman & Novak, 1997). Jarvenpaa and Todd (1997) found that it was not the issues of network bandwidth and security that impeded consumer’s acceptance of Internet technology, but rather it was that
the web is hard to navigate and difficult to find desired items. Rice (1997) concluded that in order to achieve mass appeal and market penetration, the websites must be easier to navigate and find information and content.

The access/ convenience concept includes both the ideas of approachability and ease of contact. Approachability refers to the location of the store and the availability of convenient hours of operation. Obviously, Internet service is theoretically available for 365/24/7. Convenience has been commonly cited as the key reason for shopping online (Burke, 1997; Jarvenpaa & Todd, 1997). Ease of contact refers to the adequate availability of travel company representatives and moderation of waiting time. While many online customers continue to utilize traditional means for contacting travel company representatives (800 numbers), email and live chat support have been increasingly used to ask questions or gain information.

The third attribute in the information systems group is that of security/ privacy. Security refers to the nature of the transaction and privacy and confidentiality of customer personal information. Balfour et al., (1998) have discovered substantial customer interest in transaction security and personal information privacy. Personal information such as credit card information given to travel suppliers and intermediaries by customers can be coded and decoded by outside parties using encryption algorithms. Passwords and user names are usually insufficient. New ways of encryption and digital signatures need to be refined and standardized to ensure adequate security. Consumers should also have the option to change access codes at any time to reduce their security risk. Moreover, consumers normally desire some level of privacy or anonymity for their commercial and personal transactions and behaviors performed on the Internet. The issue
of "identity theft" and the prevalence of "cookies" and "spiders" that track the identity of users and their tracks through the Internet have added additional concerns to already sensitive customers. Online travel intermediaries and travel suppliers alike will be challenged with providing continually evolving security and privacy controls.

The last category in Jun and Cai's (2001) categorization of key website attributes is that of the product/service portfolio. Many customers search the Internet and find travel products and services that are not easy to find or not available in traditional travel outlets or category specific travel websites (e.g., hotel website). Thus, a key to gaining customer loyalty is to provide various desired services and content features in the format that consumers require. One primary reason that customers use the Internet is the convenience associated with search and purchase of travel. Customers often want to complete their transactions (e.g., bookings) at one site. For instance, increasingly travel customers want to book air, hotel, car and related event, show, and tour products in one stop- at one travel website- just as they did when using traditional travel agencies in the past. Therefore, companies who offer diverse and wide product lines may be able to better capture customers, satisfy travel needs, and increase customer loyalty.

In determining the relative importance of service quality attributes, a number of researchers have applied the SERVQUAL instrument in different industries. For instance, Avkrian (1994) has discovered the credibility and responsiveness are the two most important variables in services (banking), while Johnston (1995) found responsiveness as an important factor for industrial products companies.
Attitudes toward Shopping Online (ATES)

In this study, the concept of customer attitudes toward e-shopping (ATES) is considered a direct influence to e-loyalty. ATES is made up of the items that measure the perceived risk and lifestyle enrichment aspects of consumer attitudes toward shopping online. Before addressing these two constructs and their respective items, it is necessary to frame this research by looking at the value, quality and an individual’s attitude toward e-shopping relationship. For instance, consumer perceptions of value and quality are relative in the sense that they are situational and personal (Holbrook, 1994). Drawing on the thought that value and quality judgments depend on a person’s frame of reference, Bolton & Drew (1992) developed and empirically tested a framework that documented the effect of individual difference characteristics on perceptions of service value. The perceived value and quality of shopping in an online context is likely to be influenced by individual difference factors as well. Mick & Fournier (1998) conceptualize consumers’ interactions with technology as being paradoxical in nature. In other words, technology simultaneously produces positive and negative feelings with which consumers must cope. In addition, the relative dominance of these feelings is posited to vary across individuals. Parasuraman (2000) suggests that an individual’s position along a hypothetical positive/negative technology beliefs continuum correlates with their readiness to use new technology. Academic research conducted in collaboration with industry suggests that an individual’s feelings and beliefs about online technology are one of several factors that influence the manner in which online and offline retail channels are used to search and purchase products (Shim, Eastlick & Lotz, 2000).
Empirical studies related to the adoption and use of technology-based service and retail formats may provide guidance regarding this issue as well. For example, value and quality perceptions for e-shopping may be influenced by an individual's need for freedom, control, and/or less employee-customer interaction, factors that motivate consumers to use self service technologies (Dabhohirkar, 1996; Wolfinberger, & Gilly, 2001). Consumer characteristics that predict the adoption and use of technology for shopping may also play a role in shaping perceived value and quality for online shopping. These include individual difference factors such as technology proneness and a tendency to be innovative and or less risk adverse (Donthu & Garcia, 1999; Eastlick, 1996; Korgankar & Moschis, 1987). In this study, consumers' attitude towards e-shopping is measured by items that relate to their perception of risk and lifestyle enrichment (e.g., need for freedom and control) in making travel plans.

Customer Satisfaction

It is near impossible to discuss the concept of customer loyalty without first touching on the concept of customer satisfaction and its relationship to loyalty. Over the years, numerous studies have linked satisfaction to customer retention and loyalty (LaBarbara & Mazursky, 1983; Newman & Werbel, 1973; Rust & Zahorik, 1993). Thus, there has been extensive research as to the effect of satisfaction on consumer responses in terms of its conceptualization, antecedents, and consequences (e.g. Fournier & Mick, 1999; Oliver, 1997; Yi, 1990). Still, studies of customer satisfaction are best characterized by lack of definitional and methodological standardization. Customer satisfaction is accepted as a critical component in marketing thought and consumer
research, even though some researchers regard this notion as confounding and prefer a concept similar to the concept of perceived service quality. Oliver (1999) found that satisfaction is a necessary step in loyalty formation, but becomes less significant when other mechanisms, such as social bonds or personal determinism come into play. Oliver also argued that the relationship between satisfaction and loyalty is not well-specified and still remains to be investigated. The most often outcomes of satisfaction include complaining behavior, negative word of mouth, and repurchase intentions (Szymanski & Henard, 2001). Consumers tend to complain to sellers to relieve cognitive dissonance when the consumption experience is dissatisfying (Oliver, 1987). When the problem leading to dissatisfaction is severe, the degree of blame to the retailer or manufacturer, or the likelihood to redress is high (Blodgett & Anderson, 2000). Garabarino and Edell (1997) demonstrate that depending on the level of customers reship orientation, satisfaction is either a mediating construct between trust and commitment on the one hand, and future behavioral intentions on the other (for low relational customers) or it does not relate to future intentions (for high relational customers). Oliva et al., (1992) found that the link between satisfaction and loyalty is of non-linear nature. They argue that there exists a certain threshold of satisfaction, above which loyalty will rapidly increase, but on the other hand, below which loyalty remains unaffected over a range of satisfaction levels.

The link between satisfaction and loyalty is amplified by the experience of positive emotions during the service delivery process for highly involving services (Bloemer & de Ruyter, 1999). Others have proved that satisfaction as well as service quality and perceived value are directly linked to behavioral intentions, but additional
indirect effects of the service quality via satisfaction enhanced their impact on behavioral intentions (Cronin et al., 2000). Still other researchers have found in general, evidence that higher satisfaction leads to greater customer loyalty (Anderson & Sullivan, 1997; Bolton & Drew, 1991; Oliver & Swan, 1989; Fornell, 1992).

In regards to satisfaction in online environments, Anderson and Srinivasan (2003) refer to e-satisfaction as the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm. They found support for the link between e-satisfaction and e-loyalty. But- on the customer level, this link would be accentuated by convenience motivation, purchase site, and suppressed by inertia—whereas on the business level—trust and perceived value significantly accentuate this link. Few studies have examined the factors that make e-customers satisfied with their online experience. For instance, Szymanski and Hise (2000) found that convenience, product info, site design, and financial security are the most important factors driving online-specific satisfaction, while Bansal and Voyer, (2000) found support that website characteristics, such as ease of use, product selection, information availability, and price were major drivers of overall web satisfaction, while customer service played a significant but lesser role. Furthermore, they found a link between website characteristics and stickiness.

There exists evidence that the link between e-satisfaction and e-loyalty is positively moderated by convenience motivation and purchase site, and negatively moderated by inertia (Anderson & Srinivasan, 2003). Although it appears that satisfaction tends to increase customer loyalty, that relationship is merely inclusive (Hallowell, 1996). Hallowell (1996) also found that satisfied customers are not
necessarily loyal customers. In fact, customer satisfaction has not served well as a predictor of actual behavior such as purchasing more (Loveman, 1998; Reichheld, 1994). It appears that loyalty is a superior predictor of actual behavior than customer satisfaction (Loveman, 1998). Following the above empirically supported research and the general train of thought that satisfied customers are not necessarily loyal customers, this study does not incorporate the popular construct of satisfaction in the e-loyalty model.

Customer Loyalty

Customer loyalty, as a behavioral consequence of perceived quality, perceived value, and satisfaction, is recognized to impact a firm's employee loyalty (Reichheld, 1996a), and profit (Anderson & Mittal, 2000). Jacoby and Chestnutt (1978) state that interest in loyalty as a marketing phenomenon surfaced early in the twentieth century. Melvin Copeland (1923) introduced the concept of brand loyalty as brand insistence that is an attitudinal continuum extending from brand recognition on one end to extreme preference on the other. Upon reaching extreme levels, exclusive purchase behavior was assumed to be a reflection of strong brand preference. Despite the early attitudinal perspective, over the next 50 years, brand loyalty was viewed as a stochastic phenomenon in that repeat purchase behavior could be characterized by a strong random component (Bass, 1974). Therefore, much of the research during this period focused on developing probabilistic models designed to predict repeat purchase behavior rather than establishing a clear conceptual definition to guide future empirical research. The field of loyalty was largely neglected in marketing research (Liljander et al., 2002) and according to Van Riel et al., (2001) much of the research on customer loyalty traditionally has
focused on customer evaluations and quality of services with respect to services that are characterized by personal interactions between customers and employees.

At a general level, loyalty is something that consumers may exhibit to brands, services, stores, product categories (e.g., cigarettes) and activities (e.g., swimming). The term customer loyalty as opposed to brand loyalty is used to emphasize that loyalty is a feature of people, rather than something inherent in brands. There is no universally agreed definition of loyalty (Dick & Basu, 1994; Oliver, 1999), but there are three popular conceptualizations:

1. Loyalty is primarily an attitude that sometimes leads to a relationship to a brand.
2. Loyalty is mainly expressed in terms of revealed behavior (e.g. the pattern of past purchases).
3. Buying moderated by the individual characteristics, circumstances, and/or purchase situation.

In the first view, loyalty is primarily an attitude that sometimes leads to a relationship with a brand. Many argue that there must be strong attitudinal commitment to a brand for true loyalty to exist (Day, 1990; Jacoby & Chestnut, 1978; Reichheld, 1996a). This takes the form of a consistently set of stated beliefs towards the brand purchased. Dick & Basu (1994) posit that these attitudes are measured by asking how much people say they like the brand, feel committed to it, will recommend it to others, and have positive beliefs and feelings about it- relative to competing brands. The strength of the attitudes is the key predictor of a brand’s purchase and repeat patronage. Oliver (1999) regards customer loyalty as a deeply held commitment to rebuy a product or repatronize a preferred service consistently in the future, thereby causing repetitive same-
brand or same-set purchasing despite the situational influences and marketing efforts having the potential to cause switching behavior.

Where brand loyalty increases—revenue streams become more predictable. This perspective has received much support in the advertising and brand equity research (Aaker, 1996). This model also appeals to practitioners as it is empathetic with the search for strategies to increase the strength of consumers’ attitudes toward a brand. For instance, Ahluwalia et al. (1999) found that attitudinal-loyal customers are much less susceptible to negative information about the brand than non-loyal customers. Where brand loyalty is shown to increase, so has the revenue stream from loyal customers becomes more predictable over time (e.g., Outrigger Hotels, Pizza Hut and Avis Rent-a-Car).

Even though the "attitudes drive behavior" and "relationship" approaches provide social and psychological richness to understand customer loyalty, these conceptualizations are not without critics. For instance, Dabholkar (1999b) found that they are thought to be less applicable for understanding the buying of low risk, frequently purchased brands or when impulse buying or variety seeking is undertaken, than for important or risky decisions. Moreover, Oliver (1999) noted that there is little systematic empirical research to corroborate or refute this perspective of customer loyalty. Often examples point to the revenue effects that might have been achieved rather than the profit that was actually achieved.

In the second perspective, loyalty is mainly expressed in terms of revealed behavior. This perspective is the most controversial but the best supported by the literature and data. There is controversy over the fact that in this case, loyalty is mainly
defined with respect to a person’s pattern of past purchases with only secondary regard to the underlying consumer motivations or commitment to the brand (Fader & Hardie, 1996). Researchers have gathered impressive amounts of purchase data over many years, many product categories, and many diverse countries. The findings include the notion that few customers are ‘monogamous’ (100% loyal) or ‘promiscuous’ (no loyalty to any brand) and most customers are ‘polygamous (loyal to a portfolio of brands in a product category). Ehrenberg, Barnard and Scriven (1997) regard loyalty as an ongoing propensity to buy the brand, usually as one of several. In the majority of this perspective research, researchers tend to adopt a market focus as opposed to an individual consumer focus (e.g., key performance measures are brand shares, penetration, average purchase frequencies, repeat-buying- for a defined period). In this perspective, loyalty is expected to manifest in the following steps.

a. Through trial and error, a brand that provides a satisfactory experience is chosen.

b. Loyalty to the brand (measured by repeat purchase) is the result of repeated satisfaction that in turn leads to weak commitment.

c. The consumer buys the same brand again, not because of any strongly-held prior belief or attitude or deeply-held commitment, but because it is not worth the time and trouble to search for an alternative.

d. If the brand is out of stock or unavailable for some reason, the buyer will look for another brand that is functionally similar (or suitable) to be purchased.

e. There is little reason to put much effort in weighing the alternatives when all are likely to be satisfactory.
f. Over repeated purchases a weak commitment to the limited number of brands bought in a product category can be formed.

Even though there is considerable empirical research to support this conceptualization of loyalty, the proponents of ‘attitudes drive behavior’ or ‘relationship’ approaches rule out revealed behavior as a dominant measure of loyalty. For instance, behavior might only be a product of happenstance. Oliver (1999) posits that even combinations of revealed behavior and satisfaction may not provide enough evidence that there is true loyalty.

In the third perspective, buying is moderated by the individual’s characteristics, circumstances, and/or purchase situation. In this case, a three factor model emerges- it is considered a contingency approach. Proponents of the perspective 3 contingency approach argue that the best conceptualization of loyalty is to allow the relationship between attitude and behavior to be moderated by contingency variables such as person’s individual characteristics, current circumstances, and or the purchase situation. A strong attitude towards a brand may provide only a weak prediction of whether or not the brand will be bought on the next purchase occasion because any number of factors may co-determine which brand(s) are deemed to be desirable (Belk, 1974). Individual circumstances include budget effects (e.g. the desired brand is too expensive), and time pressure (e.g., the need to buy any brand in the category at the next available opportunity). Individual characteristics include the desire for variety, habit, the need to conform, the tolerance for risk, etc. Purchase situation variables include product availability, promotions/ deals, and the particular use occasion (e.g., gift, family use) etc. Here a three factor model emerges, based on antecedents (including weak prior attitudes
and characteristics of the consumer), contingency factors (including the type of use occasion and purchase situation), and consequences (including up-dated attitudes, intentions and actual purchase behavior). The difference between contingency perspective and the attitudes perspective is that in contingency, the variables are elevated from the status of loyalty inhibitors in perspective one to loyalty co-determinants in perspective three. For instance Oliver (1997, 1999) noted that the attributes of the individual and the purchase situation are nuisance variables that inhibit the natural evolution of customer loyalty). But, in perspective three, the contingency approach, these variables are seen as playing a primary and inescapable role in explaining the observed patterns of purchase behavior. This is more evident when the attitudes are weakly held as often it is repeated satisfaction and weak commitment that together with other relevant contingency variables co-determine the future brand choices.

Customer loyalty research can also be viewed in terms of three development phases. In the first phase, the first academic investigation into subject of brand loyalty was performed by Copeland (1925), but it lacked well-underlying conceptual and methodological basis. Subsequent research made major developments towards specification of the proper research methodology in the area, where at the core of these customer loyalty studies is the concept of repeat purchase behavior, which can be regarded as some degree of repetitive purchase of the same brand by the same buyer (Day, 1969). Jacoby and Chestnutt (1978) found that there are two approaches that pertain to the nature of this construct. First, lays the stochastic view which suggests that there is a strong random component that underlies basic changes in the market structure. This view assumes that even if repeat purchasing is caused by some variables, their multiplicity and
complexity is so immense that it makes the purchasing behavior virtually an un-predictive concept and thus authorizes to claim that it is a stochastic process.

The alternative, and preferred- deterministic view, takes another look at the nature of repeat purchasing behavior. From this perspective, there are a limited number of causes that directly influence the repeated purchasing. These causes can be isolated from one another and then stimulated by the marketing manager in order to bring about the desired effects of repeat patronage. The customer loyalty research is based on this approach and thereby is focused on repeat purchase behavior that can easily be explained by means of some underlying constructs such as beliefs, attitudes or opinions. The deterministic orientation can be applied to a subset of repeat purchase behavior, which can be termed as brand loyalty.

Jacoby and Chestnutt (1978) posited a definition of brand loyalty that is expressed by a set of six necessary and collectively sufficient conditions: (1) the biased (i.e. non-random), (2) behavioral response (i.e., Purchase), (3) expressed over time, (4) by some decision-making unit, (5) with respect to one or more alternative brands out of a set of such brands, and (6) is a function of psychological (decision making, evaluative) processes. The most often used definition of loyalty comes from Oliver (1999) who describes loyalty as a deeply held commitment to re-buy or re-patronize a preferred p/s consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having a potential to cause switching behavior. This definition was an expansion of prior work by Dick and Basu (1994) where loyalty was described as the relationship between relative attitude as opposed to an absolute one due to potential variations in strength and differentiation of
people's attitudes with respect to other targets. The advantages of this definition include: (1) it enables us to avoid the mistake of treating loyalty as a behavior only resulting in repeat purchasing, and (2) it has been evidenced many times that repeat purchasing is not always a result of loyalty, as the customer may simply be forced to buy a particular brand because of situational factors (e.g., shelf position) or because of subjective norms or social norms which are one's belief that they should, or should not, do something caused by their vulnerability on influence of others beliefs.

Dick and Basu (1994) went further than a definition by developing a typology of loyalty. They classified subjects in terms of spurious loyalty (a low attitude and high repeat patronage), latent loyalty (high relative attitude and low repeat purchasing). In this case, loyalty occurs due to the marketplace environment, in which subjective norms or situational factors are stronger than the relative attitude. A study by Baloglu (2002) sought to determine which of a casino slot club's members were truly loyal to a casino brand or which members appear loyal (e.g., spuriously loyal) only because they were frequent customers. Baloglu (2002) found that only about 34% of the members were truly loyal, meaning they frequently visited the casino, spent much of their gambling time there, and were willing to assist the company by passing on favorable comments to others.

Good measures of loyalty should capture attitudinal and behavioral factors of loyalty. Jacoby and Chestnutt (1978) found most early research focused on behavioral loyalty. In fact they found 53 different definitions- mostly operational and devoid of theoretical underpinnings. Dick and Basu (1994) suggest to operationalize loyalty as the index of the strength of the relation between the attitudes and repeat purchasing, while
Bloemer and Kasper (1995) prefer to measure loyalty as an outcome of the multiplication of the score for customer commitment times the score for future purchase intentions. Either way, researchers agree that incorporating measures for future purchase intention, instead of directly measuring purchasing behavior is a rather tentative measure of customer loyalty, as follow up studies that might verify these intentions are rarely performed.

**E-Loyalty**

The Internet has increased the level and amount of competition while providing consumers with more power in the travel industry (Barsh, Crawford, & Grosso, 2000; Porter, 2001; Reichheld & Schechter, 2000). Continuous improvement in web technology, content, service and product value is crucial to the success of travel suppliers in today’s online consumer marketspace. The fact also remains that existing customers are much cheaper to retain than new customers are to acquire (Blattberg & Deighton, 1996). Given the importance of customer loyalty in achieving greater market share and profitability, recent work has called for studies of the components and drivers of customer loyalty (Parasuraman & Grewal, 2000).

The first reason for cultivating loyalty in Internet travel retailing lies in the economic benefits that loyal customers provide to firms. Reichheld and Schechter (2000) propose three benefits that a retailer can obtain by cultivating e-loyalty. First, online customers are expensive to acquire, thus losing them is costly to online travel suppliers. It has been suggested that in the case of online travel, new customers cost 20% to 40% more for pure online travel agencies than for traditional travel agencies with multi-
channel operations. Second, loyal customers purchase more than switchers. The same loyal shoppers spend more money in the future than the others. It has been shown that successful online travel intermediaries generate well over half of their sales from their site loyalists, contrasting with a typical underperforming retail travel site where only a quarter or less of sales come from repeat buyers (Dayal, Lanesberg, & Zeisser, 2001). Third, loyal customers frequently refer new customers to an online travel site, providing another rich source of customers, revenues and profits. A good example of this is expedia.com. More than half of Expedia’s customers are referrals.

The benefits associated with customer loyalty are not realized without pain. Retaining customers and cultivating loyalty can be challenging for online travel suppliers and intermediaries because of the drastically reduced switching costs associated with selling over the Internet. In an e-commerce situation, the efficiency of the Internet results in the diminishing marginal cost of information search. There are a couple of reasons for this. First, the rapid development of sophisticated search engines and the availability of comprehensive travel product information allow shoppers to easily compare price and quality across travel websites. Second, the factors that might moderate competition (e.g. store location) are non-existent on the Internet. With no spatial and time constraints, switching from one travel site to another is relatively effortless. Retaining customers is challenging to say the least.

Prior research in e-commerce has commonly focused on online shoppers’ demographic profiles, reasons for shopping online, and consumer choice between e-stores and traditional brick and mortar stores (Donthu & Garcia, 1999; Korgaonkar & Wolin, 1999; Keen, 1999). Emerging fields of study include perceived risk, e-satisfaction, and
online information processing. These topics provide a basis for the examination of
customer e-loyalty. Much of the extant literature on online shopping for travel products
has adopted a descriptive focus, rather than a conceptual focus that can be used to
understand, predict and even influence online consumption activities. Little, if any,
systematic research into the combination of perceived quality, perceived value and
attitude towards shopping online in the context of shopping online for travel has been
conducted. Given this obvious research gap, this study will be the first to conceptually
investigate the drivers of e-loyalty via the analysis of an integrated model of perceived
quality, value and attitudes toward shopping online.

There are very few studies that clearly define the concept of e-loyalty- although
some provide valuable points (see Table 5). For instance, Anderson and Srinivasan
(2003) found e-loyalty to be the customers' favorable attitude toward an electronic
business resulting in repeat buying behavior. Additional work by Gommans et al. (2001)
conceptualizes e-loyalty and discusses the similarities and differences between brand
loyalty and e-loyalty. In their work, the electronic nature of the service encounters
between customers and companies enabled easy and efficient measurement of actual e-
loyalty behavior. Behavioral outcomes of loyalty would include website usage related
measures such as visit frequency, visit duration, visit scope, visit focus, or stickiness.
Stickiness has been used in a recent study as a measure of actual browsing behavior
(Bansal & Voyer, 2003). The measurement of e-loyalty can be looked at as the usage of
web services in light of alternatives. The traditional outcomes of customer loyalty include
recommendations, complaint behavior, purchase intention, re-patronage decisions, search
motivation, and willingness to pay more.
Table 5  

*Drivers of E-Loyalty*

<table>
<thead>
<tr>
<th>Authors</th>
<th>Dependent Variable</th>
<th>Drivers</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen &amp; Hitt, 2003</td>
<td>e-store loyalty</td>
<td>Perceived value (value for money, trust, shopping efficiency)</td>
<td></td>
</tr>
<tr>
<td>Anderson &amp; Srinivasan, 2003</td>
<td>e-loyalty</td>
<td>e-Satisfaction</td>
<td>The link between e-satisfaction and e-loyalty is moderated by convenience motivation (+), purchase site (+), inertia (-)</td>
</tr>
<tr>
<td>Gommens, Krishnan, &amp; Scheffeld, 2001</td>
<td>e-loyalty</td>
<td>Website and technology, customer service, value proposition, trust, security, brand building</td>
<td></td>
</tr>
<tr>
<td>Zeithaml, Parasuraman, &amp; Malhotra, 2000</td>
<td>e-service quality</td>
<td>Perceived convenience, (access, ease of navigation, efficiency, flexibility), perceived control (reliability, personalization, security/privacy).</td>
<td>Navigation, efficiency and access are ‘new’ to the online environment and capture aspects of ease of use and usefulness which underlie acceptance of information technologies.</td>
</tr>
<tr>
<td>Francis &amp; White, 2001</td>
<td>PIRQUAL</td>
<td>Web store functionality, product attribute description, ownership conditions, delivered products, customer service, and security.</td>
<td>Except for a product attribution description, the factors were significantly related to future visits and purchase intentions. Results confirmed proposition that online satisfaction was a function of the purchase experience and the customer service (responsiveness, fix problems)/ security experience.</td>
</tr>
<tr>
<td>Authors</td>
<td>Dependent Variable</td>
<td>Drivers</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Donthu, 2001</td>
<td>SITEQUAL Internet shopping quality</td>
<td>Site related factors (ease of use, aesthetic design, processing speed, Security) Vendor related factors (Competitive value, corporate and brand uniqueness, product quality assurance)</td>
<td>A validation study indicated that SITEQUAL was directly correlated to shopping likelihood, attitude and loyalty.</td>
</tr>
<tr>
<td>Szymanski &amp; Hise, 2000</td>
<td>e-satisfaction</td>
<td>Convenience, site design, financial security, product info</td>
<td>Compares e-tail to retailing satisfaction, based on website characteristics and did not include potential drivers such as service.</td>
</tr>
<tr>
<td>Bansal and Voyer, 2003</td>
<td>Website satisfaction</td>
<td>Website characteristics (ease of use, product selection, information availability, price)</td>
<td>Customer service played a significant, but lesser role.</td>
</tr>
</tbody>
</table>

**The Theoretical Framework**

The previous section presented the relevant research and explained the concepts of perceived quality, perceived value, and attitudes toward e-shopping and their relationships with customer loyalty. This section will focus on the theoretical framework used for this study and how the conceptual model is developed. The theoretical base of the model lies in a combination of theories excerpted from the theories of technology and shopping behavior, self service technology (SST), technology adoption (TAM), means-end chain theory, quality-value relationship theory, and the service-profit chain theory (see Table 6).

For the most part, extant models representing the relationships among loyalty, quality and value have done so in traditional consumption settings (i.e., product, service,
and retail), which are characterized by a high degree of human interaction. Online shopping differs in that it is entirely facilitated by a technological focus rather than a physical and/or human interface. Despite this difference, scholars have conceptualized the chain of effects among perceived quality, value, and customer loyalty in technology-based environments to be similar to those found in traditional product and service settings (Parasuraman & Grewal, 2000; Zeithaml, 2000). Conceptual models have yet to incorporate the three components together—quality, value, and attitudes toward shopping in an online context. This study draws upon the interrelationships between quality, value, and consumer attitudes toward shopping online in order to examine the relationship in the context of shopping for travel with online travel intermediaries.

Technology and Shopping Behavior

For over 40 years, researchers have shown interest in how consumers respond to innovative, technology-based retail formats. In an early study, Cox and Rich (1967) examined the importance of risk in differentiating telephone shoppers from non-telephone shoppers. A majority of those interviewed perceived the risks associated with telephone shopping too great to make it an acceptable option. Since then, additional research has been performed over a number of technology-based retail formats, such as television shopping (Kim & Lennon, 2000), interactive tele-shopping (Eastlick, 1996), videotext (Ledingham, 1984) and online shopping (Van den Poel & Leunis, 1999). The extent of this research indicates that consumers are anxious about a variety of issues related to technology-based shopping formats. In particular, shoppers are concerned about a loss of privacy (Ledingham, 1984; Miyazaki & Fernandez, 2000), inadequate
transaction security (Miyazaki & Fernandez, 2000), insufficient product information (Kim and Lennon, 2000), high shipping costs (Strader & Shaw, 1999), difficulty in returning or exchanging merchandise (Wolfinbarger & Gilly, 2001), inability to examine and try on items (Liang & Huang, 1998), and the impersonal nature of the format due to minimal, if any, human contact (Ledingham, 1984).

In related research, scholars have focused on identifying consumer characteristics that predict consumers’ willingness to adopt and use new technology-based shopping formats (e.g. Donthu & Garcia, 1999; Eastlick, 1996; Korgankar & Moschis, 1987; Ledingham, 1984; Shim & Drake, 1990). In general, technology-based shoppers tend to be more innovative and less risk averse than other shopping segments (Donthu & Garcia, 1999; Eastlick, 1996). Research also demonstrates that prior experience with technology and technology proneness play important roles in affecting consumers’ willingness to adopt technology-based shopping formats such as videotext (Korgankar & Moschis, 1987; Ledingham, 1984; Shim & Drake, 1990), interactive teleshopping (Eastlick 1996), and online shopping (Liao & Cheung, 2001; Van den Poel & Leunis, 1999).

These studies mentioned above offer many useful insights regarding consumers’ willingness to adopt and their intentions to use innovative forms of technology-based shopping. Very little research however has been conducted to learn how the differences in the shopping environment related to technology might impact how consumers evaluate their shopping experience. A review of the research in self-service technologies provides additional support. Table 6 presents a summary of the theoretical frameworks related to the concept of e-loyalty.
Table 6

*Theoretical Frameworks Related to E-Loyalty*

<table>
<thead>
<tr>
<th>Paradigms</th>
<th>Constructs Related to e-Shopping</th>
<th>Previous Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Adoption Model (TAM)</td>
<td>Usefulness, Ease of Use</td>
<td>Davis, (1989); Davis, Bagozzi &amp; Warshaw (1989); Hendricksen &amp; Collins (1996); Igbaria, Zinatelli, Cragg, &amp; Cavaye (1997)</td>
</tr>
<tr>
<td>Self Service Technologies (SSTs)</td>
<td>Control, enjoyment, fun, customization, flexibility</td>
<td>Langeard, Bateson, Lovelock, &amp; Eiglier (1981); Ledingham (1984); Dabhokar (1996); Bitner, Booms, &amp; Tetrault (1990)</td>
</tr>
<tr>
<td>End User Computing Satisfaction</td>
<td>Content, accuracy, format, ease of use, timeliness</td>
<td>Doll &amp; Torkzadeh (1988); DeLone &amp; McLean (1992); Doll, Xia, &amp; Torkzadeh (1994); Hendricksen &amp; Collins (1996)</td>
</tr>
<tr>
<td>Technical (System) Quality</td>
<td>Convenience, flexibility, response time, reliability, ease of use, usefulness</td>
<td>Bailey &amp; Pearson (1983); Franz &amp; Robey (1986);</td>
</tr>
<tr>
<td>Information Quality</td>
<td>Accuracy, format, timeliness, relevance, reliability, perceived usefulness, completeness, comparability, understandability, quantitative</td>
<td></td>
</tr>
<tr>
<td>Service Quality (SERVQUAL)</td>
<td>Empathy, Responsiveness, personalization, trust, reliability, accessibility/convenience, ease of use, security/privacy, product/service portfolio</td>
<td>Parasuraman, Zeithaml, &amp; Berry (2000), Zeithaml (1988); Dabhokar (1996); Ledingham (1984); Lohse &amp; Spiller (1998); Langeard, Bateson, Lovelock, &amp; Eiglier (1981); Yang, Peterson, &amp; Huang (2001); Grewal, Monroe, &amp; Krishnan (1998b); Jarvenpaa &amp; Todd (1997); Spiller &amp; Lohse (1997)</td>
</tr>
</tbody>
</table>
## Self-Service Technologies

The use of the Internet to shop for travel is considered a form of self-service technology (SST). The lack of human interface is one of the defining characteristics of self-service technologies. Automated teller machines (ATMs), electronic travel or parking ticketing, grocery self check out, self-pay gas pumps, and airline/hotel/car check-in kiosks are a handful of the growing technology-based SSTs in the marketplace today. SSTs eliminate the need for frontline employees, allowing customers to obtain the desired product or service entirely through a technological interface (Dahholkar, 1996; Meuter et al., 2000). Implemented effectively, SSTs can be used to streamline customer transactions, making a single encounter between the customer and the organization more efficient and less time-consuming. Barring technology breakdowns, technology-facilitated transactions can ensure the delivery of consistent outcomes by removing human variation (errors) that occur when over time; different employees within a service organization perform the same task.

Langsaard, et al. (1981) found two primary factors for customers who favored self-service options: (1) time flexibility and (2) control over the process or outcome. Some people respond positively to SSTs because of the perceived advantages of flexibility, control, efficiency and speed, while others are less taken with the technology because of

<table>
<thead>
<tr>
<th>Paradigms</th>
<th>Constructs Related to e-Shopping</th>
<th>Previous Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality-Value Relationship Theory</td>
<td>Quality, Value, Willingness to Buy</td>
<td>Dodds &amp; Monroe (1985)</td>
</tr>
<tr>
<td>Service-Profit Chain Theory</td>
<td>Quality, Value, Satisfaction, Loyalty</td>
<td>Hallowell &amp; Schlessinger (2000)</td>
</tr>
</tbody>
</table>
its impersonal nature and their individual need for human contact (Dabhalkar, 1996; Prendergast & Marr, 1994).

Studies indicate that very often consumers cite a preference for conducting transactions with a human being when discussing reasons for their reluctance to use technology for activities such as shopping (Ledingham, 1984) or banking (Prendergast & Marr, 1994). Although the lack of human interface may be a negative aspect of technology based shopping for some consumers, others are motivated by the absence of human presence, especially with regard to shopping online. The ability to shop anonymously and alone can enhance feelings of freedom and control (Dabhalkar, 1996; Wolfinberger & Gilly, 2001).

Consumer evaluations of SSTs may be impacted by other factors as well. For example, some consumers, ease of use and fun are important criteria for using technology based SSTs (Dabhalkar, 1996; Wolfinberger & Gilly, 2001). Research by Meuter et al. (2000) found that consumers tend to evaluate SSTs favorably, and thus are satisfied when the technology works as expected, functions better than a person to person alternative, and/or helps solve a difficult consumption problem. Conversely, when the technology produces feelings of incompetence, performs inadequately, and/or is poorly designed, consumers experience dissatisfaction.

In addition to the satisfaction-SST research, a study by Dahholkar (1996) compared the attribute-based perceived quality model with the overall-affect perceived quality model and concluded that the effect of the attribute-based model tends to be a superior predictor of service quality of SST. Dabhalkar (1996) employed a review of customers’ expectations to measure each service attribute since the customer is unlikely
to have extensive experience with new kinds of self-service technology. The study revealed that enjoyment and control can significantly enhance customers’ evaluation of service quality, under conditions of different waiting times (lower, normal, and long). The enjoyment factor refers to the extent to which fun and pleasant experiences arise when customers utilize a SST. In turn, the control attribute refers to the amount of power a customer feels that he/she has over the process or outcome (Bateson & Hui, 1987). Of course, service firms can strategically determine the degree to which they offer such options and how to design and promote them. Recently, Bitner, et al. (2000) pointed out that, if designed properly, SST can be utilized independently by customers to gain (1) customization and flexibility of service offerings, (2) recovery from service failure, and (3) instant spontaneous delight.

In summary, studies on SST’s have proposed several key attributes that explain customers’ motivations and intentions to use self-service technology instead of other employee-assisted channels. Key factors may include convenience (time and place flexibility), control, enjoyment, and customization. Relevant to this study, two questions are asked: are these attributes (or others) a necessity for customers to consider the Internet as a channel to complete a booking for travel products? Which attributes are significantly important for customer loyalty?

Consumers demonstrate varied responses to the lack of human contact that is characteristic of most SSTs. The lack of person to person contact, along with other factors such as personal control, waiting time, ease of use, and fun- appear to be key determinants for using self-service technologies. The study of consumer perceptions of
using SSTs provide important contributions in understanding what factors predict consumers’ use of the Internet for shopping for travel.

A call for additional research related to consumers’ perceptions of and responses to technology has been issued by a number of scholars (Bitner et al., 2000; Parasuraman & Grewal, 2000). More specifically, additional research is needed into the perceptual process that drives customer loyalty in technology-mediated settings. For example, the extant literature has yet to offer and empirically test an integrated model of how consumers evaluate travel websites. This study is an effort to address the need for research regarding the interrelationships between perceived quality, perceived value, consumer’s attitudes toward shopping online and customer e-loyalty.

Technology Adoption Model (TAM)

The technology adoption model was introduced by Davis (1989) as a measurement instrument to assess user adoption of new information technology. The primary constructs in this model are (1) perceived ease of use, (2) perceived usefulness, and (3) actual usage. The model is shown the Figure 2 below.
This model suggests that user’s decisions to adopt an information technology are primarily determined by their attitudes toward two prominent factors: (1) usefulness and (2) ease of use (Davis, 1989, Bagozzi & Warshaw, 1989). The causal relationships in TAM have been intensively investigated and verified through multiple studies (Adams, Nelson, & Todd, 1992; Davis, 1989; Davis, Bagozzi, & Warshaw, 1989; Hendrickson & Collins, 1996; Igabaria et al., 1997). Vankatesh and Davis (2000) further extended this TAM model and proposed that perceived usefulness can be explained by three constructs of social influence: subjective norms, voluntaries, and image, and four cognitive processes: job relevance, output quality, result demonstrability, and perceived ease of use. 

Figure 2. The TAM Model. From Davis, F. (1969). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13, 318-340.
use. This extended model was supported by longitudinal data collected from four different systems in four organizations.

The original TAM model can be applied in the context of Internet commerce since the Internet is still considered a relatively new information technology. If the ease of use and usefulness of purchasing travel online does not outweigh customers' losses in terms of impersonal experience, technical problems, and learning time and effort, then it is safe to assume that customers may simply switch back to traditional channels. In this case, the usefulness and ease of use of Internet transactions play a critical role in customer satisfaction with their online services. The question remains for marketers is: what kind of attributes of Internet travel websites do customers expect for "usefulness" and "ease of use"?

Means-End Chain Theory

The means-end chain theory was originally developed to describe how consumers categorize information about products in memory (Gutman, 1982). Means are objects or activities in which people engage. Ends are valued states of being, such as security, belongingness, and achievements. In the means-end theory, consumer knowledge and perceptions are constructed in a hierarchical manner. At the lowest (attribute) level, are the objective product attributes that consumers frequently use to evaluate and/or group products (Gardial et al., 1993). At the consequence level, the benefits which are derived from the consumption of a product (or service) occur later. At the goal level, these consequences are related to the desired end-states of consumers, or the so called consumer values (Reynolds et al., 1984). A product or service is chosen because it
facilitates the achievement of a desired end state (Gutman, 1982). Figure 3 is a simplified presentation of the means-end chain model proposed by Gutman (1982).


The literature promotes the view that consumers' perception is a higher order abstraction based on the evaluation of lower level attributes (Woodruff, 1997; Zeithaml, 1988). For instance, Woodruff and Gardial, (1996) expanded the means-end chain theory into the explanation of the essence of customer value, suggesting that consumers look for desired value in a means-end way. Woodruff (1997) argues that current value assessment paradigms dominated by attribute-level criteria are not complete and advocates the need to assess customer value at higher-level abstraction (i.e. consequence and goal levels).
According to Woodruff (p. 142), customer value is defined as “customers perceived preference for and evaluation of those products attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations.”

A hierarchical, integrated model of e-loyalty is proposed in this study. Starting from the bottom of the hierarchy, consumers evaluate an online travel intermediary according to desired attributes and attribute performance. These attributes are associated with consequences which can be desirable or undesirable. Finally, a decision for loyalty towards an online travel intermediary is formed according to how these consequences help consumers achieve their goals and purposes. Perceived quality, value and attitude towards shopping online are at the consequence level which describes the benefits and costs associated with shopping for travel using online travel intermediaries. Consequences differ from attributes in that consumers receive consequences and firms (i.e. travel websites) possess attributes. An extension of the means-end chain model to e-loyalty is presented in Figure 4.

Quality-Value Relationship Theory

Dodds and Monroe (1985) conceptualized perceived value as being directly linked to behavioral outcomes (i.e., willingness to buy). In their model, perceived value is depicted in figure 5 as a tradeoff between perceptions of quality and sacrifice, both of which are impacted by a consumer's perception of price.

Service Profit Chain Theory

The Service Profit Chain theory (Hallowell & Schlessinger, 2000) in Figure 6 conceptualizes the key factors that predict customer loyalty as a chain of effects. External service quality leads to customer value, which, in turn, impacts customer satisfaction. In this model, it is satisfaction-rather than value- that is the most direct link to customer loyalty. Hallowell (1996) first examined the relationships between customer satisfaction, loyalty and profitability. He pointed out that although high customer satisfaction usually leads to a long relationship, the assumption that improvements in customer satisfaction will increase profits occurs only in the theoretical setting. The actual relationship is to the
degree that the lowest overall satisfaction rating tends to have higher profitability. In practice, many managers believe that customer service comes at the expense of profitability.

Managers often believe that keeping present customers is cheaper than acquiring new ones. Thus, customer loyalty increases the value of long-lasting customer relationships. The logic lies in the assumption that favorable customer relationships are profitable. This is not always the case. For instance, seeking to retain a hopelessly unprofitable customer in an industry characterized by continuous customer relationships does not always make good sense. In certain industries, a very limited number of customers contribute the majority of profits. According to Storbacka, Strandvik, and Gronroos (1994), approximately 50% of the customers in a retail bank’s customer base were unprofitable. However, customer satisfaction was higher among the most unprofitable customers in the customer base (Storbacka, et al. 1994). In this sense, some researchers propose that a service provider should not necessarily aim at long-term relationships with all customers.

In order to try and pull together opposing theories regarding the collective efforts of quality, value, satisfaction on behavioral outcomes such as customer loyalty, Cronin Brady, and Hult, (2000) introduced a research model suggesting that all three variables—quality, value, and satisfaction—would have simultaneous direct and positive impacts on outcome measures. Cronin et al., (2000) compared an integrated quality, value, satisfaction model with three competing models: (1) the “value model” suggests that value is the primary direct link, mediating most of the impact of other factors on positive behavioral outcomes (Cronin Brady, Brand, Hightower, & Shemwell, 1997; Sweeney et al., 1999); (2) the “satisfaction model” contends that satisfaction rather than value is the important direct link to behavioral intentions (e.g. Andreassen & Lindestad, 1996; Ennew
& Binks, 1999; Fornell et al., 1996); the “indirect model” suggests a direct effect on favorable intentions for both value and satisfaction, but only an indirect effect for quality (Gotlieb et al., 1994; Patterson & Spreng, 1997). They hypothesized that (1) service quality will have a direct effect on behavior intention and an indirect effect on behavioral outcomes through value perceptions and satisfaction, and (2) value perceptions would have a direct effect and indirect effect on behavioral intention through customer’s satisfaction. Cronin et al. (2000) findings indicated that the integrated model shown in Figure 7 outperformed the competing models in that it yielded a better fit to the data and accounted for a greater share of the variance in behavioral intentions. Thus all three constructs, value, quality and satisfaction, were found to have a direct impact on consumers’ behavioral intentions. Service quality was also indirectly linked to behavioral intentions via independent relationships with value and satisfaction.

**Integrated Model of E-Loyalty**

Most of the previous work on perceived quality and value focuses on consumer’s perceptions of quality and value of a product or service. This study examines consumers’ quality and value perception toward an online travel intermediary. Regardless of subject or context, the research method used to study perceived quality and value of a product or service can also be applied in an e-context in the study of quality and value of an online travel intermediary.

A hierarchical, integrated model of e-loyalty is shown in Figure 8. This model reflects the fusion of the theories and models of technology and shopping behavior, self-service technologies, technology adoption model, means-end chain theory, quality-value
relationship theory, and the service-profit chain theory models. The proposed integrated model of e-loyalty in figure 8, is most closely adapted from the Cronin et al. (2000) research model as it represents an important step in delineating how the relationships of value, quality, and attitude towards shopping online impact attitudinal and behavioral loyalty dimensions—the key indicators of customer loyalty. In this study, customer loyalty is referred to as e-loyalty, and contains both the attitudinal and behavioral loyalty aspects of e-loyalty to an online travel intermediary.

Attitudinal and behavioral e-loyalty is posited to be predicted by three key variables; perceived e-value, perceived e-quality, and consumer’s attitudes toward e-shopping. Perceived e-value is a relative judgment of the benefits versus costs associated with shopping for travel online. Similarly, perceived e-quality involves an evaluation of the service and technical quality of the travel intermediary website. A consumer attitude toward e-shopping is an individual’s evaluation of the risk and enrichment aspects of shopping for travel online.

Antecedents of perceived e-value include the items that relate to the perceived usefulness and value-for-money aspects of value. Antecedents of perceived e-quality include the items that relate to the service and technical aspects of e-quality. Antecedents of attitude towards e-shopping include the items that relate to the lifestyle enrichment and perception of risk aspects of shopping online with an online travel intermediary.
Research Hypotheses

Based on the conceptual foundations and theoretical models discussed in Chapter 2, there were four hypotheses corresponding to the various links in the proposed e-loyalty model were examined in this study. The following sections provide a discussion of the underlying rationale for each of the proposed hypotheses. The four hypotheses are summarized in Table 7.
Table 7

Hypotheses of Consumer’s E-Loyalty towards Online Travel Intermediaries

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Antecedents of E-Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1:</td>
<td>Consumers’ positive perception of the e-quality of an OTI will directly and positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H2:</td>
<td>Consumers’ positive perception of the e-value of an OTI will directly and positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H3:</td>
<td>Consumers’ positive attitude toward e-shopping will directly and positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H4:</td>
<td>Consumer’s positive attitudinal loyalty toward an OTI will directly and positively predict their behavioral e-loyalty.</td>
</tr>
</tbody>
</table>

Hypotheses: E-Quality

Superior performance or quality has long been associated with market growth, profitability, and customer retention. Most notably, analysis of the PIMS (Profit Impact of Marketing Strategy) data set has established a convincing link between the provision of outstanding quality and market share growth (Buzzell & Gale, 1987). Furthermore, higher levels of quality are presumed to improve profitability by lowering customer defection rates (Reichheld & Sasser, 1990). As such, superior quality is believed to be an effective differentiation strategy that fosters customer loyalty and serves as a barrier to competition (Porter, 1980). McIntyre and Peck (1988) provided a business client example that improved service levels, along with decreased customer satisfaction, can still lead to an improved customer loyalty, which was measured by “increased purchase levels,
product penetration, and projected customer retention” (p. 50). Other empirical research conducted in both the retail and pure-service settings has substantiated the positive effects of perceived quality on consumers’ loyalty intentions (Sirohi et al., 1998; Zeithaml et al., 1996).

As discussed previously, the perceived service and technical e-quality aspects of e-quality were conceptualized as an evaluation of the service and technical quality of a specific online shopping experience with an online travel intermediary. In a traditional travel agency setting, perceived service quality reflects shoppers’ evaluations of operational features such as store hours, the physical appearance of the facility, and the level of customer service provided by store personnel (Sirohi et al., 1988). In other words, shopper’s perceptions of service quality are inferred from evaluations of various service attributes. Quality attributes that are important for online travel shopping will vary from those in a traditional travel agency environment and will likely include such attributes as site navigation (ease of use), access to customer service via email or chat, explicit change or cancellation policies, and privacy protection policies (Kaynama & Black, 2000; Zeithaml, 2000).

With respect to the product/service portfolio offered by online travel intermediaries, travel shoppers are likely to infer quality from the specific travel product attributes similar to those used in traditional travel agencies (e.g. air, hotel, car, cruise brand selection and variety). The virtual characteristics of the Internet allow travel companies the opportunity to offer more extensive product/service assortments than might be found at a traditional travel agency as there are fewer constraints in the sourcing and fulfillment of travel options. With expanded depth of product/service offerings,
online travel intermediaries are able to better meet the needs of their customers, which in turn will positively impact perceptions of the overall e-quality of an online travel intermediary.

There are additional attributes that contribute to the difference in consumer evaluation for online travel agencies versus traditional bricks and mortar agencies. For example, courteous, empathetic, and knowledgeable salespeople play an important role in creating positive evaluations of store-based retail (e.g., travel agency) quality (Dabholkar, Thorpe, & Rentz, 1996). Although advances in technology (e.g., live chat, 800 number support) are improving a travel retailer’s ability to humanize Internet shopping for travel, presently the majority of online shoppers don’t encounter much interactive human contact (Hunt, 2000; Schwartz, 2001).

Using an exploratory research approach, Zeithaml et al. (2000) laid the initial groundwork necessary for future development of a scale to assess e-service quality. In a series of six focus group interviews, consumers were asked to discuss their expectations about and perceptions of purchasing products and or services on the Internet. Based on the responses, the following eleven dimensions of e-service quality were cited: access, ease of navigation, efficiency, flexibility, reliability, personalization, security/privacy, responsiveness, assurance/trust, site aesthetics, and price knowledge. Whereas several of these dimensions are conceptually comparable to the five dimensions that are believed to form the basis of service quality judgments more generally (e.g. responsiveness, and assurance), the others reflect the unique aspects of service in a technology based context (e.g. reliability, navigation, security/privacy, and site aesthetics).
The perceptual attributes that underlie these eleven dimensions are website specific. For example, shoppers evaluate “ease of navigation” by considering criteria related to their ability to maneuver through the site, the speed of maneuvering through the site, and the speed of payment/checkout. The study also revealed that consumers hold Internet-wide evaluative criteria as well. Attributes that appear to be important in motivating consumers to shop for travel online as opposed to other retail travel formats include convenience, ease of comparison shopping, and lower prices. As discussed previously, consumers’ responses to new technology may vary according to their attitudes and beliefs about technology in general (Mick & Fournier 1998). Furthermore, research related to technology-based retail and service formats indicates that an individual’s feelings, beliefs and attitudes toward a specific technology are useful in predicting their willingness to adopt and intention to use the technology itself (Dabholkar, 1996; Eastlick, 1996). Based on this body of literature, Zeithaml et al. (2000) conclude that individual differences are also likely to play a role in consumer’s evaluation of e-service quality. More specifically, they suggest that individual’s varied responses to new technologies may affect the expectations and performance perceptions used to evaluate e-service quality. The following hypothesis regarding the relationship between perceived e-quality and e-loyalty is proposed.

H1: Consumers’ positive perception of the e-quality of an OTI will directly and positively predict their attitudinal e-loyalty toward an OTI.
Hypothesis: E-Value

Conceptually, perceived value is believed to be a key determinant of customer loyalty (Parasuraman & Grewal, 2000). There have been many studies linking consumer perceptions of value and behavioral outcomes, some of which are, and are not, good indicators of customer loyalty. For instance, empirical studies have established support for the link between perceived value and willingness to buy (Dodds & Monroe 1985; Grewal et al., 1998a; Sweeney et al., 1999), search intentions (Grewal et al., 1998a), purchase intentions (Grewal, Krishnan, Baker, & Borin, 1998b), repurchase intentions (Cronin et al., 2000; Lapierre, Filiatrault, & Chebat, 1999; Sirohi et al., 1998) and recommendation intentions (Cronin et al., 2000; Lapierre et al., 1999, Sirohi et al., 1998).

In particular, an empirical study set in the context of supermarket retailing focused specifically on determinants of store loyalty intentions by measuring the likelihood to continue shopping, likelihood to use a store for more purchases in the future, and the likelihood of recommending a retailer to a friend. As it turns out, this research is one of the few studies that find the association between perceptions of value and multiple indicators of loyalty in retail setting (Sirohi et al., 1998).

Although perceived value has been theoretically linked to behavioral outcomes such as purchase/repurchase intentions in an online setting (Zeithaml et al., 2000), empirical evidence of this link is limited. Mathwick, Malhotra, & Rigdon (2001) developed a scale to assess the types of value experienced in different retail contexts. Value, conceptualized as the perceived return on financial, temporal, and behavioral investment (i.e., consumer return on investment), and was found to be a significant predictor of Internet shopping preference, which in turn, predicted future patronage.
intent. Perceptions of value are presumed to directly influence customer retention and loyalty, and by doing so, mediate some or all of the effects of its antecedents on behavioral outcomes (Bolton & Drew, 1992; Zeithaml, 1988). The direct impact of price and non-price factors on consumer perceptions of value has been well documented in the literature related to products and brands (Dodds & Monroe, 1985; Dodds et al., 1998; Grewal et al., 1998a), services (Cronin et al., 2000), business to business contexts (Lapierre et al., 1999), and retailing (Grewal et al., 1998a; Sirohi et al., 1998; Sweeney et al., 1999). Despite the plethora of research, scholars have asked for additional research on two value issues: (1) the influence of non-monetary value components (Teas & Agarwal, 2000) and (2) the role of money (price) in the evaluation of product or service value (Barnes, Dunne, & Glynn, 2000; Parasuraman & Grewal, 2000).

Perceived usefulness reflects individuals subjective evaluation of what is received versus what is given up to obtain the benefits from using an online travel intermediary to book travel. This concept includes various factors related to a shopper’s perception of time and effort (Monroe, 1990; Zeithaml, 1998). For some consumers, the constrained resources of time and effort may be perceived as being more costly than price (Zeithaml, 1988).

In the context of shopping for travel online, time-saving factors associated with shopping from any location (e.g., home or work), 365/24/7 availability, and quick search and booking capabilities may positively affect value judgments as compared to the time and effort necessary to complete travel plans in a traditional method (e.g. visit to a travel agency). In this study, perceived usefulness is conceptualized as encompassing a consumer’s perception of the time and effort associated with the shopping for travel
online with an OTI versus in a traditional channel (e.g., call center, bricks and mortar travel agency).

Day (1990) suggested that product benefits based on consumption or use of the product or service are not the sole benefits that consumers perceive. Benefits can also be derived from the shopping activities themselves such as perceived usefulness in terms of purchase convenience and buying pleasure. Ghosh & McLaﬃerty (1987) posit that the value a customer receives from shopping is determined jointly by the quality of the shopping experience and price. Furthermore, Donovan, Rossiter, & Nesdale (1994) suggest that a shoppers’ emotional state within a store predicts actual purchase behavior, not just attitudes or intention. Buyukkurt (1986) notes that a consumer’s shopping experience within a store can inﬂuence such variables as perceived search effort and value of a store. Moreover, Kerin et al. (1992) suggest that the perceived store shopping experience is more important than merchandise price or quality perceptions in explaining consumers’ value perceptions of a retail store. A useful and satisfying shopping experience can positively impact consumer’s perceptions of value, quality and loyalty.

It is generally agreed that there are two types of values associated with the consumption experience of shopping: utilitarian value and hedonic value. Utilitarian shopping value describes the accomplishment and/or disappointment over the ability (inability) to complete the shopping task. Time and search effort are major determinants or utilitarian value. The more time and effort required, the less the utilitarian value. Alternatively, hedonic shopping value represents the emotional or psychological beneﬁts emanating from a shopping experience and includes expressions of pure enjoyment.
excitement, captivation, escapism, and spontaneity (Babin, Darden, & Griffin, 1994). Both types of value serve the criteria for evaluating a shopping experience.

However, in an e-commerce situation, hedonic value dimensions such as amusement and escapism have been found as not significant in predicting consumers’ overall e-store preference (Mathwick et al., 2000). This can be explained in part by examining how consumers use a web site. The hedonic value may be influential for websites whose interfaces also serve as a place for consumption, such as content sites or sites whose core offering is information (e.g. Condenasttravel.com, travelnotes.org). In this case, consumers will use the web for entertainment purposes. However, for transaction sites selling physical products, this usually is not the case because the consumers’ primary goal is to acquire goods or services (Wolfinberger & Gilly, 2001).

The analysis of the e-value chain has suggested that value can be created in e-business by exploiting the efficiency enabled by the web technology (Amit & Zott, 2001; Rayport & Sviokla, 1995). The presence of the Internet eliminates the restrictions of physical space and time therefore facilitates shopping efficiency. Click-stream analysis of consumers on major e-commerce sites suggests that online shoppers are either goal or transaction-oriented, rather than experiential. This means that they generally do not linger long on a website unless it is necessary. A Nielsen-Net reported that the time consumers spent with a web store is quite limited, with the length of the visits at top sites being about 15 minutes or less (Wofingberger & Gilly, 2001). It has also been reported that time-starved consumers are more likely to shop online (Bellman, Lohse & Johnson, 1999). Furthermore, heavy users of the Internet tend to have a strong sense of control and a goal-oriented personality (Hoffman, Novak, & Schlosser, 2000). To these types of
shoppers, customer value can be enhanced by providing efficient and convenient shopping experiences. Additional research focusing on online shoppers further supports the view that an efficient online shopping experience is important to consumers’ decisions to purchase and to make future visits to an OTI (Totty, 2001a). It is then expected that consumer’s positive perceived usefulness will positively impact their e-loyalty.

As a higher-level abstraction, perceived value is considered complex in nature and difficult to measure (Parasuraman, 1997; Woodruff, 1997; Zeithaml, 1988). For instance, Zeithaml (1988) suggests that consumers attach diversified meanings to the perceived value of a product. In general, consumers believe perceived value to mean: (1) low price, (2) whatever I want in a product; (3) the quality I get for the price I pay; and (4) what I get for I give. In addition, it has been suggested that consumers really do not have a clear definition of the give and get components and thus do not make purchase decisions based on an overall perceived net gain (Bettman, Johnson, & Payne, 1991). Because of the potential difficulty in accurately capturing perceived value (Parasuraman, 1997), the majority of previous empirical studies operationalize perceived value as “the quality given price” or “value for money”. Other costs and benefits associated with the total consumption experience are either treated as antecedents of perceived value or proposed as a research direction in theoretical studies, but not empirically tested (Sweeney, Soutar, & Johnson, 1999; Lai, 1995).

Thus, along with perceived usefulness, value for money is thus proposed as a component of consumers overall perceived e-value of an OTI. The economic theory of utility provides a theoretical foundation for analyzing perceived e-value. The economic
theory of utility assumes that consumers are economically rational. They derive satisfaction from the consumption of goods, a satisfaction measured in theoretical units of utility. Consumers' will try to achieve the maximum utility, or satisfaction, possible given their resource limitations in terms of budget, time, cognitive capabilities, etc. (Henderson & Quandt, 1958; Horton, 1984). Consumption for emotional purposes (such as emulation and social achievement) is considered to be driven by motivations that are less rational, rather than irrational (Copeland, 1925). The economic theory of utility has provided a solid theoretical foundation for many other consumer behavior theories such as consumer information processing and risk reduction (Bettman, 1979; Horton, March, & Simon, 1958). Simply put, according to the economic theory of utility, consumers will maximize what they can get and minimize what they have to give away. The get components (desired consequences such as positive perceived e-value) will have a positive impact on behavioral outcomes (e.g. repeat purchase, positive word of mouth, etc). A second benefit of this approach is that perceived e-value is measured bi-dimensionally using perceived usefulness and value-for-money therefore allowing the examination of each value component on loyalty.

Value-for-money addresses the economic or functional benefit that consumers seek from a store (e.g., an Online Travel Intermediary) (Mathwick, Malhotra, & Rigdon, 2000). In past research, perceived value is generally given as price. This simplification of the concept makes it easy to measure and fits the concept of acquisition value commonly used by researchers (Grewal, et al., 1998b; Monroe & Chapman, 1987; Parasuraman, 1997). Two dimensions of value-for-money are identified in the previous work: acquisition value and transaction value.
Acquisition value or value-for-money is defined as buyer’s perceptions of the product quality or benefits relative to the selling price (Monroe & Chapman, 1987). The perceived acquisition value of the product will be positively influenced by the benefits buyers believe they are getting by buying and consuming a product or service and negatively influenced by the money given up to acquire the product or service. One element of the ‘get’ component is buyers’ perception of the quality of the product or service. The ‘give’ component is limited to monetary cost. Along with acquisition value is transaction value, which captures the buyer’s perception of a deal within the transaction or in other words - the perception of psychological satisfaction or pleasure obtained from taking advantage of the financial terms of the price in the deal (Lichtenstein, Netemeyer, & Burton, 1990; Monroe & Chapman, 1987; Thaler, 1985; Urbany & Bearden, 1989). Both acquisition and transaction values are important dimensions for the concept of value-for-money (Grewal, et al., 1998a; Monroe & Chapman, 1987).

Similar to a traditional retail (travel agency) context, consumers want to maximize their value-for-money in the right e-commerce context (Baker, Lin, Marn, & Zawada, 2001; Marn, 2000). An important motive for using an OTI is to acquire a desired travel product at the right price. The positive relationship between value-for-money and loyalty (intention) has been widely suggested by prior research (e.g., Dodds et al., 1991; Grewal et al., 1998a; Heskett, Sasser, & Schlesinger, 1997; Reichheld, 1996; Parasuraman & Grewal, 2000; Zeithaml et al., 1996; Zeithaml, 2000). Consistent with previous findings, this study proposes that along with perceived usefulness, value-for-money is a determinant of customer e-loyalty. Based on these findings, the following hypothesis
contends that consumers’ assessment of perceived value is a critical factor affecting a consumer’s loyalty to an online travel intermediary.

H2: Consumers’ positive perception of the e-value of an OTI will directly and positively predict their attitudinal e-loyalty toward an OTI.

\textit{Hypothesis: Attitudes toward E-Shopping}

Less well researched than perceptions of quality and value is the direct effect of individual differences on consumer loyalty. A relevant issue to consider in an investigation of online shopping for travel is the effect of its technological nature on consumer attitudes and perceptions. Previous scholars have called for research designed to investigate the extent to which a person’s feelings and beliefs about technology affect the perceived quality and value in using technology-mediated retail and service structures (Barnes et al., 2000; Parasuraman & Grewal, 2000).

Theoretically, consumer technology may be viewed in terms of paradoxes (Mick and Fourier, 1998). Described by Mick and Fournier (1998) as “being both X and not X at the same time, technology paradoxes continuously push and pull individuals in opposing directions (p.125)”. For example, shopping at home for travel at any time day or night may stimulate feelings of control. Alternatively, concerns about the unauthorized use of shared personal information online may create a sense of losing control and increased perceived risk. The eight key paradoxes of consumer technology identified by Mick and Fournier (1998) include: control/chaos, freedom/involvement, new/obsolete, competence/incompetence, efficiency/inefficiency, fulfills/creates needs,
assimilation/isolation, and engaging/disengaging. Accepting that technological paradoxes are an integral part of life, consumers develop psychological and behavioral coping strategies to reduce the anxiety and stress they produce (Mick & Fournier, 1998).

Parasuraman (2000) extends the concept and suggests that feelings about technology are fluid—that is, they are constantly shifting along a continuum between positive and negative positions, and an individual will display a tendency towards one end or the other. He further contends that an individual’s willingness to use technology (e.g., technology readiness) is closely associated with a dominant position along this continuum. In order to reveal consumers’ technology readiness, Parasuraman (2000) developed a proprietary scale in collaboration with an industry-based service and technology research firm. The Technology Readiness Index (TRI) is comprised of four dimensions: (1) optimism—a positive belief that technology is beneficial to people’s lives; (2) innovativeness—a tendency to be a “technology pioneer”; (3) discomfort—a perception that technology is intimidating or overwhelming; and (4) insecurity—a feeling of distrust or skepticism about technology and its capabilities. Whereas optimism and innovativeness push people toward technology, discomfort and insecurity pull people away.

The TRI is a useful instrument for assessing a consumer’s general predisposition toward technology instead of specific slant towards a particular type of technology. To fill this research gap, Shim et al. (2000) have developed an alternative approach designed to specifically assess a consumers’ propensity to search for and purchase products online. The measures, referred to as online shopping sophistication and based on Mick and Fournier’s (1998) eight technology paradoxes, apply to three areas of consumers’ feelings.
and beliefs about using Internet technology for shopping. The largest set of items includes the positive and life-enriching aspects of online shopping technology. A second set of items captures shoppers’ concerns about privacy, risk and the impersonality of the online shopping environment. The third set of items assesses the extent to which online shopping technology produces feelings of incompetence.

This stream of research suggests that an individual’s feeling and beliefs about technology may shape his or her perceptions of the quality and value of shopping experiences with online travel intermediaries. When shoppers exhibit more (or less) favorable attitudes toward Internet-based shopping formats, the perceived quality and value is likely to be more (or less) positive. Moreover, a consumers’ positive attitude towards e-shopping is likely to influence their loyalty to an online travel intermediary.

As discussed above, concerns about the unauthorized use of shared personal information online may create a sense of losing control and increased perceived risk. The fear of identify theft and fraud is a major factor that keeps consumers from performing online transactions (Miyazaki & Fernandez, 2001). Research on consumers’ value perception in the retail context shows that perceived risk is an important antecedent of perceived value because it increases the psychological cost of dealing with uncertainty (Shrimp & Bearden, 1982; Teas & Agarwal, 2000; Wood & Scheer, 1996). Bauer (1967) argued that consumer behavior might be better viewed as risk taking behavior. As a decision maker, the consumer attempts to choose among alternatives whose consequences are not only uncertain, but potentially adverse or negative (Horton 1984). Moreover, according to Sweeney et al. (1999), perceived risk has a direct negative impact on perceived value and it also mediates the relationship between quality and price and
perceived value. Broydrick (1998) maintains that decreasing risk is an important means of enhancing customer value.

In the online context, it has been argued that consumers are exposed to a greater level of risk than in traditional retail contexts (Kim, 2001). Two types of perceived risk are particularly relevant to online shopping; performance risk and security risk (Strader & Shaw, 1999). Performance risk refers to the loss incurred when a product fails to meet a consumer's expectation (Horton, 1976; Simpson & Lakner, 1993). On the web, consumers cannot touch or experience a physical product as they can in a traditional store—let alone get a feel for a service. Cues, such as the physical appearance of a hospitality product (e.g., air, hotel, car, or cruise) or communication from a travel or sales agent are no longer applicable. Thus, consumers may perceive that it is more difficult to judge product/service quality and they have to rely on images, streaming video, text and promises made on a travel website. Therefore, performance risk in online shopping tends to increase compared to a traditional business environment (Reichheld & Schefter, 2000; Strader & Shaw, 1999, Vijayasarathy & Jones, 2000).

Security risk involves the potential risks of financial loss due to the unauthorized access of personal and credit card information as well as the privacy loss of the misuse of information collected about consumers by online retailers (Jarvenpaa & Todd, 1997; Miyazaki & Fernandez, 2001). It has been reported that primary concerns related to online shopping is a websites lack of financial security and hacker attacks can compromise consumer credit card information (Kemp, 2000; Korgankar & Wolin, 1999; Strader & Shaw, 1999).
While some consumers may have the perception that shopping for travel online is risky, at the same time, other consumer’s may develop an attitude that shopping online enriches their life. For example, Shim et al. (2000) have developed an alternative approach designed to specifically assess a consumers’ propensity to search for and purchase products online. The measures, referred to as online shopping sophistication and based on Mick and Fournier’s (1998) eight technology paradoxes, apply to three areas of consumers’ feelings and beliefs about using Internet technology for shopping. The largest set of items includes the positive and life-enriching aspects of online shopping technology (e.g. provides freedom and control). Based on the above discussion, the following hypotheses are proposed in respect to the relationship between consumer attitudes toward e-shopping and e-loyalty as well as the relationship between attitudinal e-loyalty and behavioral e-loyalty.

H3: Consumers’ positive attitude toward e-shopping will directly and positively predict their attitudinal e-loyalty toward an OTI.

H4: Consumers positive attitudinal loyalty toward an OTI will directly and positively predict their behavioral e-loyalty toward an OTI.

Chapter Summary

The primary objectives of this chapter were to provide: (1) a conceptual overview of each of the key constructs to be examined in this study- namely customer e-loyalty, perceived e-quality, perceived e-value, and attitudes toward e-shopping; (2) information concerning the electronic distribution of hospitality products and the evolution of Online
Travel Intermediaries; and (3) the theoretical framework that serves as the basis for the proposed research model and hypotheses to be examined in the study. The next chapter (3) provides a discussion of the methodology for the study. More specifically, the procedures for sampling, data collection, questionnaire development, operationalization of the variables, and data analysis will be set forth in detail.
CHAPTER 3

METHODOLOGY

The purpose of this study was to examine the drivers of e-loyalty to online travel intermediaries and how these drivers were related to e-loyalty attributes. Specifically, the proposed e-loyalty model investigated the impact of e-quality, e-value, and attitude toward e-shopping on assessments of e-loyalty toward online travel intermediaries. The methodology used to investigate the relationships is presented in the following sections. The first section discusses the sampling and data collection procedures. The second section discusses the questionnaire development. The third section provides the operational definitions of the variables and the fourth section describes the statistical analysis technique used.

Sampling and Data Collection

Data for the study was collected using a survey distributed via email to 10,564 online customers of a U.S. based online travel company. The company was primarily engaged in the provision of travel and tourism information and travel plans booking for air, hotel, car, tour, show, event, and sports products. The company’s website was used as the primary retail channel of distribution for their travel and tourism product set; therefore the category of travel products was acceptable for study.
The respondents for the study were randomly selected from the database of 21,500 U. S. customers (18 years and older) who had purchased at least one travel product online over the past year (April 2004-April 2005). The website was considered typical of an online technology-based, self-service interface.

The initial emailing, which took place in April 2005, was followed by 4 reminders sent every 5 days after. A total of 10,564 emails were sent to participants. Respondents who opted out or communicated their preference to be taken off the mailing list were deleted appropriately from the email list of participants.

The survey resulted in a 94% delivery rate and a 4% usable response rate (n = 405 usable questionnaires). Specifically, of the 668 respondent visits to the survey site, 405 were completed while 263 were partially completed- and thus discarded as unusable. Of these 405 returned responses, 63 were deemed unusable, therefore resulting in a usable sample of 342. The unusable questionnaires were due to the following reasons: (1) a large number of missing responses, (2) respondents did not meet the minimum qualifying question of having purchased a travel product online in the past 12 months, (3) response rates for the direct email industry is typically very low (insert stat and quote), the focus on online shopping for travel may have initiated consumer hesitancy in participation due to concerns about privacy, spam and sharing of personal information (Miyazaki & Fernandez, 2000). Based on these considerations, the response rate and the net usable responses were considered acceptable for further study.
**Questionnaire Development**

The written questionnaire contained measures of the following variables: perceived e-quality, perceived e-value, attitudes toward e-shopping, attitudinal e-loyalty, and behavioral e-loyalty. Additionally, respondents were asked 10 questions related to their shopping for travel online history (e.g., the number of travel products purchased online over the last 12 months) and preferences (e.g., the travel product most often purchased online) as well as 5 demographic information questions (e.g., gender, education, marital status, household income, age).

The final version of the questionnaire contained 3 sections: (1) history of recent online shopping for travel; (2) attitudes toward shopping online and perceptions of quality and value; and (3) information about you. Respondents were asked about their thoughts and feelings on buying travel products online using a preferred travel intermediary to respond to items in section 2.

A multi-stage process was employed for the development of the questionnaire. First, preliminary measures of the variables included in the study were adapted from previous research that investigated the effects of quality and value to customer loyalty as well as the effects of attitudes toward shopping online. A convenience sample of online shoppers (e.g., people with online shopping for travel experience) was conducted in April 2005 to aid in the development of the survey. A pre-test was administered to further refine the quality, value, and attitudinal measures derived from the literature review. Thirty-five graduate students majoring in hotel administration at UNLV participated in the pretest. The participants were asked to take the survey online and provide feedback to ensure all instructions and questions were understood as intended. As a result of the
feedback, one question was eliminated and four were re-worded for clarity and readability. The final version of the questionnaire may be found in the Appendix. Scales from past studies in the relevant field were adapted to measure the constructs in the theoretical model. Path Analysis was used for the statistical tests.

*Operational Definitions of the Variables*

Operational definitions and the basis for scale development for each variable are discussed in the following sub-sections. Scales from prior research were adapted to measure the variables proposed in the model. Meanwhile, some items were created based on the literature related to online shopping and retailing. Seven-point, Likert-type, scales were employed because previous research has suggested that a seven-point scale is readily comprehensible to respondents and enables them to express their views.

*Measurement of the Variables*

The following section describes how the variables included in the model were measured. Forty eight items were utilized to predict the five latent constructs of attitudes toward e-shopping, perceived e-value, perceived e-quality, and attitudinal and behavioral e-loyalty. The 48 items were based on a seven point, Likert-type scale (strongly disagree/strongly agree) and are summarized in Table 8.

*Measurement of E-Loyalty*

In measuring e-loyalty, eight Likert-type items ranging from 1-strongly disagree to 7-strongly agree were used to measure a consumer’s loyalty toward an online travel
intermediary. Scale items were adapted from commonly employed loyalty measures that capture the behavioral and attitudinal dimensions of loyalty (Chaudhuri & Holbrook, 2001; Fornell et al., 1996; Mathwick et al., 2000; Cronin et al., 2000; Sirohi et al., 1998; and Oliver, 1997; 1999). Prior work focused on one or a few items that commonly reflected repurchase intent or recommendation (word of mouth). In this study, eight items were combined from behavioral and attitudinal categories to assess a consumers’ commitment to shop online for travel with an OTI regularly in the future despite the presence of factors that might cause switching costs (Oliver, 1997; 1999). For instance, items measuring e-loyalty from a behavioral perspective included: cooperation/partnership to help others, propensity to complain, propensity to switch, and word of mouth recommendation. Items measuring e-loyalty from an attitudinal perspective included: percentage of future purchase, future intent to search and purchase, first in mind, and willingness to pay a price premium. The scales used in this study were intended to tap into the stages of loyalty (cognitive, affective, conative, action) framework posed by Oliver (1997).

Measurement of Perceived E-Value

This research measured perceived e-value via items that related to the perceived usefulness and value-for-money aspects of value. Dodds et al. (1991) developed a five item scale to measure the perceived value of a product. The scale has been widely used in the perceived value research (Cronin et al., 2000; Sweeney & Soutar, 2001; Teas & Agarwal, 2000). Furthermore, Mathwick et al. (2000) examined consumers’ experiential value derived from using Internet shopping and catalog shopping. The authors used
economic value to describe the quality to price evaluation. Since the purpose of this study was to measure the perceived e-value of an online travel intermediary, wording changes were made to adapt Dodds et al. (1991) and Mathwick et al. (2000) value scales to this study. Three items measured the perceived usefulness aspects of value in terms of time and effort, and five items measured the value-for-money aspects of value in terms of cost and price. The items were measured using eight, seven-point, Likert-type items.

For the perceived usefulness aspects of value, two items were adapted from Dodds et al. (1991) and were selected for measuring consumers' perceived usefulness of an OTI. In their study of perceived service quality, relative price, and perceived value, Sweeney, Soutar, and Johnson (1997) recommend that relative price be operationalized as a perception of price within a range of known prices of equivalent products in the product category. Therefore, in this study, the value-for-money aspect of value was measured as consumers' price and value perceptions of an online travel intermediary.

**Measurement of Perceived E-Quality**

Perceived e-quality was measured with 24 Likert-type items. Thirteen of these items belonged to the perceived technical e-quality aspects of quality and eleven items belonged to the perceived service e-quality aspects of quality. The perceived technical e-quality component was comprised of items that related to the attributes such as access, ease of use, efficiency, and reliability while the perceived service e-quality component was comprised of the items that related to the security, personalization, product/service portfolio, and information attributes of an OTI. The e-quality items were adapted from previous service and technical (e.g., system) quality research (Fornell et al., 1996;
Two items were developed to measure a consumers' perception of the security/privacy attributes of an OTI. The items were adapted from Zeithaml et al. (2000) and Grewal et al. (1998a). Moreover, three items were developed to measure consumers’ perceptions of an OTI level of personalization/customization. The items were adapted from Parasuraman et al. (1988) and Zeithaml et al. (2000), while two items were developed to measure consumers’ perceptions of the reliability of an OTI. The items were adapted from Bailey and Pearson (1983) and Dabholkar et al. (1996). In regards to product quality, three items were developed to measure consumers’ perceptions of product/service quality and the items were adapted from Parasuraman et al. (1988) and Zeithaml et al. (2000), while two items were developed to measure consumers’ perceptions of OTI information quality of which were adapted from Szymanski and Hise (2000) and Doll and Torkzadeh (1998). Three items were developed to measure consumers’ perceptions of OTI access and convenience. The items were adapted from Bailey and Pearson (1983) and Zeithaml et al. (2000). Three items were developed to measure consumers’ perceptions of OTI ease-of-use. The items were adapted from Zeithaml et al. (2000), Szymanski and Hise (2000), and Dabholkar et al. (1996). Finally, three items were developed to measure consumers’ perceptions of OTI efficiency and flexibility. The items were adapted from Zeithaml et al. (2000) and Bitner, Booms and Tetreault (1990).
Measurement of Attitude toward e-Shopping

Consumer attitude toward e-shopping was measured via items that related to the lifestyle enrichment and perceived risk aspects of shopping online. Consumers want travel suppliers to be responsible, reliable, and offer products and services that enhance their lives. Items that related to the lifestyle enrichment were intended to tap into consumers’ feelings of freedom, control and accomplishment, while items that related to perceived risk were intended to tap into consumers’ perception of risk and familiarity when shopping online. A three-item scale for the perceived risk component was adapted from work by Miyazaki and Fernandez (2001) that measured consumers’ perception of safety and trust toward a brand and a five-item scale was adapted from Chaudhuri and Holbrook (2001) that measured the lifestyle enrichment of shopping online. The eight, seven-point, Likert-type scale items were borrowed from other studies. Tables 8, 9, 10, and 11 summarize the measurement of the five endogenous latent constructs and the respective observed variables.
Table 8

*Measurement of the E-Loyalty Variables*

<table>
<thead>
<tr>
<th>Endogenous Variable</th>
<th>Observed Variables</th>
<th>Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudinal E-Loyalty</strong></td>
<td>A-Loyalty 1</td>
<td>1. I am likely to search and purchase travel online with XYZ.</td>
</tr>
<tr>
<td></td>
<td>A-Loyalty 2</td>
<td>2. I always think of XYZ first when looking to make/book travel plans.</td>
</tr>
<tr>
<td></td>
<td>A-Loyalty 3</td>
<td>3. I am willing to pay a price premium for products and services offered at XYZ.</td>
</tr>
<tr>
<td></td>
<td>A-Loyalty 4</td>
<td>4. I am going to purchase over 50% of my future travel at XYZ.</td>
</tr>
<tr>
<td><strong>Behavioral E-Loyalty</strong></td>
<td>B-Loyalty 1</td>
<td>1. I will go out of my way and help my friends, and relatives to do business with XYZ.</td>
</tr>
<tr>
<td></td>
<td>B-Loyalty 2</td>
<td>2. I will complain to XYZ if I experience problems.</td>
</tr>
<tr>
<td></td>
<td>B-Loyalty 3</td>
<td>3. Even if I am offered lower prices at another travel website, I will not switch from XYZ.</td>
</tr>
<tr>
<td></td>
<td>B-Loyalty 4</td>
<td>4. I will recommend XYZ to my friends, relatives, and co-workers.</td>
</tr>
<tr>
<td>Endogenous Variable</td>
<td>Observed Variables</td>
<td>Scale Items</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Perceived E-Value</td>
<td>Value-for-Money 1</td>
<td>1. The travel products/services offered at XYZ are a good value.</td>
</tr>
<tr>
<td></td>
<td>Value-for-Money 2</td>
<td>2. I feel that the travel products/services purchased at XYZ are a good buy</td>
</tr>
<tr>
<td></td>
<td>Value-for-Money 3</td>
<td>3. XYZ offers reasonable rates and fees.</td>
</tr>
<tr>
<td></td>
<td>Value-for-Money 4</td>
<td>4. XYZ is expensive.</td>
</tr>
<tr>
<td></td>
<td>Value-for-Money 5</td>
<td>5. XYZ offers a good value for the money.</td>
</tr>
<tr>
<td>Usefulness 1</td>
<td></td>
<td>6. The travel products purchased at XYZ are economical</td>
</tr>
<tr>
<td>Usefulness 2</td>
<td></td>
<td>7. Offers a quick way to search for and buy travel products</td>
</tr>
<tr>
<td>Usefulness 3</td>
<td></td>
<td>8. XYZ saves me time</td>
</tr>
</tbody>
</table>
Table 10

*Measurement of the E-Quality Variable*

<table>
<thead>
<tr>
<th>Endogenous Variables</th>
<th>Observed Variables</th>
<th>Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived E-Quality</td>
<td>Service Quality 1</td>
<td>1. XYZ provides clear statements assuring my privacy and security</td>
</tr>
<tr>
<td></td>
<td>Service Quality 2</td>
<td>2. XYZ provides 3rd party approvals and tight measures to assure the security of my transactions.</td>
</tr>
<tr>
<td></td>
<td>Service Quality 3</td>
<td>3. XYZ provides recommendations of other travel products I might like</td>
</tr>
<tr>
<td></td>
<td>Service Quality 4</td>
<td>4. XYZ keeps my personal information and travel preferences.</td>
</tr>
<tr>
<td></td>
<td>Service Quality 5</td>
<td>5. XYZ presents customized information (provides different user interfaces) and promotion.</td>
</tr>
<tr>
<td></td>
<td>Service Quality 6</td>
<td>6. XYZ offers high quality travel products</td>
</tr>
<tr>
<td></td>
<td>Service Quality 7</td>
<td>7. XYZ provides prompt customer service</td>
</tr>
<tr>
<td></td>
<td>Service Quality 8</td>
<td>8. XYZ offers a wide assortment of travel products to choose from</td>
</tr>
<tr>
<td></td>
<td>Service Quality 9</td>
<td>9. XYZ provides real-time product information</td>
</tr>
<tr>
<td></td>
<td>Service Quality 10</td>
<td>10. XYZ indicates clear charges (e.g. service charges, processing fees, and or cancellation information) prior to purchase</td>
</tr>
<tr>
<td></td>
<td>Service Quality 11</td>
<td>11. XYZ offers valuable content information.</td>
</tr>
<tr>
<td></td>
<td>Technical Quality 1</td>
<td>12. XYZ offers multiple methods to communicate with the travel company (email, 800#, chat)</td>
</tr>
<tr>
<td></td>
<td>Technical Quality 2</td>
<td>13. XYZ provides access to detailed product information – drop down menus and well-defined links</td>
</tr>
<tr>
<td></td>
<td>Technical Quality 3</td>
<td>14. XYZ provides access to check the status of my transactions/ bookings</td>
</tr>
</tbody>
</table>

109
<table>
<thead>
<tr>
<th>Endogenous Variables</th>
<th>Observed Variables</th>
<th>Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Quality 4</td>
<td>15. XYZ is easy to use and search for travel products</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 5</td>
<td>16. XYZ is easy to complete a transaction/ booking</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 6</td>
<td>17. XYZ is organized and the structure of the online content is easy to follow</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 7</td>
<td>18. XYZ allows freedom to search for travel using a variety of search methods</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 8</td>
<td>19. XYZ offers a variety of payment methods and a quick checkout/purchase</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 9</td>
<td>20. XYZ is an efficient way to purchase my travel products</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 10</td>
<td>21. XYZ provides accurate transactions</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 11</td>
<td>22. XYZ is reliable (e.g. does not freeze during my travel shopping visit)</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 12</td>
<td>23. The user interface of XYZ website is friendly</td>
<td></td>
</tr>
<tr>
<td>Technical Quality 13</td>
<td>24. XYZ offers an attractive website</td>
<td></td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Table 11

Measurement of the Attitudes toward the E-Shopping Variable

<table>
<thead>
<tr>
<th>Endogenous Variable</th>
<th>Observed Variables</th>
<th>Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward E-Shopping</td>
<td>ATES 1</td>
<td>1. Shopping for travel products online with XYZ makes my life easier</td>
</tr>
<tr>
<td></td>
<td>ATES 2</td>
<td>2. Shopping for travel products online with XYZ is convenient</td>
</tr>
<tr>
<td></td>
<td>ATES 3</td>
<td>3. Shopping for travel products online with XYZ is safe</td>
</tr>
<tr>
<td></td>
<td>ATES 4</td>
<td>4. Shopping online gives me control over my shopping activities</td>
</tr>
<tr>
<td></td>
<td>ATES 5</td>
<td>5. Shopping online allows me to shop with less hassle</td>
</tr>
<tr>
<td></td>
<td>ATES 6</td>
<td>6. Shopping online fulfills most of my shopping needs</td>
</tr>
<tr>
<td></td>
<td>ATES 7</td>
<td>7. Shopping online is not risky</td>
</tr>
<tr>
<td></td>
<td>ATES 8</td>
<td>8. Shopping online is familiar to me</td>
</tr>
</tbody>
</table>

Measurement of the Demographic Variables

The demographic variables examined in this study included gender, education, income, marital status and age. The listing of definitions used to operationalize and measure the five demographic variables can be found in Table 12.
Table 12

*Measurement of the Demographic Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female, male (nominal data)</td>
</tr>
<tr>
<td>Education</td>
<td>Level of Education was indicated by the appropriate education level (ordinal data)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married, Single, Never Married, Divorced, Widowed (nominal data)</td>
</tr>
<tr>
<td>Income</td>
<td>Indicated by selecting the appropriate household income range (ordinal data)</td>
</tr>
<tr>
<td>Age</td>
<td>Age in years was indicated by selecting the appropriate age range (ordinal data)</td>
</tr>
</tbody>
</table>

*Measurement of E-Shopping History*

Ten items were used to assess a respondent's shopping history with the online travel merchants. Respondents were first asked to indicate if they have purchased a travel product online in the past twelve months. To assess volume, respondents were then asked in the second item, how many travel products they purchased online during that twelve month period. To assess online versus offline travel purchases, respondents were asked in item four, to reveal the percentage of travel purchased online versus using traditional methods (e.g., call center, visit ticket office). To get a feel for which travel products are most often purchased online, the next question (item five), asked respondents to identify the travel product most often purchased over the internet. To get an idea of which travel websites are most often used, in item six respondents were asked which method (type of website) they preferred to use when purchasing travel products online. Item seven asked
respondents to indicate the relative importance of a set of factors (e.g., brand) that influence their selection of a travel product online. In an attempt at identifying the importance of reward programs, item eight asked respondents if frequent flyer/stay/rental/cruise loyalty programs make a difference in their decision to purchase travel products. Item nine asked how many frequency programs the respondent belonged to, while item ten asked respondents to indicate the approximate amount of money spent for travel products online over the past twelve months. Finally, item 11 asked respondents to indicate their preferred travel website used to purchase travel products online. The preferred travel website was used as a point of reference in the subsequent questions numbered twelve through fifteen.

Data Analysis Method

A Path Analysis technique was employed to test the theoretical model. Path Analysis is a multivariate technique combining the aspects of multiple regression and factor analysis to estimate a series of interrelated dependence relationships simultaneously. Path Analysis provides researchers with a comprehensive and powerful tool for assessing and modifying theoretical models (Anderson & Gebring, 1988). Basically, Path Analysis can do two things. First, a series of separate, but interdependent multiple regression equations can be estimated simultaneously, which cannot be done in a single multiple regression. Second, Path Analysis possesses the ability to represent unobserved concepts in the model and account or measurement error in the estimation process (Hair, Anderson, Tatham, & Black, 1998).
It has been generally accepted that a minimum sample size of 100 is necessary to ensure the appropriate use of maximum likelihood estimation (MLE), an estimation method used in Path Analysis. More subjects allow higher power and increased sensitivity to detect differences among the data. However, as the sample size becomes large (more than 400 or 500), MLE becomes too sensitive and almost any difference is detected, resulting in poor goodness of fit (Carmines & Mclver 1981; Marsh, Balla, & McDonald, 1988; Tanaka, 1987). Thus, some researchers recommend testing the model with a sample size of 200 no matter what the original sample size was, because 200 has been proposed as being the critical sample size (Hoelter, 1983). With 63 items in the questionnaire, and a recommended 5 to 1 ratio of responses to items as appropriate for Path Analysis, then an optimal sample of at least 315 was appropriate (Hair et al., 1998). This study resulted in a usable sample of 342 responses.

In Path Analysis, variables are categorized into two types according to the nature of the causal relationships. Exogenous constructs are variables that are not caused or predicted by other variables in the model. In the path diagram, there are no arrows pointing to the exogenous constructs. In this study, exogenous variables were the observable variables representing the quality, value, and attitudes toward e-shopping aspects of loyalty. Endogenous variables on the other hand, are predicted by one or more constructs that can be both exogenous and endogenous variables. In the model, the variables of attitudinal and behavioral loyalty were the endogenous variables.

In the data analysis, two types of models were specified and estimated; a measurement model and a structural model. The measurement models in this study were sub-models in the Path Analysis that specified the indicators for each construct, and
assessed the reliability for each construct necessary for estimating the causal relationships. The loading coefficients provided estimates of the reliabilities of the indicators and the overall construct when the structural and measurement models were estimated. The structural model was a series of structural equations that represented the interrelationships between the endogenous (dependent) and exogenous (independent) variables and their predictor variables. EQS structural equation modeling software was used for the estimation.

*Causal Modeling*

The application area of modeling has been referred to as causal modeling (Bagozzi, 1982). The notion of causality, more or less explicitly, has been involved in every study. In the marketing modeling literature, a distinction is often made between first and second generation multivariate statistics techniques. With first generation statistical techniques, it is a general term relating to correlation based analysis like linear regression, Logit, ANOVA, MANOVA, etc. In regards to second generation techniques, this name refers to causal modeling and suggests a number of ways in which these techniques are superior to first generation techniques. For instance, causal modeling is known for explicit inclusion of measurement error, (2) an ability to incorporate abstract and latent constructs, (3) an opportunity to not only combine theory and data, but also to confront theory with data. Path Analysis is one of the earliest attempts at dealing with causal relationships, and Structural Equation Modeling (SEM) is the most prevalent approach applied nowadays in customer satisfaction and loyalty research (CS&L) and in
Path Analysis is a second-generation technique. On the contrary to first generation techniques, second generation analysis techniques enable researchers to answer a set of interrelated research questions in a single, systematic and comprehensive analysis by modeling the relationships among multiple independent and dependent constructs simultaneously (Anderson & Gebring, 1988). Gefen et al. (2000) found that the capacity of holistic and simultaneous analysis is what differs greatly from most first generation regression techniques, which can only analyze one layer of linkages between independent and dependent variables. Path Analysis involves three primary components.

1. Indicators — also called manifest variables or observed measures/variables. For questionnaire-based research, each indicator represents a particular question.
2. Latent variables, or construct, concept, factors. Latent variables are used to represent phenomena that cannot be measured directly.
3. Path relationships (correlation, one-way paths, or two way paths).

Path Analysis assesses not only the structural model, but in the same analysis, also evaluates the measurement model. This combined analysis is an integral part of the model, and factor analysis is to be combined in one operation with the hypotheses testing. In consequence, a researcher achieves a more rigorous analysis of the proposed research model and a better methodological assessment tool (Bollen, 1989).
For any proposed theoretical model, the above-mentioned components can be portrayed with a path diagram that represents a set of structural equations. Therefore, another practical distinction between the first and second generation techniques is the special diagrammatic syntax used in Path Analysis. According to the convention used in Path modeling, indicators in paths are usually represented as squares, whereas latent variables are normally drawn as circles. Relationships between latent variables and between latent and observed variables are defined using arrows.

Path Analysis makes a lot of assumptions. The fundamental assumption in Path Analysis models is that the error term in each relationship is uncorrelated with all the independent constructs. The objective of Path modeling is to minimize the difference between the sample covariances and those predicted by the theoretical model. An EQS model may be estimated by seven different methods and the maximum likelihood estimation method is most popular. The statistical validation is based on the rules of thumb. The goodness of fit $\chi^2$ can test the restrictions implied by the model. In other words, the statistical goal is in covariance-based SEM is to show that the operationalization of the theory under exam is corroborated and not confirmed by the data. A chi square test does not confirm a model, but rather fails to reject it (Bullock et al 1994; Rigdon 1998): A Path model is most often used as a confirmatory method. It has been applied to show that the theoretical hypotheses developed in a study were supported and plausible given the data. The explanatory potential of Path Analysis modeling comes for the most part from the estimation procedure alone, and not from the resulting model itself. The core of explanation of Path modeling is that the values predict or explain the covariance of observed variables. But when the estimation of these coefficients is
finished and the model is ready to go, then the model provides very little explanatory value. Figure 9 presents the integrated model of the hypothesized relationships between the attributes and constructs of e-loyalty.

![Figure 9. An Integrative Model of E-Loyalty](image)

**Research Hypotheses**

This study included four hypotheses. It was hypothesized that perceived e-quality, perceived e-value, and consumer attitudes toward e-shopping had direct and positive effects on attitudinal loyalty. Additionally, it was hypothesized that attitudinal e-loyalty had a direct and positive effect on behavioral e-loyalty. Table 9 summarizes the research hypotheses.
Table 13

Hypotheses of Consumers’ E-Loyalty towards Online Travel Intermediaries

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Antecedents of E-Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1:</td>
<td>Consumers’ positive perception of the e-quality of an OTI will positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H2:</td>
<td>Consumers’ positive perception of the e-value of an OTI will positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H3:</td>
<td>Consumers’ positive attitude toward e-shopping will positively predict their attitudinal e-loyalty toward an OTI.</td>
</tr>
<tr>
<td>H4:</td>
<td>Consumers’ positive attitudinal loyalty toward an OTI will positively predict their behavioral e-loyalty.</td>
</tr>
</tbody>
</table>

Chapter Summary

Chapter 3 presented the methodology employed to empirically test the proposed e-loyalty model including sampling protocol, data collection, and questionnaire development. In addition, an operational definition was provided for each of the variables in the model. In the next chapter (4), the procedure for data analysis is covered in more detail. The internal reliability of each construct was examined for each of the multiple item constructs using Cronbach’s coefficient alpha. The results of the exploratory factor analysis were used in a confirmatory factor analysis conducted on the indicators of each latent variable. Finally, path analysis using EQS software was used to test the causal relationships among the variables proposed in the model. Results of the statistical analysis are also presented in the next chapter.
CHAPTER 4

FINDINGS FROM THE STUDY

The purpose of this chapter was to describe the data analysis and present the results of the study. The statistical analysis of the data collected from the questionnaire is presented in the six sections within chapter five. The chapter begins by first providing an overview of respondent characteristics and their online shopping habits for travel. Next, a preliminary analysis was conducted to (1) explore the factor structure, (2) check the scale reliability, and (3) check the data normality. The third section discusses the use of a correlation matrix and maximum likelihood estimation method and provides the results of the exploratory and confirmatory factor analysis. In the fourth section, a two-stage approach to structural equation modeling is employed to assess the research model and the overall fit of the model is described by discussing the results of both the measurement and structural models. The chapter concludes with a presentation of the findings associated with each of the tested hypotheses and a brief chapter summary.

Data Analysis

The demographic analysis of the survey results indicated that respondents were predominantly females (65 %), middle aged at 35-54 years old (53 %), married (55 %), had household incomes greater than $100,000 year (37 %), and were college graduates.
(39 %) or have attended graduate school (24 %). The sample characteristics are presented in Table 14.

Table 14

Sample Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>139</td>
<td>35</td>
</tr>
<tr>
<td>Female</td>
<td>263</td>
<td>65</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade School</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>High School</td>
<td>35</td>
<td>9</td>
</tr>
<tr>
<td>Trade/ Technical School</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Some College</td>
<td>95</td>
<td>23</td>
</tr>
<tr>
<td>College Graduate</td>
<td>159</td>
<td>39</td>
</tr>
<tr>
<td>Graduate School</td>
<td>99</td>
<td>24</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>126</td>
<td>31</td>
</tr>
<tr>
<td>Married</td>
<td>226</td>
<td>55</td>
</tr>
<tr>
<td>Separated</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Divorced</td>
<td>43</td>
<td>10</td>
</tr>
<tr>
<td>Widowed</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $30,000</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td>$30,000-$44,999</td>
<td>54</td>
<td>14</td>
</tr>
<tr>
<td>$45,000-$59,999</td>
<td>42</td>
<td>11</td>
</tr>
<tr>
<td>$60,000-$74,999</td>
<td>54</td>
<td>14</td>
</tr>
<tr>
<td>$75,000-$99,999</td>
<td>57</td>
<td>15</td>
</tr>
<tr>
<td>$100,000 or greater</td>
<td>143</td>
<td>37</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>25-34</td>
<td>87</td>
<td>21</td>
</tr>
<tr>
<td>35-44</td>
<td>89</td>
<td>22</td>
</tr>
<tr>
<td>45-54</td>
<td>125</td>
<td>31</td>
</tr>
<tr>
<td>55-64</td>
<td>57</td>
<td>14</td>
</tr>
<tr>
<td>64 and Over</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. n = 408.
Of the 411 returned questionnaires, 97% (n = 397) of the respondents have purchased a travel product online in the past 12 months and 57% (n = 224) of those respondents purchased between 1 and 5 travel products over that period. When looking at the total amount of travel products purchased over the past 12 months, 74% (n = 296) of the respondents reported that they purchased over half of all of their travel online, with 62% (n = 248) having purchased over 75% of their total travel online. In respect to the travel products available to purchase online (air, hotel, car, cruise, packages), 65% (n = 260) of the respondents purchased airline tickets most often, while 22% (n = 89) purchased hotel rooms online most often. Respondents also reported that of all of the online methods they could use to purchase travel (e.g., travel websites), 42% (n = 168) prefer to book with an online travel merchant (e.g., Expedia), 28% (n = 113) prefer to go directly to a brand website (e.g., Marriott), and 10% (n = 41) go to a discount travel website (e.g., Hotwire). Table 15 presents the most preferred travel websites and Table 16 reports the travel products most often purchased online.
Table 15

**Most Preferred Online Travel Websites**

<table>
<thead>
<tr>
<th>Online Travel Website</th>
<th>Web Address</th>
<th>Site Description</th>
<th>n²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expedia</td>
<td><a href="http://www.expedia.com">www.expedia.com</a></td>
<td>Online travel merchant</td>
<td>53</td>
</tr>
<tr>
<td>Orbitz</td>
<td><a href="http://www.orbitz.com">www.orbitz.com</a></td>
<td>Online travel merchant</td>
<td>25</td>
</tr>
<tr>
<td>Travelocity</td>
<td><a href="http://www.travelocity.com">www.travelocity.com</a></td>
<td>Online travel merchant</td>
<td>16</td>
</tr>
<tr>
<td>Sidestep</td>
<td><a href="http://www.sidestep.com">www.sidestep.com</a></td>
<td>Online meta-scan site</td>
<td>10</td>
</tr>
<tr>
<td>Hotwire</td>
<td><a href="http://www.hotwire.com">www.hotwire.com</a></td>
<td>Online discount site</td>
<td>9</td>
</tr>
</tbody>
</table>

Note. a n = 169.

Table 16

**Travel Products Most Often Purchased Online**

<table>
<thead>
<tr>
<th>Travel Product</th>
<th>n²</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline Tickets</td>
<td>260</td>
<td>65</td>
</tr>
<tr>
<td>Hotel Rooms</td>
<td>89</td>
<td>22</td>
</tr>
<tr>
<td>Car Rentals</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Cruise Berths</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Travel Packages</td>
<td>38</td>
<td>10</td>
</tr>
</tbody>
</table>

Note. a n = 401.
In respect to the factors that are important when selecting travel products online, respondents reported the following travel products as fairly important to very important price (94% / 76%), quality (92% / 52%), convenience (92% / 53%), value (92% / 62%), location (85% / 55%), customer service (85% / 46%), security (84% / 54%), brand (62% / 18%), others recommendation (50% / 13%), variety (50% / 12%), frequency program membership (42% / 19%), and company policy (40% / 14%). Even though 19% of the respondents rated frequency program membership as very important, 50% of the respondents indicated that it was not a factor in their decision to choose a travel product online. Furthermore, 70% (n = 283) of the respondents indicated that they belong to just 1-5 frequency programs.

In respect to the types of travel websites used to purchase travel, 42% (n = 168) preferred to shop at online travel merchant sites, 28% (n = 118) prefer to go to corporate brand sites, and 10% (n = 41) prefer to buy at an online discount travel site (see Table 17).
Table 17

Types of Travel Websites Used to Purchase Travel

<table>
<thead>
<tr>
<th>Travel Website</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Property Site</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>Corporate Brand Site</td>
<td>114</td>
<td>28</td>
</tr>
<tr>
<td>Online Travel Merchant</td>
<td>168</td>
<td>42</td>
</tr>
<tr>
<td>Online Discount Travel Site</td>
<td>41</td>
<td>10</td>
</tr>
<tr>
<td>Online Browser Site</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Travel Agency Site</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Meta Scan Travel Site</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Destination Site</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Travel Guidebook Site</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Travel Magazine Site</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. \(^a\) n = 405.

In terms of the amount of money spent online for travel over the past twelve months (see Table 18), 21% (n = 96) of the respondents spent approximately $1000-$1999, 19% (n = 88) spent $2000-$2999, and 15% (n = 59) spent $500-$599 over the past 12 months. In response to the question of travel website preference, 60% (n = 236) of the respondents indicated that they did not have a preferred travel website, but of the remaining 40% (n = 160) who had a preferred online travel website, 30% (n = 49) chose Expedia.
Table 18

Money Spent Online for Travel over the Past 12 Months

<table>
<thead>
<tr>
<th>Travel Product</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $500</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td>$500-$999</td>
<td>59</td>
<td>15</td>
</tr>
<tr>
<td>$1000-$1999</td>
<td>86</td>
<td>21</td>
</tr>
<tr>
<td>$2000-$2999</td>
<td>77</td>
<td>19</td>
</tr>
<tr>
<td>$3000-$3999</td>
<td>41</td>
<td>10</td>
</tr>
<tr>
<td>$4000-$4999</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>$5000 and Over</td>
<td>69</td>
<td>17</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>13</td>
<td>3</td>
</tr>
</tbody>
</table>

Note. ^n = 409.

Statistical Analysis

The preliminary statistical analysis entailed performing an exploratory factor analysis, a scale reliability check using Cronbach coefficient alpha, and a data normality check.

Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) was employed to check whether the 48 items load on the proposed factors of an Online Travel Intermediary (OTI). The first step in the data analysis was to refine the measures used in the study. Exploratory factor analysis (EFA) using principal components factor analysis with varimax rotation was conducted.
on each multiple-item scale and resulted in a five factor solution (Hair et al., 1998). As a result of cross-loading, four items (e.g., life, expensive, good buy, economical) were eliminated from further analysis. Results of the EFA, showing specific loadings on the factors representing each variable, are provided in Tables 19-23.

Table 19

*Results of the Exploratory Factor Analysis for Perceived E-Value*

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>% Explained Variance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers a quick way to search for and buy travel products (quik)</td>
<td>.875</td>
<td>69.49</td>
<td>.88</td>
</tr>
<tr>
<td>XYZ saves me time (time)</td>
<td>.891</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers reasonable rates and fees (rate)</td>
<td>.889</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ is expensive (exp)</td>
<td>.617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers a good value for the money (valu)</td>
<td>.606</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel the products I purchased at XYZ are a good buy (buy)</td>
<td>.806</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The travel products I purchase at XYZ are economical (econ)</td>
<td>.652</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers good value for the money (mony)</td>
<td>.821</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
## Results of the Exploratory Factor Analysis for Perceived Technical E-Quality

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>% Explained Variance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ offers an attractive website (att)</td>
<td>.80</td>
<td>66.28</td>
<td>.96</td>
</tr>
<tr>
<td>The user interface of XYZ is friendly (iface)</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides accurate transactions (acc)</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ is reliable (rel)</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers multiple methods to communicate with the travel company (e.g., email, 800#, chat) (comm)</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides access to detailed product information – drop down menus and well-defined links (ainfo)</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides access to check the status of my transactions/ bookings (abook)</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ is easy to use and search for travel products (euse)</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ is easy to complete a transaction/ booking (ebook)</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ is organized and the structure of the online content is easy to follow (org)</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ is an efficient way to purchase my travel products (eff)</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers a variety of payment methods and a quick checkout/purchase (var)</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ allows freedom to search for travel using a variety of search methods (frdm)</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 21

Results of the Exploratory Factor Analysis for Perceived Service E- Quality

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>% Explained Variance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ offers valuable content information (cont)</td>
<td>.85</td>
<td>66.28</td>
<td>.96</td>
</tr>
<tr>
<td>XYZ provides clear statements assuring my privacy and security (priv)</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides 3rd party approvals and tight measures to assure the security of my transactions (e.g. Verisign). (seer)</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides recommendations of other travel products I might like (reps)</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ keeps my personal information and travel preferences (pref)</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ presents customized information (provides different user interfaces) and promotions (cstm)</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers high quality travel products (qual)</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides prompt customer service (csvc)</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ offers a wide assortment of travel products to choose from (asst)</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ provides real-time product information (pinfo)</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZ indicates clear charges (e.g. service charges, processing fees, and or cancellation information) prior to purchase (chrg)</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 22

Results of the Exploratory Factor Analysis for Attitudes toward E-Shopping

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>% Explained Variance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping for travel with XYZ makes my life easier (life)</td>
<td>.73</td>
<td>61.10</td>
<td>.88</td>
</tr>
<tr>
<td>Shopping for travel with XYZ is convenient (conv)</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping for travel with XYZ is safe to conduct business (safe)</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping online is not risky (risk)</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping online is familiar to me (fam)</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping online gives me control over my shopping activities (ctrl)</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping online allows me to shop with less hassle (hssl)</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping online fulfills most of my shopping needs (need)</td>
<td>.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 23

*Results of the Exploratory Factor Analysis for E-Loyalty*

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>% Explained Variance</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudinal E-Loyalty</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am likely to search and purchase travel online with XYZ (purch)</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always think of XYZ first when looking to make/book travel plans. (frst)</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to pay a price premium for travel products and services offered at XYZ. (prem)</td>
<td>.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am going to purchase over 50% of my future travel products at XYZ. (futr)</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Behavioral E-Loyalty</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will recommend XYZ to my friends, relatives, and co-workers. (rec)</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will go out of my way and help my friends, relatives and co-workers to do business with XYZ. (help)</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will complain to XYZ if I experience problems. (comp)</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even if I am offered lower prices at another travel website, I will not switch from XYZ. (swit)</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scale Reliability Check

Cronbach coefficient alpha (\(\alpha\)) was calculated for each construct to check the reliability of the measurement. Due to initial poor scale reliability estimates, several items were removed from the scales in order to improve the construct scale reliabilities. From the 44 item, five factor model, the removal of 15 additional items (freedom, variety, attractive, communication, product quality, recommendations, preferences, customization, security, risk, safe, premium, complain, and switch) resulted in a 29 item, five factor model. The remaining items had scale reliabilities above the commonly accepted threshold value of 0.70 (Hair et al. 1998). By eliminating these items, the Cronbach alpha for the five constructs of perceived e-value, perceived e-quality, ATES, attitudinal e-loyalty, and behavioral e-loyalty increased to 0.881, 0.960, 0.888, 0.809, and 0.856 respectively (see table 24).

Table 24

Scale Reliabilities

<table>
<thead>
<tr>
<th>Construct</th>
<th>(n^a)</th>
<th>(\alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived E-Quality</td>
<td>15</td>
<td>0.960</td>
</tr>
<tr>
<td>Perceived E-Value</td>
<td>4</td>
<td>0.881</td>
</tr>
<tr>
<td>Attitudes toward E-Shopping</td>
<td>5</td>
<td>0.881</td>
</tr>
<tr>
<td>Behavioral Loyalty</td>
<td>3</td>
<td>0.809</td>
</tr>
<tr>
<td>Attitudinal Loyalty</td>
<td>2</td>
<td>0.856</td>
</tr>
</tbody>
</table>

Note. \(^a\)n = 29
**Attitudes towards E-Shopping (ATES)**

Exploratory factor analysis revealed one factor for attitude towards e-shopping. The factor originally contained eight items reflecting the perceived risk and lifestyle enrichment aspects of consumer attitudes toward e-shopping. Five items represented the lifestyle enrichment aspects of ATES. Further analysis of the factors did reveal that the internal reliability could be improved by eliminating three items. Loadings on the ATES factor ranged from .605 to .869. Variance explained for perceived risk and lifestyle enrichment was 61.10% and the internal reliability, based on Cronbach’s coefficient alpha, was 0.888 (see Table 22).

**Perceived E-Value**

Exploratory factor analysis revealed another factor labeled perceived e-value which originally contained three items reflecting the perceived usefulness aspects of perceived e-value and five items representing the value-for-money aspects of perceived e-value. Further analysis of the factors did reveal that the internal reliability could be improved by eliminating four items. Loadings on the factor, perceived e-value, ranged from .717 to .891. The variance explained for perceived e-value was 66.28% and the internal reliability, based on Cronbach’s coefficient alpha, was 0.881 (see Table 19).

**Perceived E-Quality**

Exploratory factor analysis revealed one factor labeled perceived e-quality. The e-quality factor originally contained 24 items reflecting the privacy, personalization, product/service, and information quality aspects of perceived service e-quality in addition
to representing the reliability, access/convenience, ease of use, and efficiency aspects of perceived technical e-quality as well as two general perceived technical e-quality items. Further analysis of the e-quality factors did reveal that the internal reliability could be improved by eliminating nine items. The loadings on the factor ranged from .668 to .855. The variance explained for perceived e-quality was 68.28% and the internal reliability, based on Cronbach's coefficient alpha, was 0.960 (see Tables 20 and 21).

E-Loyalty

The exploratory factor analysis also revealed two factors labeled attitudinal e-loyalty and behavioral e-loyalty. The attitudinal e-loyalty factor originally contained four items reflecting attitudinal dimensions of e-loyalty, while behavioral e-loyalty originally contained four items. Further analysis of the factors did reveal that the internal reliability could be improved by eliminating three items. The loadings on e-loyalty ranged from .509 to .870. The variance explained for the factor attitudinal e-loyalty was 62.25% and the variance explained for the factor behavioral e-loyalty was 68.41%. The internal reliabilities for attitudinal and behavioral e-loyalty, based on Cronbach's coefficient alpha, were 0.856 and 0.809 respectively (see table 23).

Normality Check

Many estimation procedures in path analysis assume normal distribution of the data. The analysis of continuous variables using maximum likelihood estimation method inflates the chi-square ($\chi^2$) statistic and standard errors of coefficients and creates an upward bias in critical values needed for determining coefficient significance (Joreskog
and Sorbom, 2001). A skewness index greater than 3.0 and a kurtosis index greater than 10.0 suggest severe deviation from normal distribution. When skewness and kurtosis are between -1.0 and 1.0, non-normality will have little effect on the maximum likelihood estimations (Joreskog and Sorbom 1993). In this study, a number of variables were non-normal as indicated by the skewness and kurtosis indices exceeding the -1.0 to 1.0 (Table 17). Table 17 presents the skewness and kurtosis indices before and after normalization. Many variables still had indices outside the -1.0 to 1.0 range, which required normalization (e.g., EQS normalization) before they were acceptable for further analysis (see Appendix A).

Maximum Likelihood Method

EQS provides seven different estimation methods. Their characteristics and applications are discussed below. The seven estimation methods are: instrumental variables (IV), two-stage least squares (TSLS), un-weighted least square (ULS), generalized least squares (GLS), maximum likelihood (ML), weighted least square (WLS), and diagonally weighted least squares (DWLS). Generally, all methods give consistent results. Often TSLS and ULS are non-iterative methods and are used to compute the starting values for the other methods. ULS, GLS, WLS, and DWLS are iterative methods that obtain estimates by minimizing a particular fit function. ULS, GLS and ML all assume that the observed variables have normal distribution. WLS and DWLS are distribution invariant and require an estimate of the asymptotic covariance matrix of the sample variance. ML is the most commonly used method when the data are normally distributed and WLS when the data are non-normally distributed.
The data of this study was not multivariate normal even after the normal score transformation. Although some variable skewness and kurtosis indices were outside of the commonly acceptable range of -1.0 to 1.0, the estimation took non-normality into account and produced valid results. WLS is the preferred method for non-normal data, but it requires a large sample size (Hair et al., 1998). In this case, with a sample of size of 342, the estimation was first performed using ML.

An analysis was conducted to assess the validity of the scales to be used for the structural model and verify the proposed factor structure of the 29 online travel intermediary attributes. The model fit statistics and factor loadings were examined and possible model modifications explored. Overall, the results from the analysis indicated that each of the multiple-item scales had acceptable construct reliability as evidenced by Cronbach’s coefficient of alpha. Internal reliabilities ranged from 0.809 (behavioral e-loyalty) to 0.960 (perceived e-quality). In total, 19 of the original 48 items were removed due to poor factor loadings, poor reliabilities, or cross loading in order to improve the construct reliabilities.

**Overall Model Fit**

Path Analysis using EQS 6.1 was employed to test the hypotheses. Since the purpose of the study was to describe the effect of the perceived e-quality, e-value, and ATES attributes on attitudinal and behavioral loyalty, a model was assessed at the overall model fit level and the individual construct level. At the overall model level, the goodness of fit indices (e.g. GFI >0.90 and RMSEA<0.05) were met.
Chi-square statistic was used to evaluate how well the model reproduces the sample covariance/correlation matrix. The 29 item, 5 factor model had a significant chi-square ($\chi^2=2245.59$, $p<.001$, $df = 395$). A small chi-square to degrees of freedom statistic indicates good model fit, but in this case the chi-square was significant, suggesting a poor fit. The normed chi-square ($\chi^2/df = 5.8$) indicates a marginal fit given the preferred value of $\chi^2/df < 5.0$ (Tanaka & Huba, 1985).

However, since chi-square is sample size sensitive (e.g. $n-1$ times the minimum value of the fit function), it is almost always significant when the sample size is bigger than 100 (Hair et al. 1998). Therefore, to determine the model fit, additional goodness of fit indices (e.g., GFI, CFI, and NFI) and root mean square of approximation (RMSEA) need to be examined. GFI does not depend on sample size explicitly and measures how much better the model fits compared to no model at all (Tanaka & Huba, 1985). An acceptable model should have a GFI, CFI, and/or RFI greater than 0.90. RMSEA measures the discrepancy per degree of freedom and a RMSEA value less than 0.5 indicates a close fit and values over 1.0 represent poor fit (Browne & Cudeck 1993).

With the exception of the GFI indices, the model tested in this step had good fit indices (GFI=.69, CFI=.96, NFI=.95). The model also had a poor root mean indices (RMSEA=.012), suggesting a poor fit of the specified factor structure model. The weakness lies in the poor GFI and RMSEA measures, reflecting a poor fit to the data and a likely poor fit if tested to another sample.

Given that chi-square and RMSEA suggested indices suggested a lack of fit, this study looked to improve the model fit by examining factor loadings, reliabilities, and modification indices. First, a review of all factor loadings was made to ensure
significance at alpha = 0.05. Next, another review of the item reliabilities was conducted to ensure all are above the recommended cut-off of 0.50 (Hair et al. 1998). Subsequent to the review of reliabilities, loadings, and modification indices, a total of 15 items were eliminated from further analysis. The remaining 29 items loaded as follows on the five constructs of ATES (5 items), perceived e-quality (15 items), perceived e-value (4 items), attitudinal e-loyalty (2 items), and behavioral e-loyalty (3 items).

The 29 item, 5 construct, model was tested again using ML. Table 19 shows the result of the final path analysis. ($\chi^2 = 11.485, p = .0093, df = 3$). The modified model resulted in a reduced normalized chi-square ($\chi^2/df = 3.83$), below the cut-off of less than 5.0. In addition, the revised model also had improved goodness of fit indices (GFI = .98, CFI = .99, NFI = .99, RMSEA = .091 with confidence intervals of .040, .149).

Since the primary objective of the research model was to explain the nature of the relationships between the constructs, a correlation matrix (see Table 25) was used to estimate the model (Hair et al., 1995).
Table 25

*Model Correlation Matrix*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.825</td>
</tr>
<tr>
<td>E-Value</td>
<td>.825</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATES</td>
<td>.613</td>
<td>.530</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudinal Loyalty</td>
<td>.780</td>
<td>.747</td>
<td>.530</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Loyalty</td>
<td>.577</td>
<td>.553</td>
<td>.553</td>
<td>.740</td>
<td></td>
</tr>
</tbody>
</table>

*The Model*

Each of the constructs was to be examined separately to verify the statistical significance of the indicator loadings and to evaluate each construct's variance. Statistical results of the measurement model are presented in Table 19 and include the standardized factor loadings, standard errors, construct reliabilities, and proportions of variance extracted for each construct. The analysis indicated that the factor loadings of indicators of each construct were statistically significant and sufficiently high, supporting the underlying relationships among the indicators and constructs.

Additionally, results from the measurement model indicated acceptable reliability and reasonable variance. Computations using the standardized loadings and measurement error for each construct indicated reliabilities ranging from 0.649 for the variable perceived value to 0.956 for the variable perceived quality. Thus, all of the constructs exceeded the minimum criterion of 0.60 recommended by Bagozzi and Yi (1988). The variance extracted measures ranged from 0.723 for perceived e-value to 0.900 for
perceived e-quality. Thus, the variance extracted measures exceeded the minimum
criterion of 0.50 recommended by Bagozzi and Yi (1988).

An examination of the model revealed that all model estimates were in the
hypothesized direction as predicted in the proposed research model. In addition, all of the
paths were statistically significant (p<.001). The threshold value for variance extracted is
0.5 for a construct (Hair et al., 1998). In addition, item reliability should exceed 0.50,
which roughly corresponds to a standardized loading of 0.70. All latent constructs and
indicator variables were included in the measurement model. The overall model fit for the
revised model was good ($\chi^2=11.485$, $p=.0093$, $df = 3$, $\chi^2/df = 3.83$), GFI = .987, CFI =
.993, NFI = .990, RMSEA = .091).

Tests of Hypotheses

Hypotheses one, two, and three predicting three direct and positive links from
perceived e-quality (H1), perceived e-value (H2), and ATES (H3) to attitudinal e-loyalty
were supported in terms of direction (positive) and significance (p<.05). The results are
shown in Figure 10, indicating positive and significant paths of $\beta_{41}=.412$ ($p \leq .001$),
$\beta_{42}=.312$ ($p \leq .001$), and $\beta_{43}=.180$ ($p \leq .001$) for hypotheses 1, 2, and 3 respectively.

Hypothesis four, predicting a direct and positive link from perceived attitudinal e-
loyalty and behavioral e-loyalty (H4) was supported in terms of direction and
significance. The results demonstrate positive and significant paths for perceived e-
quality ($\gamma_{51}=.305$ ($p \leq .001$) and behavioral loyalty.

The two strongest direct effects in the model were identified as the influence of
perceived e-quality ($\beta_{41}=.412$) and perceived e-value ($\beta_{42}=.312$) on attitudinal e-loyalty.
Chapter Summary

The path analysis model revealed support for the proposed e-loyalty research model. In the concluding chapter, the statistical results from this chapter will be interpreted in greater detail. In addition, implications for theory and practice are offered. Finally, the limitations of the study and suggestions for future research are discussed.
CHAPTER 5

CONCLUSIONS

The purpose of this research was to examine the relationships between the online travel intermediary attributes, perceived quality, value and attitude components, and consumer e-loyalty toward an online travel intermediary. Based on the review of the literature and findings from previous studies, five e-loyalty components and 29 OTI attributes were identified. A hierarchical, integrated model was constructed to describe the e-store attributes, perceived quality, value and attitude toward e-shopping components, and the attitudinal and behavioral e-loyalty relationships. Path Analysis supported all of the hypothesized relationships. This chapter concludes this research by discussing the statistical results from Chapter 5, providing implications for future research and management, identifying the limitations associated with the study, and providing recommendations for future research.

Discussion of Findings

In Chapter 1, this study raised two sets of questions. First, what are the perceived quality, value, and ATES components and how do they influence consumer e-loyalty? Second, what are the antecedents of consumers’ perceived quality, value, and ATES and what is the relationship between attitudinal and behavioral e-loyalty and the antecedents? The purpose of these research questions was to identify the drivers of e-loyalty that
would assist online travel intermediaries in improving their web performance and retention of customers.

For the most part, extant models representing the relationships among loyalty, quality and value have done so in traditional consumption settings (i.e., product, service, and retail), which are characterized by a high degree of human interaction. Online shopping differs in that it is entirely facilitated by a technological focus rather than a physical and/or human interface. Despite this difference, scholars have conceptualized the chain of effects among perceived quality, value, and customer loyalty in technology-based environments to be similar to those found in traditional product and service settings (Parasuraman and Grewal, 2000; Zeithaml, 2000). Conceptual models have yet to incorporate the three components together—quality, value, and attitudes toward shopping in an online context. This study draws upon the interrelationships between quality, value, and consumer attitudes toward shopping online in order to examine the relationship in the context of shopping for travel with online travel intermediaries.

In this study, e-loyalty has been operationalized as a combination of consumers’ perceptions of an OTI quality, value, and attitude towards e-shopping. Based on previous research, this study identified 48 e-loyalty attributes. The attributes were related to the perceived technical and service quality, perceived usefulness, value-for-money, perceived risk, lifestyle enrichment, behavioral loyalty, and attitudinal loyalty aspects of quality, value, attitudes and loyalty.

The means-end chain theory, technology adoption model, and the service-quality-value-satisfaction-behavioral intention model, were adapted to construct an integrated model of the relationships between the OTI attributes, perceived quality, value, and
attitude components, and consumer e-loyalty. According to means-end chain theory, consumer’s perceptions are constructed in a hierarchical manner. The evaluation of the OTI attributes occurs before the higher-level, more abstract perceptions of consequences which further lead to consumer goals (also referred to as the desired end-states). The hierarchical model of e-loyalty proposed by this study hypothesized that: (1) the three loyalty components (quality, value, ATES) will have direct and positive effects on attitudinal e-loyalty; and (2) attitudinal e-loyalty will have direct and positive effects on behavioral e-loyalty.

The Effects of E-Quality, E-Value, and Attitudes toward E-Shopping

The first three hypotheses (H1 – H3) proposed the positive effects of consumer’s perception of the e-quality, e-value and ATES of an OTI on their attitudinal e-loyalty to an OTI. All three hypotheses were supported. Specifically, consumer’s perception of OTI e-quality, e-value and ATES had a direct and positive effects on a consumer’s attitudinal e-loyalty to an OTI. Among the three e-loyalty components, perceived e-quality had the biggest impact on e-loyalty (B41=.412, p<.001). The direct effects of perceived e-value and ATES had less impact on e-loyalty (B42=.312, p<.001 and B43=.180, p<.001 respectively). The last hypothesis (H4) proposed the relationship between attitudinal e-loyalty and behavioral e-loyalty. The hypothesis was supported. Consumers’ attitudinal e-loyalty had a strong effect on behavioral e-loyalty (B54=.740, p<.001).

These results suggest that in an online travel distribution setting, the perceived e-quality of an OTI website, including both technical and service quality attributes, (e.g., ease of use, reliability, access/convenience, and efficiency/flexibility,
personalization/customization, information quality, product/service portfolio, privacy/security) are vital in building consumer’s attitudinal and behavioral loyalty. Consistent with previous research, the perceived value of an OTI was also significant and important to building consumers’ loyalty. The findings suggest that consumers evaluation of value, which includes a ‘price’ component is not the most important driver of loyalty and in concert with prior studies, the combination of quality and value are better indicators of purchase intent and loyalty than value alone. It is also no surprise that the attitude toward e-shopping component was significant. With online shoppers’ concern about their privacy and financial security, an OTI’s safety feature and reputation for secure transactions is imperative for building consumers’ trust and loyalty intention. In addition and considering consumers’ relentless pursuit for ways to make life easier, it is imperative that an OTI website allow consumers to perform transactions with more control, freedom and less hassle.

Theoretical Implications

The study of loyalty and its drivers has received considerable attention in research on service and retailing environments. However, there has been limited examination of this topic in an online context and, in particular, non-existent in an online travel context. Research of loyalty in e-commerce has tended to be descriptive in nature rather than theory-driven. This study was the first effort to comprehensively examine and test the determinants of loyalty in an online travel context. This research expanded the body of knowledge in services marketing and hospitality information technology as well as provided a new model of service e-loyalty. This study also extended the use of the e-
SERVQUAL instrument to the travel market and developed a multidimensional instrument to measure service quality, value, and attitude towards e-shopping. Furthermore, an assessment was made of the relationships among e-quality, e-value, ATES, on both attitudinal and behavioral e-loyalty.

This study examined the construct of e-loyalty from a hierarchical perspective by examining the relationships between the perceived e-loyalty components (e-quality, e-value, attitude toward e-shopping) and e-loyalty attributes (technical e-quality, service e-quality, risk, usefulness, value-for-money, lifestyle enrichment, and risk). Specifically, the e-loyalty components were proposed to have direct and indirect effects on e-loyalty.

Research on consumer e-loyalty toward online travel intermediaries is non-existent in the literature. To date there have been no studies of the individual concepts of perceived value, quality, or consumer attitude towards shopping online for travel. In addition to having addressed the need for study of these constructs in the online travel context on an individual construct basis, this study went further as the first to integrate the three concepts together to predict consumer loyalty.

Different from previous services and information technology research, this study (1) explored the concept of e-quality from a technical quality (e.g., ease of use) and service quality (e.g., customer service) perspective; (2) examined perceived value from a value-for-money (e.g., price) and perceived usefulness (e.g., non-price) perspective; and (3) explored consumer attitude toward shopping online from a lifestyle enrichment (e.g., freedom) and perceived risk (e.g., safe) perspective.

Using a correlation matrix for the analysis of the structural model, this study compared the magnitude of the effects of the three e-loyalty components on attitudinal
and behavioral e-loyalty. Perceived e-quality had the biggest impact on attitudinal e-
loyalty, followed by perceived value and attitude towards e-shopping. The relative
closeness in importance of both the quality and value components suggests that the key
benefits sought by consumers from an online travel intermediary are similar to those
sought from a traditional travel intermediary, where quality and value are both important.

This study was the first to simultaneously test the effects of three e-loyalty
components on both attitudinal and behavioral e-loyalty in a hierarchical model.
Although the importance of perceived quality is well documented in prior work, their
effect on e-loyalty in an online travel setting has not been tested empirically. Just as in
traditional travel retail settings, product assortment, product quality, customer service,
information, communication, security and privacy, reliability, access and convenience,
and customization are all important factors in consumer evaluation of an online travel
service firm. In addition, the findings in this study were in line with previous research
suggests that the importance of the navigational features of a website and the quality of
product information presented online will affect consumers’ shopping experience
(Novak, Hoffman, & Duhacek, 2002) and attitude (Childers, Carr, Peck, & Carson,
2001).

Managerial Implications

Findings from the study provided insights for online travel intermediaries in
identifying important e-loyalty drivers, understanding consumer needs, and improving
online performance. Customer e-loyalty is a good indicator of company profit and
therefore understanding the drivers and dimensions is important to online travel
intermediaries. Strategies may be developed to improve customer e-loyalty by addressing the gaps among the quality, value and ATES attributes. This measurement instrument of Internet e-loyalty can be applied by other online travel organizations or service businesses to assess e-quality, e-value, ATES, and e-loyalty. Managers can use the framework and model to improve e-service performance, retain customers, and improve profitability. Specifically, this study provides the following implications for online retailers.

In order to build consumer e-loyalty, an online travel intermediary should create a technically efficient, easy-to-use, reliable, convenient, secure, customized website supported by strong customer service and complete product information. The findings from this study suggest that the quality of a website is more important in building e-loyalty than value or consumer attitude towards e-shopping. Online shopping eliminates the constraints of time zone and geographic location normally associated with traditional travel intermediaries. Consumers can shop for travel anywhere at anytime with the access of the Internet. This feature dramatically increases the shopping efficiency compared to shopping from a physical travel store. However, online travel intermediaries should not assume that shopping online automatically brings efficiencies to consumers. In this study, perceived technical quality was the single most important determinant of e-loyalty and online retailers should continue to make their websites more technically efficient and easy-to-use.

A central question to travel distribution is whether consumers are more loyal to a particular online travel intermediary (or group of intermediaries) or price? Loyalty to online travel intermediaries can be achieved with other means than price competition. A
common myth of travel distribution is that online travel intermediaries (e.g., online travel merchants or discounters such as Expedia or Priceline) have the lowest prices and therefore can survive and excel in the competitive travel market. The reality is that the many successful online retailers or travel intermediaries do not necessarily offer the lowest prices (Berry, 2001; Baker et al., 2001; Marn, 2000). This study confirms this reality in that the perceived e-quality of a travel intermediary website is more important than the perceived value aspects of a travel intermediary website.

Similar to online product retailing, the attributes of security, safety, and privacy are important issues in building trust in online travel distribution. Internet technology enables the easy collection of consumer and transactional information, which allows online firms to better target their customers (Raghu, Kannan, Rao, & Whinston, 2001). Consumers have become more concerned about how their personal information is being collected, used, and protected, and whether disclosing personal and financial information on the Internet is safe (Hoffman, Novak, & Peralta, 1999; Miyazaki & Fernandez, 2001). Following the recent rash of hacker attacks and theft of personal and financial information from banking, credit, retail, and service firms in 2004, consumers’ overall security concern has increased substantially. Online retailers who stress the importance of consumer privacy and security and offer third party assurances (e.g., Verisign) are more likely to reduce the perception of risk and increase the perception of safety— which as supported by this study, will lead to a more positive attitude toward shopping online and consumer e-loyalty.
Limitations and Future Research

As a pioneering work in examining the loyalty drivers in an online travel distribution context, this study proposed a theoretical model that examined and tested the determinants of e-loyalty to online travel intermediaries. The following sections discuss the limitations of the study and provide directions for future research.

A methodological concern is that the sample was Internet-shopper-for-travel focused. Even though the sample respondents were legitimate online travel shoppers, their behavior might be different from other customers due to experience, income, or age. In addition, the sample was derived from a list of online travel company customers and therefore their views may not be representative of non-travel company customers or shoppers.

In addition, the sample size could be larger if a follow up survey was conducted. An important lesson from this web-based survey using an email invitation letter is the necessity to reduce complaints to a minimum. More specifically, an email invitation should be carefully examined by an email security and privacy expert before it goes out to potential subjects. In addition to the problems sending an email invitation, the low usable response rate (3%) was also a result of consumer actions in response to concerns with privacy and security. Even though the subjects opted in to participate in communications with the online travel supplier, there were effects of instant delete, spam blockers and 'away or out of the office' messaging was reflected in the low response rate. Therefore, caution should be taken when generalizing the findings of this study.
The e-loyalty attributes were measured by scales adapted from previous research in the relevant marketing and information technology fields with an emphasis on the constructs of quality, value, attitudes toward online shopping, satisfaction and loyalty. Constructs that are unique to online travel retailing should be measured. Considering that perceived technical quality, perceived service quality, and perceived usefulness were the most important attributes in determining e-loyalty, future research should further examine the operationalization of these concepts. Additional scales should be developed to facilitate the future research of these concepts in addition to that of perceived value and consumer attitudes towards shopping online.

Finally, this study focused on examining the loyalty drivers for online travel intermediaries that sell intangible services and products. Perceptions of traditional travel suppliers were not included in this study. Future research should identify important attributes that consumers use to evaluate traditional travel suppliers and how these attributes affect consumer loyalty. Furthermore, future research comparing the perceptions of quality and value and the relationship to loyalty to online versus traditional travel intermediaries would also be fruitful.
APPENDIX A

NORMALITY CHECK FOR RAW DATA AND NORMAL SCORES
Table 26

*Model Correlation Matrix*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Raw Skewness</th>
<th>Data Kurtosis</th>
<th>Normal Skewness</th>
<th>Scores Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRDM</td>
<td>5.39</td>
<td>-.963</td>
<td>1.028</td>
<td>-.963</td>
<td>1.028</td>
</tr>
<tr>
<td>VAR</td>
<td>5.51</td>
<td>-1.044</td>
<td>.950</td>
<td>-1.024</td>
<td>.893</td>
</tr>
<tr>
<td>EFF</td>
<td>5.88</td>
<td>-1.338</td>
<td>1.989</td>
<td>-1.336</td>
<td>1.929</td>
</tr>
<tr>
<td>AINFO</td>
<td>5.50</td>
<td>-.805</td>
<td>.316</td>
<td>-.794</td>
<td>.277</td>
</tr>
<tr>
<td>ABOOK</td>
<td>5.75</td>
<td>-1.066</td>
<td>.770</td>
<td>-1.047</td>
<td>.725</td>
</tr>
<tr>
<td>COMM</td>
<td>5.25</td>
<td>-.706</td>
<td>.063</td>
<td>-.964</td>
<td>.028</td>
</tr>
<tr>
<td>EUSE</td>
<td>5.79</td>
<td>-1.439</td>
<td>2.402</td>
<td>-1.393</td>
<td>2.201</td>
</tr>
<tr>
<td>EBOOK</td>
<td>5.97</td>
<td>-1.570</td>
<td>3.112</td>
<td>-1.570</td>
<td>3.057</td>
</tr>
<tr>
<td>ORG</td>
<td>5.90</td>
<td>-1.431</td>
<td>2.391</td>
<td>-1.379</td>
<td>2.206</td>
</tr>
<tr>
<td>ACC</td>
<td>6.11</td>
<td>-1.783</td>
<td>4.062</td>
<td>-1.774</td>
<td>3.206</td>
</tr>
<tr>
<td>REL</td>
<td>6.04</td>
<td>-1.641</td>
<td>3.639</td>
<td>-1.618</td>
<td>4.056</td>
</tr>
<tr>
<td>QUAL</td>
<td>5.94</td>
<td>-1.371</td>
<td>2.611</td>
<td>-1.353</td>
<td>6.388</td>
</tr>
<tr>
<td>CSVVC</td>
<td>5.67</td>
<td>-1.207</td>
<td>1.688</td>
<td>-1.198</td>
<td>2.585</td>
</tr>
<tr>
<td>ASST</td>
<td>5.64</td>
<td>-.974</td>
<td>.712</td>
<td>-.969</td>
<td>1.729</td>
</tr>
<tr>
<td>RECS</td>
<td>5.03</td>
<td>-.502</td>
<td>-.219</td>
<td>-.515</td>
<td>.747</td>
</tr>
<tr>
<td>PREFS</td>
<td>5.42</td>
<td>-.898</td>
<td>.402</td>
<td>-.868</td>
<td>-.163</td>
</tr>
<tr>
<td>CSTM</td>
<td>5.11</td>
<td>-.515</td>
<td>.607</td>
<td>-.513</td>
<td>.410</td>
</tr>
<tr>
<td>Variable</td>
<td>Mean</td>
<td>Raw Skewness</td>
<td>Data Kurtosis</td>
<td>Normal Skewness</td>
<td>Scores Kurtosis</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>--------------</td>
<td>---------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>CONT</td>
<td>5.71</td>
<td>-1.212</td>
<td>1.829</td>
<td>-1.206</td>
<td>0.026</td>
</tr>
<tr>
<td>PRIV</td>
<td>5.75</td>
<td>-1.188</td>
<td>1.568</td>
<td>-1.176</td>
<td>1.891</td>
</tr>
<tr>
<td>SECR</td>
<td>5.26</td>
<td>-.536</td>
<td>-.339</td>
<td>-.515</td>
<td>1.566</td>
</tr>
<tr>
<td>PINFO</td>
<td>5.71</td>
<td>-1.073</td>
<td>.852</td>
<td>-1.047</td>
<td>-.363</td>
</tr>
<tr>
<td>CHRG</td>
<td>5.81</td>
<td>-1.379</td>
<td>1.975</td>
<td>-1.363</td>
<td>.758</td>
</tr>
<tr>
<td>IFACE</td>
<td>5.73</td>
<td>-1.307</td>
<td>1.938</td>
<td>-1.289</td>
<td>1.991</td>
</tr>
<tr>
<td>QUIK</td>
<td>5.92</td>
<td>-1.315</td>
<td>1.846</td>
<td>-1.279</td>
<td>1.927</td>
</tr>
<tr>
<td>TIME</td>
<td>6.05</td>
<td>-1.748</td>
<td>3.586</td>
<td>-1.721</td>
<td>1.780</td>
</tr>
<tr>
<td>RATE</td>
<td>5.89</td>
<td>-1.452</td>
<td>2.596</td>
<td>-1.427</td>
<td>3.515</td>
</tr>
<tr>
<td>EXP</td>
<td>3.22</td>
<td>.401</td>
<td>-.276</td>
<td>.376</td>
<td>2.556</td>
</tr>
<tr>
<td>MONY</td>
<td>5.60</td>
<td>-.972</td>
<td>1.012</td>
<td>-.956</td>
<td>-.339</td>
</tr>
<tr>
<td>LIFE</td>
<td>5.74</td>
<td>-1.254</td>
<td>1.911</td>
<td>-1.227</td>
<td>1.022</td>
</tr>
<tr>
<td>PURC</td>
<td>5.92</td>
<td>-1.595</td>
<td>3.752</td>
<td>-1.559</td>
<td>1.805</td>
</tr>
<tr>
<td>VALU</td>
<td>4.88</td>
<td>-.152</td>
<td>-.041</td>
<td>-.162</td>
<td>3.673</td>
</tr>
<tr>
<td>FRST</td>
<td>5.59</td>
<td>-.979</td>
<td>.785</td>
<td>-.953</td>
<td>-.008</td>
</tr>
<tr>
<td>PREM</td>
<td>3.69</td>
<td>.120</td>
<td>-.701</td>
<td>.096</td>
<td>.722</td>
</tr>
<tr>
<td>SAFE</td>
<td>5.63</td>
<td>-.936</td>
<td>1.272</td>
<td>-.918</td>
<td>1.268</td>
</tr>
<tr>
<td>RECO</td>
<td>5.65</td>
<td>-.955</td>
<td>1.091</td>
<td>-.949</td>
<td>1.126</td>
</tr>
<tr>
<td>HELP</td>
<td>4.69</td>
<td>-.357</td>
<td>-.249</td>
<td>-.374</td>
<td>-.222</td>
</tr>
<tr>
<td>ECON</td>
<td>4.93</td>
<td>-.456</td>
<td>.018</td>
<td>-.450</td>
<td>-.002</td>
</tr>
<tr>
<td>Variable</td>
<td>Mean</td>
<td>Raw Skewness</td>
<td>Data Kurtosis</td>
<td>Normal Skewness</td>
<td>Scores Kurtosis</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>--------------</td>
<td>---------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>COMP</td>
<td>5.08</td>
<td>-1.318</td>
<td>1.609</td>
<td>-1.288</td>
<td>1.512</td>
</tr>
<tr>
<td>SWIT</td>
<td>3.02</td>
<td>.517</td>
<td>-.676</td>
<td>.467</td>
<td>-.765</td>
</tr>
<tr>
<td>BUY</td>
<td>2.43</td>
<td>1.122</td>
<td>.519</td>
<td>1.112</td>
<td>.486</td>
</tr>
<tr>
<td>FUTR</td>
<td>4.60</td>
<td>-.288</td>
<td>-.203</td>
<td>-.285</td>
<td>-.175</td>
</tr>
<tr>
<td>CTRL</td>
<td>5.51</td>
<td>-.945</td>
<td>.886</td>
<td>-.944</td>
<td>.904</td>
</tr>
<tr>
<td>HSSL</td>
<td>5.78</td>
<td>-1.285</td>
<td>1.609</td>
<td>-1.280</td>
<td>1.617</td>
</tr>
<tr>
<td>NEED</td>
<td>5.33</td>
<td>-.926</td>
<td>.477</td>
<td>-.928</td>
<td>.501</td>
</tr>
<tr>
<td>CONV</td>
<td>5.26</td>
<td>-.764</td>
<td>.276</td>
<td>-.766</td>
<td>.306</td>
</tr>
<tr>
<td>RISK</td>
<td>4.66</td>
<td>-.342</td>
<td>.944</td>
<td>-.345</td>
<td>-.585</td>
</tr>
<tr>
<td>FAM</td>
<td>5.86</td>
<td>.276</td>
<td>.444</td>
<td>-.936</td>
<td>.441</td>
</tr>
</tbody>
</table>
APPENDIX B

QUESTIONNAIRE
UNLV Survey of Consumer's Perspectives on Online Travel Websites

You are invited to participate in this research study by taking this simple survey. It has been designed to take between 7 to 10 minutes of your time and all results will be kept confidential.

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice.

All information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for at least 3 years after completion of the study. After the storage time the information gathered will be destroyed.

If you have any questions regarding this research or experience harmful effects as a result of participation please contact director of graduate program, Dr. Pearl Brewer, UNLV, 702-895-3643 or email to brewer@ccmail.nevada.edu

If you have any questions about the right of research subjects please contact the UNLV Office for the Protection of Research Subjects at 702-895-2794.

Thanks for your participation. Your opinions are valuable to us!

The principal risk in this research would be potential harm resulting from a breach of confidentiality. For this reason, you do not have to sign the Informed Consent. If you wish to be identified with this research study, you may sign. Your Name:
UNLV Survey of Consumer's Perspectives on Online Travel Websites

2. During the last 12 months, have you purchased any travel product such as airline tickets, hotel rooms, car rentals, cruise line accommodations, or travel packages (include a combination of two or more of the above travel products)?

[ ] Yes [ ] No

3. If yes, approximately how many travel products have you purchased over the Internet over the last 12 months?

[ ] 1 - 5
[ ] 6 - 10
[ ] 11 - 15
[ ] more than 15

4. Considering all of the travel products you purchased in the past 12 months, approximately how much was purchased over the Internet versus purchased using traditional travel methods (e.g. by phone call or visit to a travel agent, call center, or ticket office)?

[ ] under 25 % of all purchases
[ ] 26 - 50 % of all purchases
[ ] 51 - 75 % of all purchases
[ ] 76 - 100 % of all purchases
Of the following travel product(s), please choose one that you are most often buy over the Internet? 

- [ ]

Of the following methods to purchase travel products over the Internet, please identify the top method that you prefer to use when purchase a travel product.

- go to an individual hotel website (such as The Hyatt Downtown St Louis)
- go to a company brand website (such as Delta Airlines, Best Western Hotels, Hertz, Carnival Cruise Lines)
- go to an online travel merchant website (such as Expedia, Travelocity, Orbitz,)
- go to an online discount travel website (such as Hotwire, Priceline)
- go to an online browser (such as Google, Yahoo, AOL, Excite)
- go to an online website of a traditional travel agency (such as Carlson Travel, Liberty Travel, AAA)
- go to an online travel meta-scan website (such as Kayak, Sidestep, Travelx, Mobissimo, Farechase)
- go to an online destination websites (such as those for a City, State, or Theme park attraction)
- go to an online travel guidebook websites (such as Frommers, Fodors, or Lonely Planet)
- go to an online travel magazine or newspaper website (such as Conde Nast, NY Times, USA Today)
Please rate the following factors in terms of importance when selecting a travel product over the Internet?

<table>
<thead>
<tr>
<th>Factor</th>
<th>1 not important at all</th>
<th>2 not so important</th>
<th>3 neutral</th>
<th>4 fairly important</th>
<th>5 very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Other's recommendation</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Company policy</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Variety</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Customer Service</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Convenience</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Frequent membership loyalty program

8

Do frequent flyer/stay/driver/cruise loyalty programs make a difference in your decision process to purchase a travel product?

YES  NO

9

Approximately, how many frequent flyer/stay/driver/cruise loyalty programs are you a member of?

- none
- 1-5
- 6-10
- 11-15
- more than 16

10

Over the past 12 months, what was the approximate amount of money you paid for all of the travel products you purchased over the internet?

- Less than $500
- $500 - $999
- $1000 - $1999
- $2000 - $2999
- $3000 - $3999
When purchasing travel products over the Internet, do you have a preferred online travel website that you use for purchasing your travel products? (please identify)

If yes, please identify your preferred online travel website

You have completed 35% of survey questions!
you used to book travel. In regards to your experience with the travel website identified as XYZ below, please indicate how much you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Mostly disagree</td>
<td>Somewhat disagree</td>
<td>Neutral</td>
<td>Somewhat agree</td>
<td>Mostly agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

**XYZ allows freedom to search for travel using a variety of search methods**


**XYZ offers a variety of payment methods to checkout/purchase.**


**XYZ is an efficient way to make my purchase my travel products**


**XYZ provides access to detailed product information- drop-down menus and well-defined links**


**XYZ provides access to check the status of transactions/bookings**


**XYZ offers multiple methods to communicate with the travel company (email, 800#, chat)**


**XYZ is easy to use and search for travel products**


**XYZ is easy to complete a transaction/booking**


**XYZ is organized and the structure of the online content is easy to follow**

In regards to the quality offered by the online travel website identified as XYZ below, please indicate the extent that you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ provides accurate transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ is reliable - (e.g. does not freeze during my travel shopping visit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ offers an attractive website</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ offers high quality travel products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ provides prompt customer service.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ offers a wide assortment of travel products to choose from.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ provides recommendations of other travel products I might like.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ keeps and my personal information and travel preferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ presents customized information (provides different user interfaces) and promotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>XYZ offers valuable content information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
XYZ provides clear statements assuring my privacy and security

XYZ provides 3rd party approvals and tight measures to assure the security of my transactions (e.g. Verisign)

XYZ provides real-time product information

XYZ indicates clear charges (e.g. service charges, processing fees and/or cancellation information) prior to purchase.

XYZ provides a friendly website interface

You are doing great!
You have completed 70% of survey questions!

UNLV Survey of Consumer's Perspectives on Online Travel Websites

In regards to the value offered by the online travel website identified as
XYZ below, please indicate the extent that you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th></th>
<th>1 Strongly disagree</th>
<th>2 Mostly disagree</th>
<th>3 Somewhat disagree</th>
<th>4 Neutral</th>
<th>5 Somewhat agree</th>
<th>6 Mostly agree</th>
<th>7 Strongly agree</th>
</tr>
</thead>
</table>
I am willing to pay a price premium for products and services offered at XYZ.

I feel safe in shopping for travel with XYZ

I will recommend XYZ to my friends, relatives, and co-workers.

I would go out of my way and help my friends, relatives, and coworkers to do business with XYZ.

The travel products I purchase at XYZ are economical

I will complain to XYZ if I experience problems.

Even if I am offered lower prices at another travel website, I will not switch from XYZ.

I feel the travel products I purchased at XYZ are a good buy

I am going to purchase over 50% of my future travel products at XYZ.

In regards to your thoughts about shopping online for travel products, to what extent do you disagree or agree following statements.

1 Strongly
2 Mostly
3 Somewhat
4 Neutral
5 Somewhat
6 Mostly agree
7 Strongly
disagree disagree disagree agree agree

Shopping online gives me control over my shopping activities

Shopping online allows me to shop with less hassle.

Shopping online fulfills most of my shopping needs.

Shopping online is convenient

Shopping online is not risky

Shopping online is familiar to me

You have completed 95% of survey questions!
Just few more questions about you!

UNLV Survey of Consumer’s Perspectives on Online Travel Websites
What is your gender?

- Male
- Female

What is the highest level of education you have completed?

What is your marital status?

Approximately, what is your total household income?

What is your approximate age?
BIBLIOGRAPHY


Keen, C. (1999). The attribute structure of Internet shopping: What is more important and what tradeoffs are possible between Internet, retail, and catalog formats? Unpublished doctoral dissertation, Purdue University, West Lafayette, IN.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


TIG Global & HSMAI (2005), *De-mystifying distribution: Building a distribution strategy one channel at a time*. Washington, DC.


Yang, Z., Peterson, R. T., & Huang, L. (2001). Taking the pulse of Internet pharmacies: Online shoppers speak out on pharmacy service issues. *Marketing Health Services*, 4-10.


VITA

Graduate College
University of Nevada, Las Vegas

Gregory Eric Dunn

Local Address:
3484 Arcata Point Drive
Las Vegas, NV 89146

Home Address:
4813 Crestview Court
Stillwater, OK 74074

Degrees:
Bachelor of Arts, Management, 1992
Webster University, St. Louis

Master of Business Administration, 1995
University of Denver, Denver

Dissertation Title: An Examination of Consumer E-Loyalty to Online Travel Intermediaries

Dissertation Examination Committee:
Chairperson, Dr. Pearl Brewer, Ph.D.
Committee Member, Dr. Andy Feinstein, Ph.D.
Committee Member, Dr. Seyhmus Baloglu, Ph.D.
Graduate College Representative, Dr. Michael LaTour, Ph.D.