ASSESSING USE ACCEPTANCE AND SATISFACTION TOWARD ONLINE TRAVEL AGENCIES

YOON C. CHO and JEROME AGRUSA

College of Business Administration, Hawaii Pacific University, Honolulu, HI, USA

This article first considers what factors affect ease of use and usefulness and then how ease of use and usefulness affect attitudes toward online travel agencies and customer satisfaction. This study applied classification of different user groups based on their degree of involvement to measure different levels of perceived ease of use and usefulness. The results of this study found that customers’ attitudes towards online travel agencies significantly impact the level of e-satisfaction. The findings of the study contribute to the development of the uses and gratification theory by applying it to users’ attitudes toward online travel agencies. Further, this study provides implications and offers suggestions to e-businesses dealing with travel agencies.

Key words: Online travel agencies; e-Satisfaction; Ease of use; Usefulness

Introduction

This article views e-commerce, e-business, and the emergent I-Way economy as a “virtualization” of product/service/knowledge/information exchanges. Virtualization means that parties involved in exchanges use computer-mediated communication (CMC) systems as a means of establishing interpersonal, interorganizational, and intraorganizational contact. The “telepresence” created by this virtualization process enables individuals, organizations, and automated systems to coordinate all aspects of the consumer buying process. This article is based on the premise that the current brick-and-mortar/physical product/service/knowledge/information exchanges that are prevalent today and have been a part of human culture for a long time will not disappear overnight. On the other hand, the current growth of the successful application of “telepresence” in a number of different settings and different roles suggests that the traditional economic activities of old are suffering a profound transformation. But practical examples also show us that efforts to build a “telepresent” economy are not all successful in terms of user acceptance and business profits. This raises the managerial question of being able to predict and plan for success rather than failure, taking advantage of telepresence in the places where it can build a competitive advantage and user value, thus proving to be a sound business effort. By offering a new model for hypermedia computer-mediated environment...
(CME) (Hoffman, Novak, & Chatterjee, 1995), the Internet has increased interactivity in various business files, such as B2B, B2C, C2B, and C2C. Because the percentage on online usage has increased tremendously, it is essential to understand consumer behavior online. According to a research by Nielsen/NetRatings, the number of Internet users was approximately 200 million or about 67.6% of the US population as of December 2004. According to IT facts, consumers spent a record US$117 billion online in 2004. Moreover, consumers’ online travel purchases have increased. A statistic in 2004 showed that 40% of online travel booking made all of their travel purchases online, versus 29% in 2003 (http://www.tia.org/Travel/).

Studies that considered the product sector measured different consumers’ attitudes/behavior, including purchasing behavior and e-satisfaction, based on product categories. Prior studies (Cho & Ha, 2004; Figueiredo, 2000) have noted that consumers’ attitudes toward e-businesses vary based on the “product/service categories.” Product categories have been frequently applied to e-researches due to the inevitable fact that e-transactions have limitations to deliver the senses via computer network. While online travel agencies deliver most services on the Web, today’s savvy customers expect high quality with e-business, such as better Web customer interface, lower price, better travel package combinations, customization, and a high level of interactivity. Based on the consideration above, the purpose of this study was to explore: 1) the factors affecting users’/consumers’ attitudes toward travel agencies; 2) how those factors affect perceived ease of use (EOU) and usefulness (U); 3) the effects of perceived ease of use and usefulness on overall attitudes toward the online travel agencies; 4) how overall attitudes toward sites affect customer satisfaction; and 5) how online users’ attitudes toward websites differ from individual users’ various levels of involvement.

**Current Issues With Online Travel Agencies**

Previous researchers (Cho, Im, Hiltz, & Fjermestad, 2002) have shown that consumers prefer to purchase product categories such as computer equipment/accessories, books, music/movies but are reluctant to purchase other products, such as apparel and groceries, in the online environment. While consumers’ attitudes toward various product categories on the Web have been investigated, as the Web does not deliver senses via network, attitudes toward various services need to be explored as transactions and information through e-services cannot deliver all physical activities on the Web. This study examined consumer attitudes toward online travel agencies, which is an e-service sector. While many studies have investigated consumers’ attitudes toward different product categories or e-businesses dealing with products (i.e., tangible product) online, not many studies have explored consumers’ attitudes toward the service sector (i.e., nontangible product). Therefore, this study suggests a retail continuum for the service sector: “how services can successfully deliver on the Web to satisfy customer needs.” This study extended the previous model, titled “The Dot Com Retail Continuum,” which was proposed for the product sector, considering classification for the service sector. For example, customers using online travel agencies can conduct most of their transactions online, such as finding information, getting e-tickets, asking questions, etc. However, services, such as cutting one’s hair or getting a massage, have limitations in providing physical services on the Web, because customers must physically be present to get such services. This dimension has been proposed to classify some of the e-service sectors such as cutting one’s hair as a service that cannot be performed online. Previous studies have suggested that e-businesses should apply different competitive strategies based on how easy or difficult it is to judge the quality of the products on the Web (see Fig. 1).

This study is based on the current environment that the travel industry has adopted technology and provided services in the Information superhighway (I-Way). A maturing Web travel market and challenging business and economic environments have suggested that the travel industry adopt new technology perspectives and strategies for distribution, marketing, customer service, and procurement (http://www.forrester.com). By identifying hypermedia, travel agencies can expand the business format from offline (e.g., offline travel agencies or offline airline companies) to online or hybrid approach of offline and online. In addition
Figure 1. Modified dot com retail continuum. Source: Figueiredo (2000).

Online travel agencies framed market opportunities by looking at the value system with a lens that yields ideas about new business possibilities (Mohammed, Fisher, Jaworski, & Cahill, 2002). A previous study classified three types of generic values, including trapped value (i.e., more efficient markets and value systems), new-to-the-world value (i.e., customized offerings, build community, introduce new functionality or experience), and hybrid value (i.e., disrupt pricing, ease access, and radically extend reach) that are offered by e-businesses (see Table 1 for description of value types). For example, Priceline.com flipped a conventional marketing system on its head (Dolan, 2000), known as e-business, which disrupted pricing. Priceline.com allows a buyer to advertise a unit of demand to a group of sellers (Dolan) and clearly targets the budget-minded leisure traveler.

Online travel agencies that offer customized offerings, such as Travelocity.com and Expedia.com, are examples of e-businesses that provide new-to-the-world value. Particularly, Travelocity.com offers customized services, which has been addressed as a marketing mix that brings success to e-business (Mohammad et al., 2002). For example, Travelocity.com’s “My Stuff” allows members i) to plan “My Trips,” ii) to manage “My Account,” iii) to check “My Rewards,” iv) to update travel plans to customers’ phone, fax, or PDA using “My Messaging,” and v) to track the lowest fares to customers’ favorite destinations using “My FareWatcher” (www.travelocity.com). Other online travel agencies differentiate their business from others by offering different values. For example, while it is not known as a travel agency, throughout the transaction via Ebay.com, customers can get airline tickets from an auction. Priceline.com, as mentioned earlier, provides “reverse auction,” so consumers offer a preferred deal to the business. Building an online community has become a new-to-the-world value type. A community is known as a set of interwoven relationships built upon a shared interest, not simply held together by a shared interest (Hanson, 2000). Reichheld and Schechter (2000) indicated that the Web is actually a very sticky space and a powerful tool for strengthening relationships. By creating communities, e-business/e-commerce will reap the benefits of greater “customer loyalty” and may gain important insights into the nature and needs of their “customer usage” (Hanson, 2000).

Up until the year 2000, very few large players...
Table 1
Three Types of Generic Value for Online Travel Industry

<table>
<thead>
<tr>
<th>Value Types</th>
<th>Classification</th>
<th>Brief Description</th>
<th>E-Travel Business Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trapped value</td>
<td>More efficient markets</td>
<td>Allow lowering search and transaction costs.</td>
<td><a href="http://www.tavelocity.com">www.tavelocity.com</a></td>
</tr>
<tr>
<td>New-to-the-world value</td>
<td>Customize offerings</td>
<td>Allow customers to customize products/services.</td>
<td><a href="http://www.tavelocity.com">www.tavelocity.com</a></td>
</tr>
<tr>
<td></td>
<td>Build community</td>
<td>Provide services such as sharing information and communicating with users through chat rooms, bulletin boards, etc.</td>
<td><a href="http://www.travelerspoint.com">www.travelerspoint.com</a>, <a href="http://www.travelmole.com">www.travelmole.com</a>, <a href="http://www.dokeswick.com">www.dokeswick.com</a>, <a href="http://www.virtualtourist.com">www.virtualtourist.com</a></td>
</tr>
<tr>
<td></td>
<td>Introduce new functionality or experience</td>
<td>Allow converging communications, computing, and entertainment as well as the ever-changing form and functionality of access devices.</td>
<td><a href="http://www.tavelocity.com">www.tavelocity.com</a>, <a href="http://www.expedia.com">www.expedia.com</a></td>
</tr>
<tr>
<td>Hybrid value</td>
<td>Disrupting pricing</td>
<td>Provide value that customers can gain influence over pricing and capture part of the vendor’s margin when they have more information about relative vendor performance.</td>
<td><a href="http://www.priceline.com">www.priceline.com</a></td>
</tr>
<tr>
<td></td>
<td>Enable ease of access</td>
<td>This entails enhancing the access points and the degree of communication between relevant exchange partners.</td>
<td><a href="http://www.onlinetravel.com">www.onlinetravel.com</a></td>
</tr>
<tr>
<td></td>
<td>Radically extend reach</td>
<td>Companies can extend the boundaries of an existing market or create a new market by delivering cost-effective reach.</td>
<td>cruises.about.com, yellowpages.superpages.com</td>
</tr>
</tbody>
</table>

Modified from Mohammed, Fisher, Jaworski, and Cahill (2002).

dominated most of the bookings on the Web. It seems that many online travel agencies follow leaders and mimic business strategies, including customer interface, structure, content, service combination possibilities, products, and customer service. Other leaders, however, differentiate businesses to earn competitive strategies by providing better services that are also crucial for successful e-businesses. Therefore, this study aimed to explore factors that affect success for online travel agencies.

Conceptual Framework

Uses and gratification theory (Herzog, 1944; Luo, 2002; McGuire, 1974) has been applied in this study to explain users’ attitudes and consumer satisfaction toward online travel agencies. Well-known satisfaction theories that have explained consumer attitudes to brick-and-mortar businesses, such as contrast theory (Cardozo, 1965; Engel & Blackwell, 1982) and dissonance theory (Festinger, 1957), have been applied in this study of click-and-mortar businesses. Yi (1990) reviewed several theories that have been suggested to explain the effects of expectation and disconfirmation on perceived product performance. Involvement theory also has been applied in this study. The degree of involvement has been treated as a mediator to affect perceived usefulness and EOU for online travel agencies. A previous study by Luo (2002) developed the theory by linking the well-grounded uses and gratifications framework to online consumer behaviors (Luo, 2002). Uses
and gratification theory has been developed from research in the context of traditional media, such as TV, magazines, or radio (Herzog, 1944; McGuire, 1974). It has been extended to research in the context of the online environment (e.g., Luo, 2002). Recent studies in the online context frequently measure web usage, attitudes toward websites, and satisfaction (Chen & Wells, 1999; Korgaonkar & Wolin, 1999; Luo, 2002). Application of uses and gratification theory in the online context has drawn the attention of scholars since the Internet, as an interactive multimedia tool, has become a place that provides a new, many-to-many communications model and dramatically alters the traditional view of communication media (Hoffman et al., 1995).

The present study has been supported by another theory, proposed by Ajzen and Fishbein (1980) and often used in behavioral research. The Theory of Reasoned Action (TRA), which suggests that individuals’ performance of a given behavior is primarily determined by their intention to perform that behavior (Ajzen & Fishbein, 1980). Further, researchers criticized TRA for not explaining the beliefs that are operative for a particular behavior, which is related to the usage of information technology (Succi & Walter, 1999). Thus, the Technology Acceptance Model (TAM) was proposed by Davis (1989) to explain specific behavior from electronic commerce. The TAM model has been adopted in this study to describe consumer behavior in the online environment. The model explains why online users accept or reject websites and how their internal beliefs and attitudes affect their usage behavior (Davis, 1989; DeSanctis, 1983; Ives, Olson, & Baroudi, 1983).

Therefore, within the uses and gratification framework and the theory of reasoned action, this study investigates how online travel agencies can be an interactive marketing tool for online users by exploring factors that affect perceived ease of use and usefulness. Particularly, this study classifies factors that can be used to measure perceived ease of use and usefulness. Factors proposed in this study include information, price, product/service, convenience, technology & usability, brand name, promotional, and entertainment factors. This study also measures the impact of such factors to the users’ attitudes toward the specific website (i.e., online travel agencies). The study also measures how consumers’ attitudes toward specific websites affect their customer/user satisfaction or behavior intention to use. User satisfaction has been obtained from the current users and behavior intention to use from the potential users of online travel agencies. For current users, the present study adopted the levers, suggested by Mohammad et al. (2002), across the stages of online travel agencies to determine whether those factors have a different impact on user satisfaction based on a different extent of individual user’s usage on information systems (Fig. 2).

The proposed model of this study is determined by the different factors that arouse perceived ease of use and usefulness and also dummy variables for the levers across the stages on online travel agencies with coefficients. Perceived usefulness and perceived ease of use have been frequently used to measure users’ attitudes toward websites and technology acceptance. Based on a definition by Davis, Bagozzi, and Warshaw (1989), perceived usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (p. 985). Davis et al. (1989) also described the definition of perceived ease of use: “as the degree to which a person believes that using a particular system would be free of effort” (p. 985). In this study, perceived usefulness and ease of use are considered predictors to investigate the external variables that affect users’ acceptance of online travel agencies. Both variables—perceived usefulness and perceived ease of use—are the equivalent of internal beliefs ($\beta_i$) from the TRA.

**Hypothesis 1:** As perceived usefulness of online travel agencies is greater, customers’ positive attitudes toward those websites increase.

**Hypothesis 1a:** The degree of perceived usefulness will be higher as the degree of user involvement with online travel agencies increases.

**Hypothesis 2:** As perceived ease of use of online travel agencies is greater, customers’ positive attitudes toward those websites increase.

**Hypothesis 2a:** The degree of ease of use will be higher as the degree of user involvement with online travel agencies increases.

**Attitudes Toward Sites and E-Satisfaction**

Attitudes toward a website have been often considered as a variable to measure the effective-
ness of websites, systems, or Internet advertising (e.g., Chen & Wells, 1999; Zhou, 2002). Previous researchers found that attitudes toward a site are quite measurable (Gibson, 1997). Compared to the attitudes toward offline shopping, researchers have often investigated attitudes toward the usage of computers and perceptions of the competence and productivity of computers (Zoltan & Chapanis, 1982). These researchers also found that those with higher attitudes view computers as more efficient, dependable, precise, and organized. Prior studies also addressed that attitudes toward computers have important effects on the usage and ultimate success or failure of computer systems (Igbaria, et al., 1990; Webster & Martocchio, 1992). Schubert and Selz (1999) proposed criteria to measure e-business effectiveness, including information, agreement, settlement phases, and community component. Further, attitudes toward websites have been discussed to measure the ease of building a relationship with a business, website loyalty, e-satisfaction with the site or service provided by the business, length of time to stay on a website, or a comparison analysis between or among the sites (Chen & Wells, 1999; Cho et al., 2002; Schubert & Selz, 1999). Thus, the researchers hypothesized that positive attitudes towards websites increase e-satisfaction for existing customers of online travel agencies. Users were classified into four different categories to measure their attitudes toward online travel agencies depending on their degree of involvement. The current study considers the degree of involvement as a mediating variable based on the suggested model (Fig. 2). The degree of involvement considered in this study included factors such as number of years of online use, number of times logged on to online travel agencies, number of times tickets were purchased, and consumers’ attitudes towards the sites.

Involvement theory, which has been often studied in traditional marketing, is also applied in this study for online usage and context. In traditional marketing, involvement has been adopted in the study of purchase decisions (Clarke & Belk, 1978), advertisements (Krugman, 1972), or products (Howard & Sheth, 1969), etc. For example, involvement with purchases leads one to search for more information and spend more time searching for the right selection ( Zaichkowsky, 1985). Past studies in the online context have considered the degree of involvement as a predictor of technology acceptance (Stafford & Stern, 2002). Stafford and Stern (2002) summarized the opinions on involvement that perceived ease of use is superior to perceived usefulness in predicting technology acceptance.
to involvement (Venkatesh & Davis, 2000), while others argue that subjective experiences such as involvement ultimately drive behavior (Webster & Martocchio, 1992). Degree of involvement in this study has been treated as a mediator to affect perceived usefulness and ease of use for online travel agencies. Assuming that Internet users’ attitudes toward websites are quite varied based on their levers on websites, this study uses the framework of levers across the stages proposed by Mohammad et al. (2002). The levers, which were introduced based on different stages to classify the factors that account for the success of the online marketing strategies, has been applied in this study (Cho & Ha, 2004; Mohammad et al., 2002). This framework was adopted in this study by positing that proposed different levers could be explained by different groups of users’ usages of the websites. This study assumed that the levers are on the continuum of the degree of involvement on the websites. Thus, when users are in the stage of higher degree of web usage, such as commitment, their involvement on the website is also higher. In other words, the degree of involvement on the online travel agencies increases from novice to commitment considering the levers on the continuum. Therefore, this study hypothesized that user involvement increases when the levers on online travel agencies are commitment rather than awareness or expansion. The suggested levers across the stages by Mohammad et al. (2002) were modified for this study (Fig. 3).

The traditional market places emphasis on “customer satisfaction” as a way to earn consumer loyalty and attract new customers. Previous studies (Cho & Fjermstad, 2006) have examined the firm’s approach to Customer Relationship Management (CRM) in order to account for the new realities of market spaces. This study measures the impact of overall attitudes toward sites to the e-satisfaction. Previous studies have posited that maximizing customer satisfaction and maintaining customer loyalty are major components for E-Commerce Customer Relationship Management (eCRM). In an effort to provide a positive contrast for the new against the old, this research addresses the issue of customer satisfaction and customer loyalty as being at the center of successful click-and-mortar business exchanges (Cho & Fjermstad, 2006). The study focuses more on customer satisfaction because it provides clues as to what managerial changes might have induced different and more desirable behaviors, raising the issue of customer loyalty myopia. Satisfaction/Dissatisfaction theories such as cognitive dissonance theory (Festinger, 1957), contrast theory (Cardozo, 1965; Engel & Blackwell, 1982; Howard & Sheth, 1969), assimilation-Contrast Theory (Oliver, 1997), expectation/disconfirmation theory (Oliver & De Sarbo, 1988), level of aspiration (LOA) theory (Yi, 1990), and adaptation level theory (Helson, 1959, 1964) have been applied in this study to measure e-satisfaction. Other theories such as comparison-level theory, equity theory, and value-percept disparity theory have also been applied for explaining e-customer satisfaction.

<table>
<thead>
<tr>
<th>Online Users' Attitudes and Behavior</th>
<th>Novice</th>
<th>Awareness</th>
<th>Exploration/Expansion</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novice</td>
<td>Beginner for online travel agencies</td>
<td>Recognize advertising for online travel agencies</td>
<td>Register online travel agencies, Use options such as Opt-In to provide permission to receive sales promotions or advertising, Click – through to website from keyword, links, or partner websites, Click on advertising related to online travel agencies</td>
<td>Opt-ins to view subsequent episodes, Use customized browser, Click-throughs (e.g., AOL Google) to purchase tickets or reserve room/seat, Aware AOL content placement, Aware contests and Sweepstakes</td>
</tr>
</tbody>
</table>

Figure 3. The levers across the stages on online travel agencies. Modified from Mohammad, Fisher, Jaworski, and Cahill (2002).
Hypothesis 3: Overall, as positive attitudes toward online travel agencies increase, the degree of e-satisfaction also increases.

Hypothesis 3a: Positive attitudes toward online travel agencies will be higher as the degree of involvement on the websites increases.

Proposed Factors That Affect Attitudes Toward Online Travel Agencies

Information Factor

The Internet has assumed a crucial role as a source of enormous information. Online users are able to easily find almost unlimited information and customers can make transactions conveniently, 24 hours a day, 7 days a week. As a source of information, the Internet significantly affects users’ search behavior. Therefore, the quality of information content provided by websites often reduces users’ search efforts and agitates their behavioral intention to use. It is expected that overall aroused satisfaction will positively affect an individual user’s attitudes toward a website. Online users often log on to the online travel agencies, such as www.travelocity.com or www.price line.com, in order to get information about their immediate or future travel. This study hypothesized that consumers’ positive attitudes towards online travel agencies increase as their perceived ease of use and usefulness of information increases. Further, this study also measures impacts based on different degrees of user involvement. Traditional marketers addressed the effects of the degree of involvement on the information search effort, or vis-à-vis (e.g., McGAughey & Mason, 1998). Prior researchers (McGAughey & Mason) determined that if consumers have low involvement with products that can satisfy their perceived need, they exert little effort in the information search. However, with high involvement, the consumer is likely to conduct a more active information search (McGAughey & Mason). Further, in a state of high involvement, the consumer may be more willing to seek out detailed information through product trial experiences (McGAughey & Mason). When the impact of involvement is discussed in the online context, the effects of user involvement in information systems have been investigated (Baroudi, Olson, & Ives, 1986; Franz & Robey, 1986). Various studies (Cho et al., 2002; McGAughey & Mason, 1998) have investigated the degree of involvement, attitudes toward a website, and e-satisfaction. This study hypothesizes that for more involved online customers, those whose degree of involvement moves from novice to commit, their positive attitudes toward websites will affect a higher e-satisfaction.

Hypothesis 4: User perception on an information factor toward online travel agencies is positively associated with both perceived usefulness and perceived ease of use.

Hypothesis 4a: The impact of the information factor on perceived usefulness and ease of use will be higher as the degree of user involvement of online travel agencies increases.

Price Factor

Previous researchers stated that price is a major factor to measure consumer sensitivity (Krishnamurthi & Raj, 1988). The price factor has a large role in the choice and quantity of buying decisions (Krishnamurthi & Raj). Price affects online users’ perception both positively and negatively. Hanson (2000) posits that the Internet will raise or lower price sensitivity among customers. Price sensitivity might increase in the online environment due to the availability of price comparisons on the Web. Many online companies provide services, such as price and service comparisons, so customers can easily compare the price with the various service options. In addition, consumers often have a negative perception of price offered by electronic commerce, particularly regarding delivery costs. Various studies proved that online customers are often dissatisfied with the delivery costs (Cho et al., 2002), while often satisfied with discounted prices. However, in general, online customers expect a lower price than in the traditional marketplace; in fact, online providers offer lower prices than traditional stores. It is well known that in the online shopping environment the costs of producing, processing, and overhead and banking transactions are lower. It is possible for online stores to reduce costs when they maintain an efficient distribution system, allowing them to provide a similar price for the same product as physical stores (Cho & Ha, 2004). Moreover, effective
online distribution systems such as just-in-time inventory, electronic data interchange (EDI), and supply chain management play a role in reducing costs. Users of online travel agencies save money and time by purchasing tickets, reserving a hotel room, or renting a car online. This study also addressed that the product sector has limitations because consumers’ cannot see/hear/touch/smell the product, while service sectors minimize such limitations. This study hypothesized that customers' perception of the price factor of online travel agencies is related to the customers’ perceived usefulness and perceived ease of use.

Hypothesis 5: User perception of the price factor of online travel agencies is positively associated with both perceived usefulness and perceived ease of use.

Hypothesis 5a: The impact of the price factor on perceived usefulness and ease of use will be higher as the degree of user involvement on online travel agencies increases.

Product and Service Factor

Online travel agencies provide product packages such as cruises to the Caribbean, Europe, or other vacation tour packages. While offline travel agencies also provide product package options to customers, online travel agencies provide different options. How online travel agencies provide services is also a crucial factor for a successful e-business. Previous studies addressed how companies offer and maintain product/service quality as a success factor for eCRM. Other studies have found that customer service failure is often a cause of customer complaints (Cho, Im, & Hintz, 2003). Various researchers have addressed the importance of technology that enhances service quality. For example, Bitner, Booms, and Tetreault (2000) found that technology is incorporated into the service-marketing triangle, both supporting and facilitating service delivery. A study by Bitner, Brown, and Meuter (2000) also discussed the role of technology in implementing effective service recoveries and encouraging customer complaining (see also Brown, 1997; Shaffer, 1999). Most online firms manage Web-based customer service centers to deal with customer comments and complaints, utilizing sophisticated technology (Cho et al., 2002). This study hypothesizes that users’ perception of the product/service quality of online travel agencies positively affects perceived usefulness and ease of use, as proposed by Davis (1989).

Hypothesis 6: User perception of the product and service factor of online travel agencies is positively associated with both perceived usefulness and perceived ease of use.

Hypothesis 6a: The impact of the product and service factor on perceived usefulness and ease of use will be higher as the degree of user involvement with online travel agencies increases.

Convenience Factor

Various researchers found that a major factor to increase consumer satisfaction from electronic commerce is convenience (Cho et al., 2002). It is well known that a media-inherent characteristic of the Internet is its accessibility because users are able to use the Internet 24 hours/7 days a week. Online shoppers can save time on trips to stores when they place orders online. Similarly, online travel agency users can easily reach sites for various purposes and with increased frequency on the Internet. Users easily compare prices and product packages throughout various online travel agencies. Online users enjoy the convenience of easily purchasing airline tickets, reserving hotel rooms, and obtaining information, via various websites, such as www.expedia.com or www.travelocity.com, and links to “travel” via portals, such as Yahoo or MSN, link via search engines. In addition, users of certain dial-up systems, such as AOL, can also take advantages to easily connect to online travel agencies by clicking advertising or links through search engines. In addition, by personalizing websites and using permission marketing tools, such as opt-in, users receive current information about the travel industry and also information based on their preferences (e.g., Travelocity’s “My Stuff”). This study hypothesizes that users’ perception of the convenience of online travel agencies positively affects perceived usefulness and ease of use, as proposed by Davis (1989). However, when all travel agencies provide equivalent services, such as personalizing websites or sending email promotions, online users do not perceive significant differences and might not ap-
preciate the convenience of online travel agencies.

In addition, this study proposes how the impact of the convenience factor on perceived usefulness and ease of use is positively associated with the degree of user involvement. This research posits that as users’ perception of online travel agencies as interactivity tools increases, the degree of involvement on those sites also increases. Users’ interactivity with online travel agencies increases through the stages. An online sales promotion offered by the travel industry actively advances users through the stages (Mohammed et al., 2002). Online travel agencies use its partnership with major portals to make it easy for customers moving through the stages to not only discover travel information, but also actively use services from a web browser.

**Hypothesis 7:** User perception of the convenience of online travel agencies is positively associated with both perceived usefulness and perceived ease of use.

**Hypothesis 7a:** The impact of the convenience factor on perceived usefulness and ease of use will be higher as the degree of user involvement with online travel agencies increases.

**Technology and Usability Factor**

Online travel agencies cannot only adopt new technologies, but must consider usability factors to meet the ultimate needs and wants of these customers. Prior studies discussed how perceived usefulness and ease of use are influenced by various factors, including the system’s technical design characteristics (Benbasat & Dexter, 1986; Dickson, DeSanctis, & McBride, 1986; Malone, 1981). Technology factors include website effectiveness such as speed and customer interface design factors (e.g., content, context, and customization) (Mohammed et al., 2002). Technology and media-inherent factors, proposed by Schubert and Dettling (2002), are applied in this study. The extended Web Assessment Method (EWAM), proposed by Schubert and Dettling (2002), focuses on the special features that are inherent to the Internet. This study selected criteria, related to the technology factor from the Web Assessment Model, which was proposed by Schubert and Selz (1999), prior to EWAM. Based on the suggested phases (e.g., settlement, agreement, and information phases) from the Web assessment model, criteria, related to the technology factor at each stage, such as good user interface, structure of content, adjustable customer profile, and possibility of customized products, are used in this study. Another framework for technology-mediated customer interface by Mohammed et al., (2002) called 7Cs form the basis of an effective interface, including context, content, community, customization, communication, connection, and commerce. Mohammed et al. (2002) also addressed the extent to which all of the 7Cs work together to support the value proposition and business model (i.e., Fit and Reinforcement) is vital for successful e-businesses. Successful online travel agencies have developed marketing strategies considering 7Cs through product selection, changing plans, payment system options, in-flight menu selection, seat selection, and 2Is (i.e., individualization and interactivity). This study hypothesized that user perception of the technology and usability factor of online travel agencies is positively associated with perceived usefulness and perceived ease of use.

**Hypothesis 8:** User perception of the technology and usability factor of online travel agencies is positively associated with both perceived usefulness and perceived ease of use.

**Hypothesis 8a:** The impact of the technology and usability factor on perceived usefulness and ease of use will be higher as the degree of user involvement with online travel agencies increases.

**Brand Name Factor**

The role of brand has been frequently addressed in previous studies. Traditionally, brand names serve a variety of purposes for consumers and advertisers (Meyers-Levy, 1989). Various researchers (Levy, 1989) have noted that firms with extremely memorable brand names often regard those names as their most valuable asset because these labels provide immediate recognition, and often acceptance of new products that may be introduced under the brand name. This study points out that the role of a brand name is also significant in the online environment. Consumers log on to
certain websites based on their recognition of the
brand names. The role of the URL (Uniform Re-
source Locator), which represents the online busi-
ness, is also important as online consumers recall
the e-commerce sites depending on how much the
URL is memorable (Cho & Ha, 2004). Therefore,
brand names could help consumers make purchase
decisions with the computer mediated environment
as they enable highly reliable inferences about
consumption benefits after one purchase and use
(Alba et al., 1997). Keller (1993) also posited that
the stronger the brand image held in the consum-
ers’ memories, the more likely they will purchase
those products without any additional decision
making. However, as Dick, Chakravarti, and Bie-
hal (1990) pointed out, brand attribute value infer-
ences depend on the accessibility of information.
This study hypothesizes that brand name affects
consumer choice behavior in the electronic mar-
ketplace.

**Hypothesis 9:** User perception of the brand name
factor of online travel agencies is positively
associated with both perceived usefulness and
perceived ease of use.

**Hypothesis 9a:** The impact of the brand name fac-
tor on perceived usefulness and ease of use will
be higher as the degree of user involvement
with online travel agencies increases.

**Promotional Factor**

E-businesses use the Internet for various pro-
motional tools. First, the Internet can be a vital
marketing tool, which is the online equivalent of
word of mouth for industries (Hanson, 2000). Ac-
cording to Hanson, the Net amplifies the power
and accelerates the speed of feedback from users
to potential adopters. Further, in order to target
specific segments without losing the online travel
agency’s intended brand appeal, a well-designed
travel community website (e.g., www.traveller
point.com) was developed (Mohammed et al.,
2002).

According to emarketer.com (2004), goals of
online advertising are to retain customers and in-
crease loyalty (63%); to acquire new customers
(62%); to create awareness of new products (59%);
to encourage trial use (55%), and to keep and es-
ablish a product as “top of mind” (50%). While
effectiveness of online advertising (i.e., banner
ads) use is very low (e.g., average click through
rate is only about 1%), online advertising is still
effective to increase brand awareness and loyalty.
Compared to banner ads, the click through rate for
email advertising is quite high (on average about
80%) as customers received email ads based on
their permission and preference. Online businesses
often use email and other advertising for sales pro-
metal tools. This study hypothesized that pro-
motional factors affect consumer behavior of on-
line travel agencies.

**Hypothesis 10:** User perception of the promo-
tional factor of online travel agencies is posi-
tively associated with both perceived usefulness
and perceived ease of use.

**Hypothesis 10a:** The impact of the promotional
factor on perceived usefulness and ease of use
will be higher as the degree of user involvement
increases.

**Entertainment Factor**

Prior studies (Danet, Wachenhauser, Bechar-
Israeli, Cividalli, & Rosenbaum-Tamari, 1996)
noted that computer mediated communication
(CMC) is strikingly playful. Various studies have
recognized the inherently playful nature of the
computer as medium (Danet et al.). Danet et al.
mentioned that millions of people are playing with
their computer keyboards in various ways, thus an
application of computers to travel related purposes
is perhaps inevitable. Researchers (Webster &
Martocchio, 1992) argue that microcomputer play-
fulness represents a degree of cognitive spontane-
ity in computer interactions. Playfulness is an im-
portant factor to acquaint one with the computer,
by shifting attitudes from fearful and awesome as-
pects to positive factors (Gardner, Young, & Ruth,
1989; Howard & Smith, 1986; Webster & Martoc-
chio, 1992). It is also viewed as the capacity to
draw satisfaction from the immediate intellectual
development of a topic, irrespective of any ulterior
motive (Dewey, 1913).

Social escapism motivation refers to consum-
ers’ motives for using the Web as a reliever of
day-to-day boredom and stress (Korgaonkar &
Wolin, 1999; Zhou, 2002). Online travel agencies
are a pleasurable, fun, and enjoyable activity that
allows one to escape from reality (Zhou, 2002). As Zhou cited, users may perceive online travel agencies as more entertaining than informative. Therefore, this study separates the entertainment factor for online travel agencies from the information factor to investigate the effects to the perceived usefulness and ease of use. This study proposes that users' perceptions about online travel agencies as an entertainment factor significantly affect their perceived usefulness and ease of use.

**Hypothesis 11:** User perception of the entertainment factor of online travel agencies is positively associated with both perceived usefulness and perceived ease of use.

**Hypothesis 11a:** The impact of the entertainment factor on perceived usefulness and ease of use will be higher as the degree of user involvement increases.

**Methodology**

This study conducted a survey with 350 randomly selected subjects in the US. Subjects were online users and had usage experience with the Internet. The survey was distributed to randomly selected online users including undergraduate and graduate students at a university in the US from April to May 2005. The response rate was 95% and approximately 97% of respondents answered that they have logged onto online travel agencies. Of the 350 respondents, 54.6% were male and 45.4% were female. About 18.8% were between the ages of 19 and 20; 63.4% were between the ages of 21 and 30; 13.2% were in the 31–40 age group; 1.9% were in the age group 41–50; and 2.7% were age 51 or older. Approximately 4.0% reported that their highest educational level was high school graduate, while 6.8% had an associate degree, 57.9% were still at university for an undergraduate degree, and 9.9% had a bachelor’s degree, 13.0% were still at university for graduate degree, and 8.4% had a master’s degree or higher. Over 80% (80.8%) had an annual average income between $20,000 and $50,000 and 51.3% were American (i.e., 28.1% were Caucasian American; 19.9% were Asian-American; and 2.8% African-American), 30.8% were Asian, 10.8% European, and 3.4% were Hispanic. In order to check reliability, this study measured Cronbach’s alpha for multi-item scales to measure each of the eight constructs that served as the basis for the questionnaire items. This study found that Cronbach’s alpha for information factor and price factor was 0.87; product and service factor was 0.84; convenience factor was 0.85; technology and usability factor was 0.93; brand name factor was 0.84; promotional factor was 0.83; entertainment factor was 0.88; and perceived ease of use and usefulness was 0.94.

Quantitative methods, including factor analysis, regression, and ANOVA (analysis of variance), were applied to measure perceived usefulness, perceived ease of use, online users’ attitudes towards sites, behavioral intention to use, and e-satisfaction. This study measured whether factors such as information factor, price factor, product/service factor, convenience factor, technology/usability factor, brand name familiarity, promotional factor, and entertainment factor affect perceived usefulness and ease of use toward online travel agencies. The scales in this study were developed from previous studies. For example, scales for perceived usefulness and perceived ease of use were from the study by Davis (1989) and Davis et al. (1989). Scales for other variables were from studies by Succi and Walter (1999), Zhou (2002), Schubert and Selz (1999), and Chen and Wells (1999). Likert scales, semantic differential scales, and open-ended questions were used to measure the items. For Likert scale questions, a 5-point scale with extremes labeled “strongly disagree” and “strongly agree” was used. Multivariate data analyses, such as factor and regression analyses, were used to analyze this study. In order to measure the degree of involvement, this study used the scale items for each lever across the stages of online travel agencies, proposed by Mohammed et al. (2002) with modifications. This study measured the average of the items for each lever, which represents the degree of involvement (e.g., average for items of novice, awareness, exploration/expansion, and commitment). Users’ degree of involvement with online travel agencies was decided based on the average scores, obtained above. For instance, if a user had the highest score for the items of awareness, we considered that she/he was in the stage of awareness. After the lever was found, dummy
variables were used to code the data. This study used novice as a base for dummy variables.

**Results**

The first step in this analysis was intended to validate the factors that affect two predictors: perceived usefulness and ease of use. This study ran the confirmatory factor analysis to identify those factors. Using principal components analysis as the extraction method and varimax rotation methods with Kaiser normalization, the most relevant data emerged. This analysis demonstrated a distinct reduction of six factors, with eigenvalues over 1.00. Seven factors that affect perceived usefulness and ease of use toward online travel agencies appeared to be information factor, price factor, product/service factor, technology/usability factor, brand name familiarity, promotional factor, and entertainment factor. A separate factor analysis was done to group scale items for the predictors—perceived usefulness and ease of use—that affect attitudes toward websites. Scale items were developed from the previous study by Davis (1989). This study shows the results of factor analysis for external variables that affect perceived usefulness and ease of use. Factors that had eigenvalues over 1.00 were grouped as variables. Three items represented perceived ease of use and four items represented perceived usefulness.

This study analyzed simple linear regression analyses and ANOVA. Factor scores were used for regression analyses. First, this study used regression analyses for the impacts of external variables to the predictors perceived usefulness and ease of use. The different degrees of involvement were considered as dummy variables. Because four different levers were used as different degrees of involvement, three dummy variables were added to the regression analyses. Another regression analysis was conducted to examine the effects of perceived usefulness and ease of use to the attitudes toward the websites and the effects of attitudes toward the websites on e-satisfaction and behavioral intention to use. Table 2 presents the results of the regression analyses for the effects of external variables to the perceived usefulness (U) and ease of use (EOU). Factor coefficients, found from factor analyses, were used for regression analyses. Stepwise regression analysis was applied to determine which, if any, indicators could predict usefulness and ease of use. The results in Table 2 show that all external variables except product and service factor and brand name factor affected perceived usefulness and perceived ease of use. Factors such as information and entertainment were the first and second variables strongly associated with perceived usefulness, while factors such as information and technology/usability were strongly related to perceived ease of use. Thus, hypotheses 4, 5, 8, 10, and 11 (i.e., the impacts of factors, such as information, price, technology and usability, promotional, and entertainment factors) to perceived usefulness and ease of use were accepted, while hypothesis 11 (i.e., the impact of price factor to perceived usefulness and ease of use) was not supported. The results of ANOVA found the models significant at 0.01 level with $F = 50.578$ and 43.329 (two-tailed, $r^2 = 0.760$ and 0.734) for perceived usefulness and ease of use.

Table 3 shows the regression analyses with dummy variables to examine the relationship between the degree of involvement, external variables, perceived usefulness, and ease of use. ANCOVA (analysis of covariance) was also applied in this study in order to examine the effect of the degree of involvement. The results of ANCOVA, regression analysis, and ANOVA were used to test hypotheses. This study used dummy variables to test the differential effects of external variables by
Table 3
Summary of the Effects of External Variables on Perceived Usefulness (U) and Perceived Ease of Use (EOU) by the Degree of Involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Awareness U</th>
<th>EOU</th>
<th>Exploration/Expansion U</th>
<th>EOU</th>
<th>Commitment U</th>
<th>EOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information factor</td>
<td>0.290 (2.476)*</td>
<td>0.219 (1.825)</td>
<td>0.238 (3.476)**</td>
<td>0.174 (2.526)**</td>
<td>0.570 (3.761)**</td>
<td>0.871 (5.823)**</td>
</tr>
<tr>
<td>Price factor</td>
<td>0.270 (2.353)*</td>
<td>0.225 (1.919)</td>
<td>0.113 (1.746)</td>
<td>0.153 (2.354)*</td>
<td>0.628 (6.807)**</td>
<td>0.010 (0.113)</td>
</tr>
<tr>
<td>Product and service factor</td>
<td>0.202 (0.970)</td>
<td>0.066 (0.307)</td>
<td>0.116 (1.488)</td>
<td>0.114 (1.458)</td>
<td>0.340 (2.661)**</td>
<td>0.135 (1.069)</td>
</tr>
<tr>
<td>Technology and usability factor</td>
<td>0.597 (1.578)</td>
<td>0.441 (1.138)</td>
<td>0.443 (4.332)**</td>
<td>0.500 (4.858)**</td>
<td>0.885 (7.964)**</td>
<td>0.612 (5.584)**</td>
</tr>
<tr>
<td>Brand name factor</td>
<td>0.131 (0.527)</td>
<td>0.207 (0.816)</td>
<td>0.022 (0.242)</td>
<td>0.100 (1.069)</td>
<td>0.264 (3.321)**</td>
<td>0.510 (6.499)**</td>
</tr>
<tr>
<td>Promotional factor</td>
<td>0.553 (2.350)*</td>
<td>0.548 (2.275)*</td>
<td>0.275 (3.027)**</td>
<td>0.295 (3.115)**</td>
<td>0.556 (3.601)**</td>
<td>1.134 (3.312)**</td>
</tr>
<tr>
<td>Entertainment factor</td>
<td>0.522 (2.585)*</td>
<td>0.567 (2.742)**</td>
<td>0.274 (3.010)**</td>
<td>0.258 (2.889)**</td>
<td>1.008 (2.940)**</td>
<td>0.605 (1.788)*</td>
</tr>
</tbody>
</table>

Standard coefficients and significance are shown. Standard coefficients show the effects of the three levers, awareness (N = 72), exploration/expansion (N = 211), and commitment (N = 67), while novice was used as a base.

*Significant at the 0.05 level (two-tailed).

**Significant at the 0.01 level (two-tailed).

the degree of involvement on perceived usefulness and ease of use. The findings of regression analyses indicate that the impacts of external variables on perceived usefulness and ease of use were higher if the degree of involvement was higher. For example, this impact scored higher when the degree of involvement was in the stage of commitment rather than in the novice stage. Further, the results of ANCOVA showed that the impact of the external variables on the perceived usefulness and ease of use was significantly different according to the degree of involvement ($F = 9.413, \varepsilon^2 = 0.151$, significant at 0.01 level).

Another regression analysis was conducted to see how attitudes toward online travel agencies are affected by perceived usefulness and ease of use. Table 4 shows the results of regression analysis for the impact of perceived usefulness (U) and ease of use (EOU) to the attitudes toward the websites. The results of analysis of variance found that, overall, the regression model was significant ($F = 20.12$, significant at 0.01 level, two-tailed, $r^2 = 0.685$). The impact of the two predictors, in relation to the attitudes toward the online travel agencies, was almost equivalent.

As Table 5 shows, this study found the impacts of the attitudes toward online travel agencies to the e-satisfaction. This study measured the effects on e-satisfaction using the existing online travel agencies users. The study found that attitudes toward online travel agencies significantly affect e-satisfaction.

Discussion and Conclusion

This research explored users’ attitudes toward online travel agencies and consumer satisfaction. Applying uses and gratification theory (Luo, 2002) and TAM (Davis et al., 1989), this study investigated which factors affect online users’ attitudes toward online travel agencies; how those factors affect perceived ease of use and usefulness; the effects of perceived ease of use and usefulness on overall attitudes toward travel-related websites;
and how online users’ attitudes toward online travel agencies affect e-satisfaction. This study found important factors that affect online consumer attitudes toward the online travel agencies. The information factor, price factor, product/service factor, technology factor, technology/usability factor, brand name factor, promotional factor, and entertainment factor are factors that affect online travel agencies. This study also found that the convenience factor is not a significant factor for customers’ attitudes toward online travel agencies. This finding gives an important implication that customers no longer just perceive e-business as a convenient marketplace, but perceive it as a place that provides greater value. From the regression analysis result, this study found that factors such as information factor, price factor, technology factor, technology/usability factor, brand name factor, promotional factor, and entertainment factor significantly affect both ease of use and usefulness. It is interesting to find that product and service sectors do not significantly affect ease of use and usefulness. There might be possible reasons such as i) compared to the offline businesses, customers perceive that online travel agencies don’t provide much better product package options; ii) providing products or product packages by online travel agencies are not helpful or easy to use online; iii) customers’ expectation for online customer service is getting higher.

The study has some limitations. Although this study used multivariate statistics, such as factor and regression analysis and ANCOVA, the study did not measure the cause and effect relationship using a program such as LISREL. The researchers will consider this issue in future studies. A framework to classify the different levels of involvement will also be developed and applied to measure consumer attitudes toward various websites. For further studies, a larger number of subjects will be considered.

The findings of this study contribute to the development of the uses and gratification theory and TAM by applying it to the online users’ attitudes toward travel-related sites. Further, this study provides implications and offer suggestions to e-businesses dealing with travel-related products and services. The researchers expect that as a result of the regression analysis, factors will be found in this study that affect both perceived usefulness and ease of use. Further, it is expected that the impact of the factors on perceived usefulness and ease of use will be significantly different according to the users’ degree of involvement on the websites. The findings of the study contribute to the development of the uses and gratification theory and TAM, while also providing implications and suggestions to e-businesses.

Biographical Notes

Dr. Yoon C. Cho is Assistant Professor at the Hawaii Pacific University, where she serves as advisor of the American Marketing Association (AMA)—HPU Chapter. She received her Ph.D. from Rutgers and M.B.A. from Cornell University. She published research papers in various academic journals such as Advances in Consumer Research (ACR), Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior (JCS/DCB), Hawaii International Conference on System Sciences, Journal of Business & Economics Research, etc.

References


Bitner, M. J., Brown, S. W., & Meuter, M. L. (2000). Tech-


