# Application of Werthner and Klein's Model in Tourism Context

Faramarz Nikseresht
Faculty member, Department of management, Fazilat University, Semnan, Iran


Masoud lajevardi*
PhD student in marketing management, Department of business Management, Semnan Branch, Islamic Azad University, Semnan,Iran

**Abstract**
Web evaluation has become a critical process in DMOs' performance measurement efforts.  However, Web evaluation research over the past decade has led to diverse approaches and findings rather than a unified understanding of success factors that should be measured in order to gauge a Web site's performance.  The common success factors and potential additional factors identified in this study provide an important basis for practical Web evaluation implementation and simultaneously serve as a useful input for future research.  The major benefit of this study is the digest of a large volume of key factors into one comprehensive model that can be tested and applied to Web site development and evaluation problems.  This integration helps to identify not only commonalities but also gaps in existing approaches.
**Keywords:** Destination marketing; DMOs' performance measurement; E-satisfaction; E-loyalty; E-quality; Qualitative meta-analysis

## INTRODUCTION
Destination marketing organizations (DMOs) are organizations which have been established to promote specific destinations to potential travelers (Gartrell 1994).  The Web has revolutionized the way DMOs provide destination information and the manner in which they communicate and interact with consumers and practitioners (Wöber 2003).  Web-based destination marketing has become a reality for most DMOs and simultaneously constitutes a great opportunity and a great challenge for these organizations (Gretzel,Yuan, and Fesenmaier 2000).  As Web-based marketing strategies have become more widely adopted and pressure on DMOs to account for investments in their Web sites has increased, interest in the evaluation of Web sites has grown.  However, whereas general advertising effectiveness measures have been developed and widely discussed in the literature, e.g. by Kim, Hwang, and Fesenmaier (2005), the development of Web site evaluation methods has been all but systematic and conclusive.  Morrison, Taylor, and Douglas (2004) report that Web site evaluation in tourism is still in its early stages of development.  There are currently no commonly accepted standards for evaluating Web site success in tourism (Law and Bai 2006), leading most DMOs to simply track visits or measure some basic form of conversion (online brochure request or actual travel after visiting the Web site).  Although valuable to some extent, these measures give little insight as to what aspects of the Web site triggered or hindered certain attitudes or behaviors and how the Web design, structure, content, etc. could be improved.  Increasing the effectiveness of their Web sites is crucial for DMOs and Web site evaluation methods need to be able to inform this process (Tierney 2000).

Studies which try to identify and evaluate Web site success factors have emerged in various disciplinary areas (tourism, marketing, information systems, human-computer interaction, advertising, etc.) and have been labeled in many ways (Web site evaluation, e-satisfaction, Web quality, e-quality, e-loyalty, etc.).  Although somewhat different in their approaches, the underlying concepts of these studies are very similar and a unified model of success factors based on the various existing research models could greatly inform the field as well as practice of tourism Web site evaluation.  Therefore, the goal of the study presented in this paper was to conduct a meta-analysis of the findings of existing studies in order to draw conclusions about the factors which drive Web site success.  According to Hunter, Schmidt, and Jackson (1982, p. 10), "…a single study will not resolve a major issue, and a small sample study will not even resolve a minor issue.  Thus, the foundation of science is the culmination of knowledge from the results of many studies."  Consequently, the aim of this paper is not to annotate the past but rather to summarize the collective understanding of Web site success factors.  The major benefit of this study is the digest of a large volume of key factors into one comprehensive model that can be tested and applied to Web site development and evaluation problems.  This integration helps to identify not only commonalities but also gaps in existing approaches.

## Literature review
Successfully integrating information technology such as Web sites into the fabric of their organizations and their marketing strategies is critical for the survival of DMOs as promoters of destinations and brokers of information between tourism suppliers and consumers (Buhalis 2000; Wang and Fesenmaier 2006; Gretzel et al. 2006).

Effective Web-based marketing requires taking full advantage of Web sites as a communication medium (Brownlie et al. 1994; Cronin 1995). Gretzel, Yuan, and Fesenmaier (2000) claim that the success factors for marketing on the Web include attracting users, engaging users' interest and participation, retaining users and ensuring they return, learning about user preferences, and relating back to users through customized interactions. Similarly, Wang and Fesenmaier (2006) suggest that the key ingredients to successful Web-based destination marketing include identifying, developing, and analyzing the factors that can influence or even shape customer needs, thus suggesting that Web site development and evaluation efforts should not only assess the technical quality of the medium but should also include aspects related to customer satisfaction. The following provides a brief overview of Web site evaluation studies as well as the literature on customer perceptions, satisfaction and loyalty in an online context.

**Web Site Evaluation**

Web site evaluation promises strategic benefits such as customer retention, positive return on investment and leadership within the competition (Cronin 2003). Several evaluation studies have been conducted related to tourism Web sites (for example Murphy et al. 1996; Tierney 2000; Kasavana 2002; Morrison, Taylor, and Douglas 2004; Scharl, Wöber, and Bauer 2004, etc.), using a multitude of approaches that range from expert judgments to consumer surveys to automated evaluations by crawler technology. These studies have identified a myriad of possible factors. For instance, Schegg, Steiner, Frey, and Murphy (2002) analyzed Swiss hotel web sites to find successful online marketing strategies and proposed more than ten key factors for evaluating the effectiveness of hotel Web sites. Therefore, what the past research seems to have in common is a general agreement that assessing a Web site's effectiveness or performance requires multi-dimensional instead of uni-dimensional evaluation approaches and measures. However, the number, labels and definitions for these dimensions differ across the various studies, making it difficult to compare findings and identify factors that have consistently been used to evaluate Web sites. This situation has led to a lot of replication and little progress in our understanding of key factors that should be included in Web site evaluation frameworks. Although the boundaries are blurry, Web site evaluation studies tend to rely more often on expert assessments or pre-determined benchmarks and on the tangible aspects of a Web site rather than on consumer opinions. Studies that are based on the latter are more likely to appear under the categories of e-quality, e-satisfaction or e-loyalty studies.

**E-quality, E-satisfaction, and E-loyalty**

There is a growing body of research addressing the topic of defining, measuring, and managing e-quality, e-satisfaction, and e-loyalty. These studies focus on measuring key factors that address customers' needs, wants, and expectations toward a Web site. Maintaining a high quality is crucial for Web sites in order to increase customer satisfaction and encourage customers to return. The term service quality is widely used as a measure of a customer's judgment about an entity's overall excellence and superiority (Zeithaml and Bitner 2000), whereas e-quality is defined as the customer's overall judgment of an e-entity's excellence (Santos 2003). Santos (2003) stresses that e-quality offers a sustainable competitive advantage for the e-company by driving customers' purchase decisions and enhancing customer relationships.

Like e-quality, e-satisfaction has also been recognized as important in the marketing literature and diverse studies have been conducted to identify the drivers of e-satisfaction. Anderson and Srinivasan (2003: 125) defined e-satisfaction as "…contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm." According to McKinney, Yoon and Zahedi (2002), Web site characteristics and service features are important drivers of customer satisfaction in an online context. Given the well-studied and extensively documented relationships of customer satisfaction with customer behavior and ultimately company profitability, measuring customer satisfaction based on the interaction with a Web site becomes an important issue (Bansal et al. 2004). Some studies related to customer evaluations of Web sites have explicitly concentrated on customer retention. For instance, Reichheld and Schefter (2000) described loyalty as being all about quality customer support, on-time delivery, compelling product presentations, convenient and reasonably priced shipping and handling, and a clear and trustworthy privacy policy. The authors also claimed that loyalty through means of customer retention is critical to the success of any e-business because loyal customers significantly contribute to customer acquisition through positive word-of-mouth.

Appendix - Table 4. Summary of Key Factors Used in E-satisfaction Studies

| Tourism | |
|---|---|
| *Study* | *Key factors* |
| Chang and Weaver (2002) | Assurance, Flexibility, Reputation, Security, Accuracy, Detailed confirmation information |
| Mills and Morrison (2003) | -Interface: Access, Loading, Appearance, Navigation, Interactivity, Search, Security<br>-Perceived Quality: Incentives, Feedback, Information, Reliability<br>-Perceived Value: Involvement, Shopping convenience, Transaction utility, Price |
| Weber, Murphy, Schegg, and Murphy (2005) | -User Interface: Access, Ease of navigation, Design, Speed<br>-On-line resource: Form and organization of content, Product/service information<br>-Customer confidence: Security, Privacy, Brand<br>-Relationship service: E-customer service, Interactivity/e-mail, Customization, Incentives<br>-Perceived value: Price, Convenience |
| Kao, Louvieris, Powell-Perry, and Buhalis (2005) | -Web Information quality: Relevance, Understandability, Reliability, Adequacy, Scope, Usefulness<br>-Web System Quality: Access, Usability, Entertainment, Hyperlinks, Navigation, Interactivity |
| **Non-Tourism** | |
| *Study* | *Key factors* |
| Szymanski and Hise (2000) | Convenience, Site Design, Financial Security, Merchandising |
| Wang, Tang, and Tang, (2001) | Customer support, Security, Ease of use, Digital products/services, Traction and payment, Information content, Innovation |
| Devaraj, Fan, and Kohli (2002) | - Technology Acceptance Model (TAM) Constructs: Usefulness, Ease of use<br>- Transaction Cost Analysis (TCA) Constructs: Time, Ease, Price savings<br>- SERVQUAL Constructs: Empathy, Reliability, Responsiveness, Assurance |
| McKinney, Yoon, and Zahedi (2002) | -Web Information quality: Relevance, Understandability, Reliability, Adequacy, Scope, Usefulness<br>-Web System Quality: Access, Usability, Entertainment, Hyperlinks, Navigation, Interactivity |
| Wang and Huarng (2002) | General feedback on web site design, Competitive price of the product, Merchandise availability, Merchandise condition, On-time delivery, Merchandise return policy, Customer support, E-mail confirmation on customer order, Promotion activities |
| Shim, Shin, and Nottingham (2002) | - Convenience of site use<br>- Simplicity of site design (access to information and customer-service policies) |
| Bansal, McDougall, Dikolli, and Sedatole (2004) | Ease of Use, Information availablility, Product selection, Customer service, Price, Transaction duration, Shipping and handling |
| Evanschitzky, Iyer, Hesse, and Ahlert (2004) | Convenience, Product offerings, Product information, Site design, Financial security |
| Yang and Peterson (2004) | Ease of use, Customer service, Order fulfillment, Security/Privacy, Product portfolio |
| Wu and Padgett (2004) | Accuracy, Ability to customize, Net coverage, Homepage testing, Ease of use, Layout, Speed, Popularity |
| Muylle, Moenaert, and Despontin (2004) | Layout, Information (relevancy, accuracy, comprehensibility, comprehensiveness), Connection (ease of use, entry guidance, structure, hyperlink connotation, speed), Language customization |
| Schaupp and Belanger (2005) | Trust, Delivery, Usability, Product customization, Product quality, Security |
| Chong and Wong (2005) | Information quality, Customer services, System quality, Service policy, Seller Trustworthiness, Item offering, Item quality, Convenience, Community |
| Posselt and Gerstner (2005) | -Pre sale variables: Ease, Selection, Clarity, Price, Look, Ship-fee, Ship-options, Charge<br>-Post sale variable: Availability, Tracking, On-time, Expectation, Support |
| Jiang and Rosenbloom (2005) | - At check out satisfaction: Ease of ordering, Product information, Web site performance, Product selection, Shipping and handling<br>- After-delivery satisfaction: Product met expectations, On-time delivery, Customer support, Order tracking |
| Rodgers, Negash, and Suk (2005) | - Information quality: Informativeness, Entertainment<br>- System quality: Interactivity, Access<br>- Service quality: Tangibility, Reliability, Responsiveness, Assurance, Empathy |
| Zviran, Glezer, and Avni (2005) | Information and presentation, Search, Information completeness, Personalization, Error handling |
| Park and Kim (2006) | User interface quality, Product information quality, Service information quality, Security perception |

Appendix - Table 5. Summary of Key Factors Used in E-Loyalty Studies

| **Tourism** | |
|---|---|
| *Study* | *Key factors* |
| Miller (2004) | Customization, Contact interactivity, Care-Community, Cultivation-Choice, Character, Trust |
| **Non-Tourism** | |
| *Study* | *Key factors* |
| Gommans, Krishnan, and Scheffold (2001) | Website & Technology, Value proposition, Customer service, Trust & Security, Brand building |
| Srinivasan, Anderson, and Ponnavolu (2002) | Customization, Contact Interaction, Cultivation, Care, Community, Choice, Character, Convenience |
| Gefen (2002) | Tangibles, Empathy, Reliability, Responsiveness, Assurance, Trust, Perceived risk with vendor, Cost to switch |
| Anderson and Srinivasan (2003) | Trust, Perceived value |
| Taylor and Hunter (2003) | No Web site-specific factors |
| Devaraj, Fan, and Kohli (2003) | Efficiency (Time, Ease of use, Effort), Value (Price, Quality), Interaction (Information, Safety, Load time, Navigation) |
| Luarn and Lin (2003) | Trust, Perceived value, Customer satisfaction |
| Lee and Sohn (2004) | Price premium, Web page design, Ease of use, Switching cost, Trust |
| Thatcher and George (2004) | Commitment, Trust, Social Involvement |
| Allagui and Temessek (2004) | Core services/supporting services, Web site design, Customization, E-satisfaction |
| Ribbink, van Riel, Liljander, and Streukens (2004) | Assurance, Ease of use, E-scape, Responsiveness, Customization, E-Trust, E-Satisfaction |
| Chiou (2004) | Attributive service satisfaction, Perceived value, Perceived trust, Future ISP expectancy |
| Semeijn, van Riel, van Birgelen, and Streukens (2005) | Assurance, Navigation, E-scape, Accuracy, Responsiveness, Customization, Fulfillment, Satisfaction |
| Gounaris, Dimitriadis, and Stathakopoulos (2005) | Information, User friendliness, Interaction/Adaptation, Aesthetics |
| Balabanis, Reynolds, and Simintiras (2005) | Convenience, Emotional, Speed, Familiarity, Unawareness, Parity |
| Flavian, Guinaliu, and Gurrea (2006) | Trust, Usability, Satisfaction |
| Lin and Wang (2006) | Perceived value, Trust, Customer satisfaction, Habit |
| Wang and Liao (2007) | Content quality, Appearance, Service quality, Ease of use |

**Identifying Success Factors for Destination Marketing Web Sites**

In order to learn from the existing studies which have emerged from different theoretical backgrounds and have been informed by somewhat dissimilar goals, commonalities in the factors employed need to be identified and synthesized into a framework that can be used as the basis for Web site evaluation efforts in the context of destination marketing. Such a formally derived integration of existing research also provides a crucial foundation for future research in that it makes gaps in existing approaches apparent and calls for the development of specific measures for the various Web site evaluation dimensions. A qualitative meta-analysis approach was deemed as most appropriate for achieving this goal. Its process and outcomes are described in the subsequent sections of the paper.

**METHODOLOGY**

Meta-analysis is a methodology employed to synthesize the outcomes of various studies related to the same topic or outcome measure (Hunter et al. 1982). It is typically conducted as a quantitative procedure geared toward the comparison of effect sizes across a variety of research studies. Given the diversity of approaches used in the context of Web site evaluation such statistical evaluation is not possible. However, an integration of research findings can also be achieved through qualitative means. Qualitative meta-analysis, also referred to as meta-synthesis, follows the same replicable procedures of a quantitative meta-analysis; however, it is interpretive rather than aggregative (Paterson et al. 2001). As in the case of a quantitative meta-analysis, defining the domain of research and establishing criteria for including studies in the review is critical.

## Data Collection

Computer databases (Ebsco, ProQuest, and Google scholar) were initially searched to identify relevant research in both tourism and non-tourism fields.  Search terms included different combinations of "Web", "eCommerce", "Internet", "satisfaction", "loyalty", "quality" and "evaluation".   Data collection efforts also included a systematic search of selected journals/proceedings within the timeframe of January 1997 and September 2006. Tourism related publications included in this search were the ENTER conference proceedings, the Journal of Information Technology and Tourism, Tourism Management, Journal of Travel Research, Annals of Tourism Research, Journal of Hospitality Information Technology, Journal of Vacation Marketing, and the Journal of Travel and Tourism Marketing.  To identify research in non-tourism fields, the top ten e-commerce research journals as listed by Bharati and Tarasewich (2002) were searched.  The next step in the data collection process involved a type of snow ball sampling technique in that the references listed by the obtained studies were used to determine additional studies.  The identified papers were then evaluated with respect to their suitability for inclusion in the study, e.g. research that focused on Web site evaluation with respect to Intranets and job performance were excluded.  This procedure resulted in a sample of 153 academic papers.

## Description of Sample

The papers included in the sample were classified into tourism (53 papers) and non-tourism papers (100) based on the focus of their research.  Not surprisingly, most papers were published after 2000.  Whereas the number of relevant publications in non-tourism areas shows a steady increase until 2005, publications in tourism fluctuate more and seem to have peaked in 2004 (Figure 1).
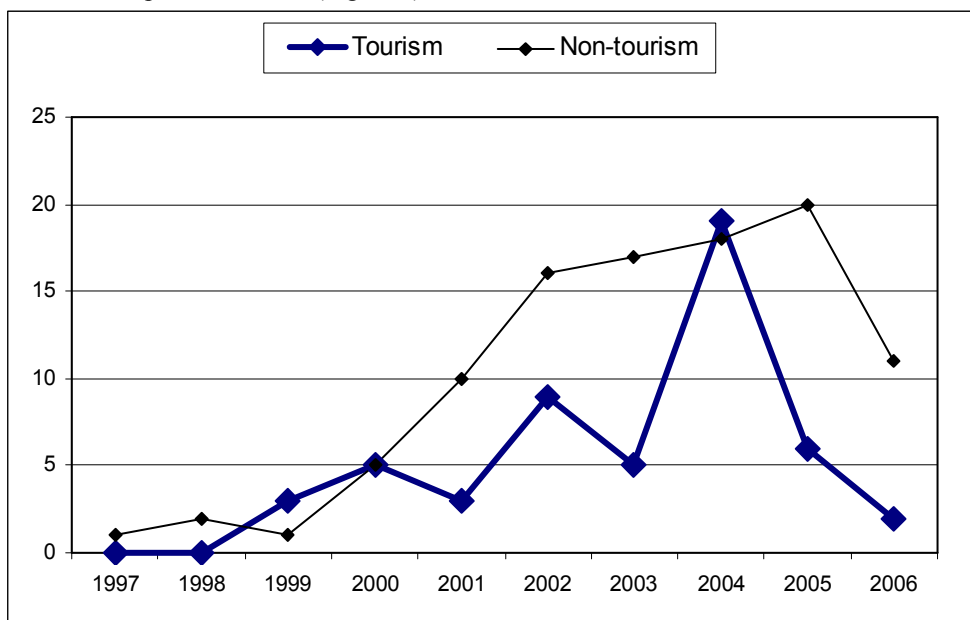


Figure 1. Distribution of Papers by Year and Area of Investigation

The papers were further categorized based on their title, keywords, and dependent variables (if applicable) into four subject areas: 1) Web evaluation, 2) E-Quality; 3) E-Satisfaction; and, 4) e-Loyalty.  Figure 2 depicts the distribution of papers among these subjects for tourism as well as non-tourism papers.  The frequencies show that tourism papers appeared mostly under the label of Web evaluation, whereas non-tourism papers fall most frequently into the E-quality category.  Figure 2 also shows the limited number of e-satisfaction and e-loyalty studies in tourism.
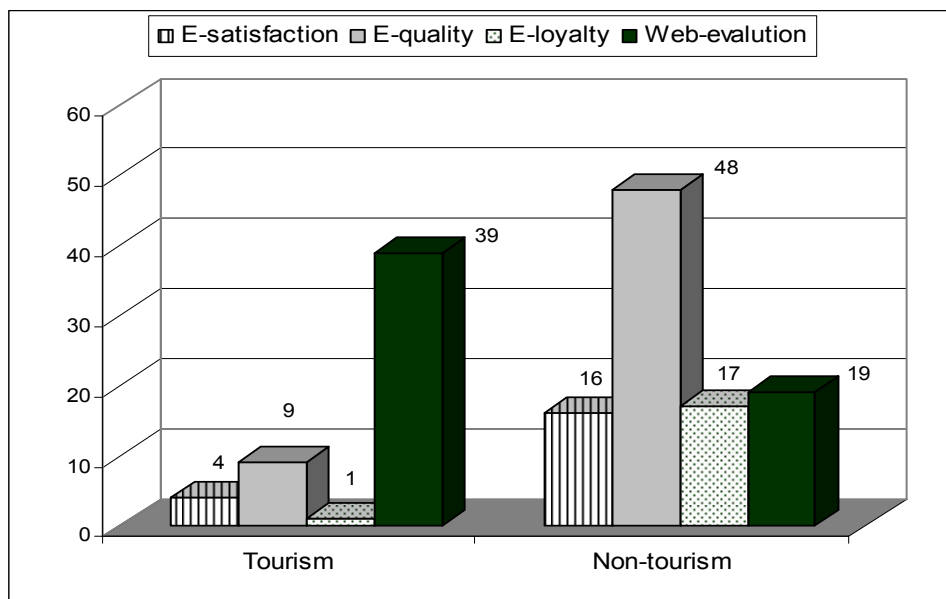
Journal of Tourism, Hospitality and Sports
ISSN (Paper) 2312-5187  ISSN (Online) 2312-5179    An International Peer-reviewed Journal
Vol.22, 2016

www.iiste.org
IISTE

Figure 2. Distribution of Papers by Subject Area and Area of Investigation

## Data Analysis

Several steps were followed in the process of synthesizing the Web site evaluation concepts presented in the various studies.  First, the dimensions/factors used in the studies were extracted from the text of the papers.  A detailed list of factors identified in the various studies is included in the Appendix to this paper.  Second, the factors were pre-sorted based on their title only.  As a next step, the factor descriptions as provided in the papers were reviewed and concepts were resorted.  For instance, accessibility was found to have different meanings in different studies.  In some instances it referred to usability concerns such as ease of finding the Web site and downloading speed (Gupta, Jones, and Coleman 2004; Yoches and Erdem 2005), whereas in other instances it referred to accessibility of service representatives (Yang 2001; O'Connor 2004).  If a concept contained subdimensions, the subdimensions rather than the overarching concept were sorted into the various categories.  For instance, this was the case with Web System Quality, which included access, usability, entertainment, hyperlinks, navigation, and interactivity (McKinney et al. 2002).  The sorting process is further illustrated in Figure 3, which relates to specific factors used by Posselt and Gerstner (2005).  Look, for example, was described as overall look and design of the site.  Based on its meaning it was assigned to the Visual Appearance category.  If a factor could not be assigned to any of the existing concepts, a new category was created.
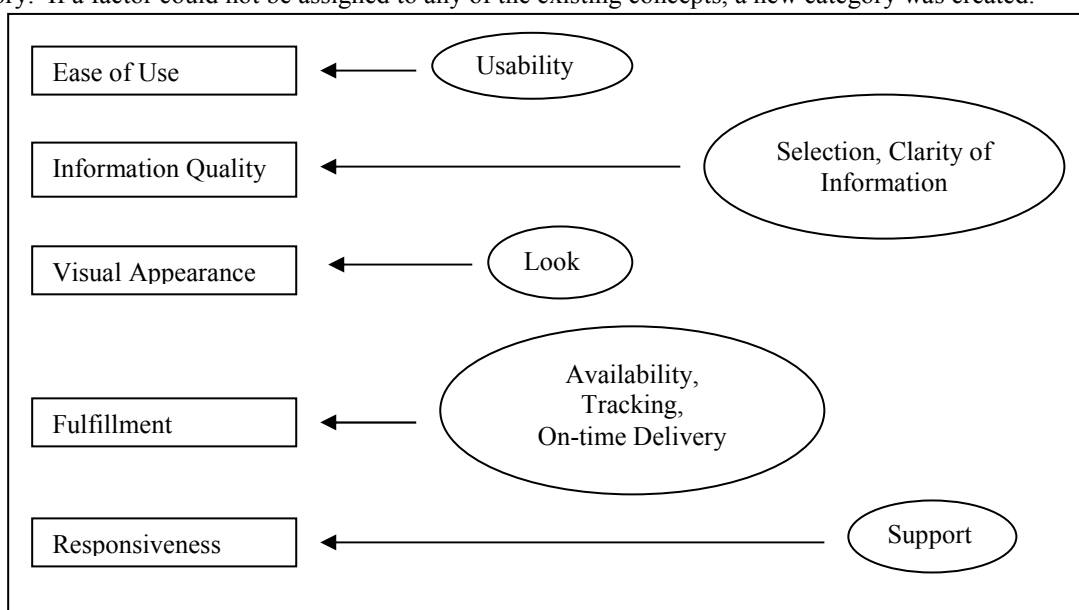


Figure 3. Illustration of Factor Sorting Process

## FINDINGS

The papers included in this study identified on average five Web evaluation factors (mean value = 5.24). The paper by Madu and Madu (2002) listed the greatest number of dimensions (16) whereas Zhang and Von Dran (2002) only measured one dimension. Thus, over 700 concepts were initially entered into the meta-analysis. The various steps of the sorting process resulted in a total of 38 factors, suggesting that there was considerable overlap if not in the wording than at least in the meaning of the factors identified by the studies in the sample. This list of factors was used to identify the most commonly used Web site success factors as well as to point out potential gaps in current Web site evaluation approaches.

### Common Factors

Identified as common factors were those dimensions reported by more than 10 percent of the studies. A total of 13 of such key dimensions were found in the tourism papers and 15 common factors emerged from the non-tourism studies. Table 1 presents the actual rankings of these common factors for tourism and non-tourism related papers. The Information Quality factor was used in a majority of tourism studies (87%) and was also widely used in non-tourism studies (83%). However, the factor that most often occurred in non-tourism studies was Fulfillment, a dimension that did not appear at all in tourism studies. Ease of Use was also a commonly evaluated factor in both tourism and non-tourism studies as was Security/Privacy. Interestingly, Visual Appearance was a much more common success measure in non-tourism studies. Also, Customization was a factor that was commonly used in non-tourism studies but not at all in tourism related Web evaluation efforts.

Appendix - Table 1. Summary of Key Factors Used in Tourism-Related Web Evaluation Studies

| Tourism | |
|---|---|
| Study | Key Factors Identified |
| Morrison, Taylor, Morrison, and Morrison (1999) | Technical, Marketing, Internal, Customer |
| Weber and Roehl (1999) | Security, Quality of information, Internet vendor's reliability, Getting orders/services in timely manner, Ease of contacting vendor, Ease of placing orders, Ease of handling returns/refunds, Customer service and after-sale support, Variety of choices, Ease of canceling orders, Ease of payment procedures, Lowest price, Satisfaction of being cutting edge |
| Buhalis and Spada (2000) | User-friendly and easy-to-understand system, Comprehensive destination information before, during, and after trip, On-line booking confirmation, Speed of transactions, Range of prices available, Late-availability information, Secure payment methods, Option to conduct virtual tours and view pictures of a destination, Book products form a variety of distribution channels, On-line booking through DMS, Availability of help function such as a toll-free telephone, Intuitive on-line help |
| Friel, Sombert, and Crimes (2000) | Transparency, Proactiveness, Service, Speed, Reliability, Care, Creativity |
| Pröll and Retschitzegger (2000) | Quality of access, Quality of content, Ability to customize |
| Jung and Butler (2000) | -Successful website: regular updating, repeat visits, appearance, useful information, interactivity, web design, promotion (off-line), forming partners, value-added info, institutional support, building royalty, clear navigation paths<br>-Successful web design: appearance, added value, content, design & creativity, ease of use, joy of use, relationship with customers, security, transportation support |
| Chu (2001) | Informative, Interactive, Attractive |
| Perdue (2001) | Speed and quality of site accessibility, Ease of navigation, Visual attractiveness of the site, Quality of the site, Quality of information content |
| Yip and Law (2002) | Special discounts, Free delivery of tickets, Extra benefits, Complementary shopping coupons, Secure personal information |
| Wan (2002) | -User Interface: Ease of Physical Access, Ease of Accessing Specific Information within the Web Site, Standardized Format, Ability to Access Information in Multiple Ways, Help and Orientation<br>-Variety of Information: Simplicity, Current and Reliable Information, Comprehensive Coverage, Hyperlinks to Relevant Web Sites<br>-Online Reservation: Capacity to make Reservation or Remit Payment by Credit Card |
| Law and Leung (2002) | -Information quality: Accompanying persons, airline preferences, availability of regulations and rules, class choices, date or time not available for booking, list of airline choices, meal selection option, number of travelers, price comparison on different airlines, special airfare promotion, seat selection, summary on selected itinerary, ticket type.<br>-System use: Confirmation period, express search, free entry of origin, free entry of destination, free entry of departure day/time, online ticket purchase, reservation steps to follow, steps to make reservation and payment<br>-System quality: no errors in searching and researching, secure payment systems, message display, warning on infeasible date/time<br>-Service quality: Customer support, online suggestions, payment options<br>-Customer loyalty: Membership, extra bonus for frequent flyer members |
| Sigala and Christou (2002) | Perceived ease of use, Perceived usefulness, Perceived functionality of Internet tools, Perceived usefulness as an education tool, Perceived competencies, Perceived level of IT support |
| Ranganathan and Ganapathy (2002) | Information content, Design, Security |
| Wöber, Scharl, Natter, and Taudes (2002) | Volume of textual & graphical information, Diversity of words used, Ease of navigation, Interactivity, Reservation and booking features, Number of different language versions |
| Schegg, Steiner, Frey, and Murrhy (2002) | -Service Process: Access and Navigation, entertainment, information, online booking<br>-Customer relationship: communication, database management<br>-Value creations: Added value services, incentives and triggers<br>-Trust: implicit trust features, explicit trust features<br>-Cybermarketing |
| Palmer (2003) | Download Delay, Navigation/ Organization, Interactivity, Responsiveness, Information/ Content |

| Table 1. Continued | |
| --- | --- |
| Study | Key factors |
| Liang and Law (2003) | Customer contact information, Facilitation information, Reservations information, Surrounding area information, Management of website |
| Nysveen, Methlie, and Pedersen (2003) | Search engine, Service integration, Personalization, Trust, Reversed pricing, Auctions, Collective volume discount, Service aggregation, Customer community |
| Law and Wong (2003) | Secure payment methods, Different price ranges for products/services, User-friendly system, Rapid information search, on-line booking and confirmation, Comprehensive destination information, Availability of help functions, Provision of related Web links, Late availability information, Availability of virtual tours/video files of destination, Presentation style, specifically designed for user group |
| Yeung and Law (2004) | Language Usability, Layout and Graphics, Information Architecture Usability, User Interface and Navigation Usability, General Usability |
| Xiang and Fesenmaier (2004) | Functionality, Ease of use, Learnability, Speed, Design, Interactivity, Novelty |
| Scharl, Wöber, and Bauer (2004) | Product, Speed, Intelligence, Layout, Services, Languages, Navigation, Interactivity |
| Powley, Cobanoglu, and Cummings (2004) | Website quality (Efficiency, Speed and quality of design, Convenience of web site, Attractiveness of web site), Purchasing motivators, Personal significance, Travel information source, Attitude |
| Schaffer and Mills (2004) | Product quality, Processing capacity, Credit card protection, Data handling/privacy policy, Web site design, Navigation, Customer service |
| Zins, Bauernfeind, Missier, Venturini, and Rumetshofer (2004) | Design/layout, Functionality, Ease of Use, Learnability, Outcome/Future Use, Errors/system reliability |
| Fam, Foscht, and Collins (2004) | Calculation, Predictability, Intentionality, Capability, Transference, Tangibilization, Interactivity |
| Gupta, Jones, and Coleman (2004) | Access, Information, Design, E commerce/immediacy, Customer relationship |
| Aaberge, Grotte, Haugen, Skogseid, and Olnes (2004) | Information presentation, Web site structure, Content (Theme, Scope), Communication |
| Sigala (2004) | Playfulness, Aesthetics, Consumer return on investment, Service excellence |
| Christou, Avdimiotis, Kassianidis, and Sigala (2004) | Relative advantage, Compatibility, Trialability, Observability, Complexity, Perceived risk |
| Kline, Morrison, and John (2004) | -User friendliness: Ease of navigation, Contact information<br>- Site attractiveness: Visual appeal<br>- Marketing effectiveness: Product, Information availability<br>- Technical qualities |
| Douglas and Mills (2004) | - User friendliness: Web mobility, Ease of contact<br>- Site attractiveness: Web interface, Tangibilize products<br>- Marketing effectiveness: Marketing information, Destination activities, Market segments, Glocalization, Trip planner |
| Richard (2005) | -High task relevant: Navigational characteristics, Informativeness, Information content effectiveness, Structure, Organization,<br>-Low task relevant: Entertainment |
| Kim and Fesenmaier (2005) | Aesthetics, Fun, Interactive media/experience, Metaphors, Narratives, Personalization, Promotions/Incentives, Social Actors, Tools |
| Kaplanidou, Vogt, and Morris (2005) | Navigation, Content, Accessibility |
| Yoches and Erdem (2005) | Interface, Navigation, Content, Reliability, Technical performance |
| Mich, Franch, and Martini (2005) | Identity, Content, Services, Location, Maintenance, Usability |
| Law and Hsu (2006) | Reservations information, Facilities information, Contact information, Surrounding area information, Website management |
| Baloglu and Pekcan (2006) | Interactivity, navigation, functionality, marketing |
| Kaplanidou and Vogt (2006) | Content (trip information functionality), Content (motivating visuals), Accessibility (fast downloads) |

Table 1. Most Prominently Used Concepts

| Tourism | | Non-Tourism | |
|---|---|---|---|
| *Key factor* | *Percent (%) of Papers* | *Key factor* | *Percent (%) of Papers* |
| Information Quality | **87** | Fulfillment | **90** |
| Ease of Use | **60** | Information Quality | **83** |
| Security/ Privacy | **43** | Ease of Use | **69** |
| Responsiveness | **42** | Visual Appearance | **63** |
| Customer Service | **39** | Security/ Privacy | **53** |
| Interactivity | 39 | Responsiveness | 47 |
| Accessibility | 29 | Interactivity | 45 |
| Navigation | 27 | Customer Service | 39 |
| Visual Appearance | 23 | Accessibility | 35 |
| Personalization | 19 | Navigation | 25 |
| Trust | 18 | Personalization | 24 |
| Brand/Reputation | 16 | Customization | 20 |
| Incentive | 16 | Trust | 20 |
| | | Brand/Reputation | 17 |
| | | Return Policy | 15 |

These factors were then further condensed based on their logical relationships to increase the applicability of the evaluation framework to actual Web site performance measurement.  For instance, Navigation was conceptualized as essentially a usability factor and was merged with Ease of Use.  Most authors described navigation as successful movement through a Web site (Kaplanidou, Vogt, and Morris 2005; Yoches and Erdem 2005).  Similarly, Customer Service was merged with Responsiveness as both fundamentally addressed issues of getting in touch with the company and receiving a prompt response to questions or problems (Wolfinbarger and Gilly 2003).  Further, Brand/Reputation was combined with Trust as both concepts reflect a customer's evaluation of the credibility of the company and its offerings, including the Web site.  This effort led to nine common factors that appear to form the basis of the majority of studies.  These factors are: 1) Information Quality; 2) Ease of Use; 3) Security/Privacy; 4) Visual Appearance; 5) Personalization; 6) Responsiveness; 7) Interactivity; 8) Trust; and, 9) Fulfillment.  The identified dimensions largely correspond with Rowley's (2006) findings of commonly used dimensions except for Visual Appearance and Trust. Table 2 provides an overview of the common factors with a short description for each.

Appendix - Table 2. Summary of Key Factors Used in Non-Tourism Related Web Evaluation Studies

| **Non-Tourism** | |
|---|---|
| Study | Key factors |
| Rice (1997) | Design features or emotional experience, Enjoyable, Quality of the organization or layout, Uniqueness, Information/content, Exciting, Visually attractive, Ease to navigate, Speed of moving around the site |
| Griffith and Krampf (1998) | Online sales, Communication, Customer service |
| Palmer and Griffith (1998) | Multimedia use, Site navigability, Promotional activities, Sales and delivery, Product support |
| Abels, White, and Hahn (1999) | Use, Content, Structure, Linkage, Search, Appearance |
| Liu and Arnett (2000) | Information and Service Quality, System Use, Playfulness, System Design Quality |
| Voss (2000) | -Lower level: Web site responsiveness, Effectiveness, Order fulfillment.<br>- Middle level: Trust, Customization, Information, Status<br>- Top level: Proactive service, Value-added service |
| Fink and Laupase (2000) | Tangibles, National Culture |
| Huizingh (2000) | Content: Information, Transaction, Entertainment, Number of features<br>Design: Navigation structure, Search function, Protected content, Quality of structure, Image, Presentation style |
| Ahuja and Webster (2001) | Disorientation, Ease of use |
| Van Riel, Liljander, and Jurriens (2001) | Core service, Supplementary services, User Interface |
| D'Ambra and Rice (2001) | Training, Interests, Information, Shopping cost, Difficult information, Fun, Social influence, Identify control, Use control |
| Benbunan-Fich (2001) | Navigation, Content, Interactivity |
| Lee and Kim (2002) | Convenience: Information gathering; Order making<br>Delight: Interface to system; Interface to people<br>Firmness: Robust, Security |
| Yeung and Lu (2004) | Information, Communication, Downloading, Transaction |
| Constantinides (2004) | Usability, Interactivity, Trust, Aesthetics, Marketing mix |
| Hong and Kim (2004) | - Robustness dimension: Internal reliability, External security for structural robustness<br>- Utility dimension: Useful contents, Usable navigation<br>- Aesthetic appeal dimension: System interface attractiveness, Communication interface attractiveness |
| Hassan and Li (2005) | Screen, Appearance, Content, Accessibility, Navigation, Media Use, Interactivity, Consistency |
| Yenisey, Ozok, and Salvendy (2005) | Perceived operational factors, perceived policy-related factors |
| Cyr; Bonanni, Bowes, and Ilsever (2005) | Menu layout, Access to product information, Professional design, Logical presentation of product info, Screen design, Navigation, Sequencing, Presentation of product attributes, Product availability |
| Bart, Shankar, Sultan, and Urban (2005) | Privacy, Security, Navigation and presentation, Brand strength, Advice, Order fulfillment, Community features, Absence of errors |
| Wulf, Schillewaert, Muylle, and Rangarajan (2005) | Content, Organization, Technology |

Table 2. Description of Unified Key Evaluation Factors

| Key Factors | Description |
|---|---|
| Ease of Use | - Usability, Accessibility, Navigability<br> - Logical structure |
| Responsiveness | - Accessibility of service representatives, e-mail service, reply to online reservations<br>- Contact information<br>- Availability of help functions such as a toll-free telephone, intuitive on-line help |
| Fulfillment | - Order process, accuracy of service promises, billing accuracy<br>- On-line booking process and confirmation<br>- On-time delivery |
| Privacy/Security | - Protecting information during transmission and subsequent storage<br>- Security for online purchases/reservations<br>- Privacy/confidentiality statement |
| Personalization | - Personalized or individualized attention<br>- Customization of offerings and of information |
| Visual Appearance | - Attract attention<br>- Convey image<br>- Aesthetics |
| Information Quality | - Variety, scope, currency, conciseness, accuracy of information<br>- Authority, reliability, uniqueness of information |
| Trust | - Brand recognition<br>- Consistency<br>- Intentions<br>- Credibility |
| Interactivity | - Interactive features such as virtual tours<br>- Interactive communication (FAQs, guest books, chat) |

This unified model of key success factors for DMO Web sites differs mostly from existing frameworks in tourism in that it includes a fulfillment related factor.  Fulfillment refers to the delivery of products and services within a service level promise (Zeithaml, Parasuraman and Malhotra 2002; Wolfinbarger and Gilly 2003; Field, Heim and Sinha 2004).  Although DMOs have traditionally not engaged in the selling of products, almost all mail out brochures, many offer online booking capabilities, and some even provide virtual souvenir shops on their Web sites.  Thus, measuring a DMO Web site's performance in terms of fulfillment becomes important.  While having a return policy is only crucial for those DMOs that actually ship tangible products, other aspects such as order confirmation and delivery estimates apply to traditional DMO activities such as sending out promotional materials.

**Additional Factors**
User interactions with Web sites are quasi-social interactions for which general communication and persuasion principles hold true (Reeves and Nass 1996).  Consequently, destination marketing Web sites provide unique opportunities for persuasion through interactivity and the ability to create stimulating information environments. However, a recent study by Kim and Fesenmaier (2005) found that destination Web sites in the United States largely neglect persuasion principles and are rather inconsistent in their communication efforts.  The qualitative meta-analysis conducted for this study shows that existing Web site evaluation frameworks fail to fully integrate measures necessary to detect such shortcomings.  This is partly due to misconceptions of the Web as a purely informational and functional medium that still largely prevail in the tourism field.  Werthner and Klein (1999) point out that tourism marketing messages serve four distinct purposes: 1) Information; 2) Education; 3) Advertising/Persuasion; and, 4) Entertainment.  Whereas the first purpose is reflected in the unified model of Web site success factors, the other three are only somewhat captured, e.g. through Personalization and Interactivity.  Several factors that were included in only a small number of the studies could inform the measurement of the extent to which DMO Web sites facilitate learning, entertainment and persuasion.  One of these factors is cultural adaptation.  Given the global audience DMO Web sites receive, catering to the needs of international visitors can greatly enhance the Web site's persuasive impact on the specific target market (Cyr and Trevor-Smith 2004; Sing et al. 2006).  Another factor that emerged from the meta-analysis is playfulness.

Although still not widely recognized in Web evaluation frameworks, playfulness, fun, enjoyment and flow have received increasing attention in the overall human computer interaction literature (Blythe et al. 2003; Lin, Wu and Tsai 2005) and pleasure has recently been identified as an important mediating variable between evaluation of Web site quality and satisfaction (De Wulf et al. 2006).  As DMOs start to invest in the entertainment aspects of their Web sites, they need to have measures in place to evaluate these efforts.  Further, given the importance of word-of-mouth in tourism (Kotler, Bowen and Makens 2006), fostering and managing positive eWOM through a DMO Web site is a must.  Social involvement emerged as a factor that signifies opportunities to share information and communicate experiences and opinions to others.  Whereas the Interactivity factor stresses the destination Web site's effectiveness in engaging the user with Web site content through interactive features, social involvement emphasizes the sharing and peer communication dimension of Web site interactions.  Also, "marketing" and "incentives" were factors that appeared in the included studies and hint at attempts to better measure the advertising/persuasion aspect of Web sites.  Finally, emotional appeal was also suggested in the literature as a success measure to be included in Web evaluation efforts.  Since destinations market tourism experiences with often highly emotional significance and travel information search involves hedonic components (Vogt and Fesenmaier 1998), appealing to travelers' emotions besides just their functional information needs through Web site content and features appears to be an important factor to consider.

**Factors Not Considered in Existing Research**

One aspect of destination marketing involves inspiring people to visit places or attractions which they did not know or consider before engaging with promotional materials.  Web sites have to help achieve this persuasion goal and their effectiveness needs to be evaluated in this respect.  Gretzel (2005) defines inspiration as persuasive communication that influences individuals' consideration sets.  Cross-references to nearby attractions or events, suggested itineraries, featured products, as well as recommendations are examples of inspirational Web site components that should be evaluated separate from other Web site elements.

Technology integration is another factor that should be considered for Web evaluation studies because it will increase in importance as new technologies such as car navigation systems, MP3 players, Web-enabled cell phones and other forms of mobile computing become widely adopted by the traveling public.  A substantial role of destination Web sites will be the provision of content that can be downloaded to these various devices and used during the actual trip.  Investments in Web site features that support technology integration will have to be measured and evaluated to inform DMOs of their performance with respect to disseminating information and marketing messages through a variety of channels.

Current Web site evaluation studies assume that consumers cognitively engage with various features of a Web site and Web site quality measures are largely geared towards evaluations after the Web site has been used for quite some time.  Recent research suggests that first impressions of Web sites are typically formed within milliseconds (Kim and Fesenmaier 2006; Lindgaard et al. 2006).  Thus, it is important to develop evaluation measures which can capture and assess a destination Web site's ability to appeal to consumers within the blink of an eye and without cognitive elaboration (Gladwell 2005).

Appendix - Table 3. Summary of Key Factors Used in E-quality Studies

| **Tourism** | |
|---|---|
| *Study* | *Key factors* |
| Jeong and Lambert (1999) | Perceived usefulness, Perceived ease of use, Perceived accessibility |
| Kaynama and Black (2000) | Content, Accessibility, Navigation, Design and Presentation, Responsiveness and Feedback, Background information, Personalization and Customization |
| Jeong and Lambert (2001) | Perceived Usefulness, Perceived Ease of Use, Perceived Accessibility |
| Lee and Kim (2002) | Ease of Use, Information Quality, Responsiveness, Personalization, Reputation, Security, Availability |
| Chung and Law (2003) | Facilities information, Customer contact information, Reservation information, Surrounding area information, Management of websites |
| Kim and Lee (2004) | -Dimensions of web service quality of online travel agencies: Structure and Ease of use, Information content, Responsiveness and Personalization, Reputation and security, usefulness<br>- Dimensions of web service quality of online travel suppliers: Information content, Structures and ease of use, Reputation and security, Usefulness |
| O'Connor (2004) | Notice, Choice, Onward transfer, Access, Security, Enforcement |
| Shchiglik and Barnes (2004) | Easy to navigate, Attractive appearance, Projects a sense of competency, Accurate, Timely, Reliable information, Good reputation, Safe to transact, Personal data security, Will deliver as promised |
| Sigala and Sakellaridis (2004) | Task Fit, Interactivity, Trust, Responsiveness, Design appeal, Intuitiveness, Visual appeal, Innovativeness, Flow-emotional appeal, Integrated communications, Business process, Viable substitute |
| Yen (2005) | Efficiency, Ease of use, Performance, Perceived control, Convenience |
| **Non-Tourism** | |
| *Study* | *Key factors* |
| Zeithaml, Parasuraman, and Malhotra (2000) | -Perceived convenience: Access, Ease of Navigation, Efficiency, Flexibility<br>-Perceived control: Reliability, Personalization, Security/privacy |
| Donthu (2001) | -Site-related factors: Ease of Use, Aesthetic Design, Processing Speed, Security<br>-Vendor-related factors: Competitive Value, Clarity of Ordering, Corporate and Brand Equity, Product Uniqueness, Product Quality, Assurance |
| Barnes, Liu, and Vidgen (2001) | Information quality, Website navigation/appearance, User empathy |
| Yoo and Donthu (2001) | Ease of use, Aesthetic design, Processing speed, Security |
| Yang (2001) | Reliability, Responsiveness, Access, Ease of use, Attentiveness, Credibility, Security |
| Jun and Cai (2001) | Product Quality: Product variety<br>Customer Service Quality: Reliability, Responsiveness, Competence, Courtesy, Credibility, Access, Communication, Understanding the customer, Collaboration, Continuous improvement<br>Online Systems Quality: Contents, Accuracy, Ease of use, Timeliness, Aesthetics, Security |
| Zhang and von Dran (2001) | Information content (accurate, appropriate detail level of information) |
| Yang and Jun (2002) | Internet Purchaser: Reliability, Access, Ease of Use-Personalization, Security, Credibility<br>Non-Purchaser: Security, Responsiveness, Ease of Use, Availability-Reliability, Personalization, Access |
| Zeithaml, Parasuraman, and Malhotra (2002) | Efficiency, Reliability, Fulfillment, Privacy, Responsiveness, Compensation, Contact |
| Barnes and Vidgen (2002) | Usability, Information, Service interaction |
| Francis and White (2002) | Web Store functional, Product Attribute description, Ownership Conditions, Delivered Products, Customer Service, Security |
| Olsina and Rossi (2002) | Usability, Functionality, Reliability, Efficiency |
| Loiacono, Watson, and Goodhue (2002) | Ease of Use, Usefulness, Entertainment, Complementary relationship |
| Janda, Trocchia, and Gwinner (2002) | Performance, Access, Security, Sensation, Information |
| Aladwani and Palvia (2002) | Specific content, Content quality, Appearance, Technical adequacy |

Journal of Tourism, Hospitality and Sports
ISSN (Paper) 2312-5187  ISSN (Online) 2312-5179    An International Peer-reviewed Journal
Vol.22, 2016

www.iiste.org

IISTE

| **Table 3**. Continued | |
|---|---|
| *Study* | *Key factors* |
| Madu and Madu (2002) | Performance, Web site features, Structure, Aesthetics, Reliability, Storage capability, Serviceability, Security, System integrity, Trust, Responsiveness, Product/service quality differentiation and customization, Web store policies, Reputation, Assurance, Empathy |
| Zeithaml (2002) | Core E-SQ: Efficiency, Fulfillment, Reliability, Privacy; Recovery E-SQ: Compensation, Contact |
| Van Riel, Semeijn, and Janssen (2003) | User interface, Reliability, Security, Customization, Responsiveness |
| Yang, Peterson, and Cai (2003) | Responsiveness, Credibility, Ease of use, reliability, convenience, Communication, access, Competence, courtesy, personalization |
| Douglas, Muir, and Meehan (2003) | Presentation, Content, Accessibility, Reliability, Customer Support, Security |
| Wolfinbarger and Gilly (2003) | Website design, Fulfillment, Reliability, Privacy/security, Customer service |
| Barnes and Vidgen (2003) | Usability, Information quality, Service interaction, Overall |
| Santos (2003) | -Incubative dimension: Ease of use, Appearance, Linkage, Structure and layout, Content<br>-Active dimension: Reliability, Efficiency, Support, Communication, Security, Incentives |
| Gounaris and Dimitriadis (2003) | -Customer care and risk reduction benefit: Concern of the user, Ease to communicate with service personnel, Security of transactions, Responds promptly to queries and e-mails, Security for personal information<br>-Information benefit: Reliable information, Complete information, Covering personal interests, Security, Up-to-date information, Information matching personality & lifestyle<br>-Interaction facilitation benefit: technology, design, speed, functionality |
| Wang and Tang (2003) | Reliability, Responsiveness, Assurance, Empathy |
| Mich, Franch, and Gaio (2003) | Identity, Content, Services, Location, Management, Usability, Feasibility |
| Buckly (2003) | -User-focused: Ease of learning, Efficiency of use, Memorability, User-drop out, Error frequency and severity<br>-User satisfaction: Measured by SERVQUAL, Perceptions of privacy<br>-Outcomes based measures: Yield & income by site/per customer, Customer loyalty & drop-off rates |
| Cai and Jun (2003) | Web site/design/content, Trustworthiness, Prompt/reliable service, Communication: |
| Negash, Ryan, and Igbaria (2003) | Information quality (Informativeness and entertainment), System quality (Interactivity and access), Service quality (Tangibles, Reliability, Responsiveness, Assurance, Empathy) |
| Surjadaja, Ghosh, and Antony (2003) | Responsiveness, Site effectiveness and functionality, Real-time assistance, Fulfilment, External communication, Interactivity, Up-to-date information, Systems integration, Personalization, Navigability, Accessibility, Convenience, Security, Trusted service, Return process, Supply chain integration, Internal communication, Customization, Service recovery, Price. |
| Long and McMellon (2004) | Tangibility, Physical evidence of service, Assurance, Trust & confidence, Reliability, Performance & dependability, Purchase process, Ordering, shipping, packaging, Responsiveness, Individual attention |
| Field, Heim, and Sinha (2004) | Website design, Fulfillment/reliability, Security/privacy, Customer service |
| Parasuraman, Zeithaml, and Malhotra (2004) | -E-S-QUAL: Efficiency, Fulfillment, System availability, Privacy<br>-E-RecS-QUAL: Responsiveness, Compensation, Contact |
| Chen and Yen (2004) | Playfulness, Choice, Connectedness, Information collection, Reciprocal communication |
| Iwaardena, Wiele, Ball, and Millen (2004) | Tangibles, Reliability, Responsiveness, Assurance, Empathy |
| Kim and Stoel (2004) | Informational fit-to-task, Tailored communication, Completeness, Relative advantage, Visual appeal, Innovativeness<br>Emotional appeal, Consistent image, Easy to understand, Intuitive operations, Response time, Trust |
| Jayawardhena (2004) | Web interface (Navigation, Updated, Visually attractive, Relevant information, Interactive), Interaction, Reliability, Responsiveness, Assurance, Empathy |
| Hernon and Calvert (2005) | Ease of Use, Web Site Aesthetics, Linkage, Collections, Reliability , Support, Security/Privacy/Trust, Ease of Access, Flexibility, Customization/Personalization |
| Schaik and Ling (2005) | Perceived ease of use, Disorientation, flow-involvement, flow-control, Aesthetic quality |
| Davori, Mazzoni, and Corradini (2005) | Basis functionality, Advanced functionality, Usability, Accessibility, Efficiency, Maintainability and Compliance |

| **Table 3**. Continued | |
|---|---|
| Lee and Lin (2005) | Web sites design, Reliability, Responsiveness, Trust, Personalization |
| Ma, Pearson, and Tadisina (2005) | Availability, Security, Application features, Ease of use, Reliability, Empathy, Responsiveness, Assurance, Flexibility |
| Parasuraman, Zeithaml, and Malhotra (2005) | -E-S-QUAL scale: Efficiency, Fulfillment, System availability, and Privacy<br>-E-RecS-QUAL: Responsiveness, Compensation, Contact |
| Guertin and Nantel (2005) | Ease of use, Quantity & quality of information, Privacy & security, Design & aesthetics, Personalization & interactivity, Variety & uniqueness |
| Yang, Cai, Zhou, and Zhou (2005) | Usability, Usefulness of content, Adequacy of information, Accessibility, Interaction |
| Zhang and Prybutok (2005) | Navigation, Sufficient information, Visual Appeal, Guarantee policy, Prompt service, Up-to-date information |
| Collier and Bienstock. (2006) | Process dimension: Functionality,  Information accuracy, Design , Privacy, Ease of use<br>Outcome dimension: Order accuracy, Order condition, Timeliness<br>Recovery dimension: Interactive fairness, Procedural fairness, Outcome fairness |
| Kim, Kim, and Lennon (2006) | Efficiency, Fulfillment, System availability, Privacy, Responsiveness, Contact, Personalization, Information, Graphic style |
| Barnes and Vidgen (2006) | Usability, Design, Information, Trust, and Empathy |
| Bauer, Falk, and Hammerschmidt (2006) | Functionality/design, Enjoyment, Process, Reliability, Responsiveness |
| Petre, Minocha, and Roberts (2006) | Match existing shopping experiences, Support the customer interface experience, Give cues to enhance trustworthiness, Provide quality information, Provide a reliable customer service |
| Éthier, Hadaya, Talbot, and Cadieux, (2006) | Functionality, Visual appeal, Navigation, Information, Contact |
| Waite (2006) | Access, Usability, Navigation, Aesthetics, Security |
| Rowley (2006) | Site features, Security, Communication, Reliability, Customer support, Responsiveness, Information, Accessibility, Delivery, Personalization |

## CONCLUSION

Web evaluation has become a critical process in DMOs' performance measurement efforts.  However, Web evaluation research over the past decade has led to diverse approaches and findings rather than a unified understanding of success factors that should be measured in order to gauge a Web site's performance.  The common success factors and potential additional factors identified in this study provide an important basis for practical Web evaluation implementation and simultaneously serve as a useful input for future research.  Since the concepts identified as success factors have not been uniformly operationalized in past research, the big challenge for the research community involves developing and testing measures that reflect the nine core dimensions as well as assessing the merit of including the proposed additional factors.  Further, it is not yet clear which of these success factors are hygiene factors in that they only inhibit customer interactions when absent and which factors are the true catalysts for changes in consumer attitudes and behaviors (Zhang et al. 1999; Zhang and Von Dran 2001; Kim and Fesenmaier 2005).  Further, many Web evaluation efforts currently restrict themselves to ratings of features and do not link evaluations to outcome measures.  What these outcome measures are is an area of research that clearly needs attention.

As DMOs, technologies, and consumers change, the factors to be included in Web evaluation efforts might change.  Thus, the success factors proposed in this study provide a snapshot of currently relevant dimensions and are to be seen as a starting point for future research rather than a fixed framework.  Also, which factors to include and which outcome measures to use ultimately depends on the marketing goals a DMO establishes for its Web site.  Many DMOs have yet to determine clear objectives for their Web sites as well as strategic development plans for their online marketing efforts.  Web site evaluation is of little use if its results are not interpreted in the context of specific goals.

## REFERENCES

Aaberge, T., Grøtte, I.P., Haugen, O., Skogseid, I., and Ølnes, S. (2004). "Evaluation of Tourism Web Sites: A Theoretical Framework." *In A.J. Frew (Ed.), Information and Communication Technologies in Tourism*, pp. 305-317. Vienna, Austria: Springer.

Abels, E.G., White, M.D., and Hahn, K. (1999). "A User-Based Design Process for Web Sites." *OCLC Systems and Services*, 15(1): 35-44.

Ahuja, J.S., and Webster, J. (2001). "Perceived Disorientation: An Examination of A New Measure to Assess Web Design Effectiveness." *Interacting with Computers*, 14: 15-29.

Aladwani, A.M., and Palvia, P.C. (2002). "Developing and Validating an Instrument for Measuring User-perceived Web Quality." *Information and Management*, 39(6): 467-476.

Allagui, and Temessek (2004). "Testing An E-loyalty Conceptual Framework." *Journal of E-Business*, 4 (1): 1-6.

Anderson, R.E., and Srinivasan, S.S. (2003). "E-satisfaction and E-loyalty: A Contingency Framework." *Psychology and Marketing*, 20 (2): 123-138.

Balabanis, G., Reynolds, N., and Simintiras, A. (2006). "Bases of E-store Loyalty: Perceived Switching Barriers and Satisfaction." *Journal of Business Research*, 59(2): 214-224.

Baloglu, S., and Pekcan, Y.A. (2006). "The Website Design and Internet Site Marketing Practices of Upscale and Luxury Hotels in Turkey." *Tourism Management,* 27(1): 171-176.

Bansal, H.S., McDougall, H.G., Dikolli, S.S., and Sedatole, K. (2004). "Relating E-satisfaction to Behavioral Outcomes: An Empirical Study." *Journal of Service Marketing*, 18(4): 290-302.

Barnes, S., Liu, K., and Vidgen, R. (2001). "Evaluating WAP Sites: the WebQual/m." *Proceedings of the 9th European Conference on Information Systems*, Bled Slovenia, June, 27-29.

Barnes, S., and Vidgen, R.T. (2002). "An Integrative Approach to the Assessment of E-commerce." *Journal of Electronic Commerce Research*, 3(3): 114-126.

Barnes, S., and Vidgen, R. (2003). "Measuring Web Site Quality Improvements: A Case Study of the Forum on Strategic Management Knowledge Exchange." *Industrial Management and Data Systems*, 103(5): 297-309.

Barnes, S., and Vidgen, R.T. (2006). "Data Triangulation and Web Quality Metrics: A Case Study in e-government." *Information and Management*, 43(6): 767-777.

Bart,Y., Shankar, V., Sultan, F., and Urban, G.L. (2005). "Are the Drivers and Role of Online Trust the Same for all Web Sites and Consumers? A Large-scale Exploratory Empirical Study." *Journal of Marketing,* 69 (4): 133–152.

Bauer, H.H., Falk, T., and Hammerschmidt, M. (2006). eTransQual: "A Transaction Process-based Approach for Capturing Service Quality in Online Shopping." Journal of Business Research, 59, 866–875.

Benbunan-Fich, R (2001). "Using Protocol Analysis Evaluate the Usability of a Commercial Web Site." *Information Management*, 39: 151-163.

Bharati, P. and Tarasewich, P. (2002). "Global Perceptions of Journals Publishing E-Commerce Research", *Communications of the ACM*, 45(5): 21-26.

Blythe, M. A., Overbeeke, K., Monk, A. F. & P. C. Wright (2003). *Funology – From Usability to Enjoyment. Human-Computer Interaction Series*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Brownlie, D., M. Saren, R. Whittington, and R. Wensley (1994). "The New Marketing Myopia: Critical Perspectives on Theory and Research in Marketing Introduction." *European Journal of Marketing*, 28 (3):6-12.

Buckley, J. (2003). "E-service Quality and Public Sector." *Managing Service Quality*, 13(6): 453-462.

Buhalis, D. (2000). "Tourism in an Era of Information Technology." In B., Faulkner, G., Moscardo, and E., Laws (Eds.) *Tourism in the 21st Century: Lessons from Experience*, (pp. 163-181). London, UK: Routledge.

Buhalis, D., and Spada, A. (2000) "Destination Management Systems: Criteria for Success-an Exploratory Research."  In D. R. Fesenmaier, S. Klein and D. Buhalis (Eds.)*, Information and Communication Technologies in Tourism*, pp. 473-484. Vienna, Austria: Springer.

Cai, S., and Jun, M. (2003). "Internet Users' Perceptions of Online Service Quality: A Comparison of Online Buyers and Information Searchers.**"** *Managing Service Quality,* 13(6): 504-519.

Chang, D.Y., and Weaver, P.A. (2002). "The Use of Application Systems in the Hospitality and Tourism Industry: A Satisfaction Analysis." *Annual Graduate Conference Proceedings*, 43-47.

Chen, K., and Yen, D.C. (2004). "Improving the Quality of Online Presence through Interactivity." *Information and Management*, 42: 217–226.

Chiou, J. (2004). "The Antecedents of Consumers' Loyalty toward Internet Service Providers." *Information and Management*, 41: 685–695.

Chong, B., and Wong, M. (2005). "Crafting an Effective Customer Retention Strategy: A Review of Halo Effect on Customer Satisfaction in Online Auctions." *International journal of management and enterprise development*, 2(1): 12-21.

Christou, E., Avdimiotis, S., Kassianidis, P., and Sigala, M. (2004). "Examining the Factors Influencing the Adoption of Web-based Ticketing: Etix and its Adopters." In D. R. Fesenmaier, S. Klein, D. Buhalis (Eds.), *Information and Communication Technologies in Tourism*, pp. 129-138. Vienna, Austria:

Springer.

Chu, R. (2001). "What Do On-line Hong Kong Travelers Look for On Airline/travel Web Sites?" *International Journal of Hospitality Management*, 20: 95-100.

Chung, T., and Law, R. (2003). "Developing a Performance Indicator for Hotel Websites." *Hospitality Management*, 22: 119-125.

Collier, J.E., and Bienstock, C.C. (2006). "Measuring Service Quality in E-Retailing." *Journal of Service Research*, 8(3): 260-275.

Constantinides, E. (2004). "Influencing the Online Consumer's Behavior: The Web Experience." *Internet Research*, 14(2): 111-126.

Cronin, J. J. (2003). "Looking back to see forward in services marketing: some ideas to consider", Managing Service Quality, 13(5): 332-337.

Cronin, M. J. (1995). *Doing More Business on the Internet: How the Electronic Highway Is Transforming American Companies.* New York: Van Nostrand Reinhold.

Cyr, D., Bonanni, C., Bowes, J., and Ilsever, J. (2005). "Beyond Trust: Web Site Design Preferences across Cultures." *Journal of Global Information Management,* 13 (4): 25-54.

Cyr, D., and Trevor-Smith, H. (2004). "Localization of Web Design: An Empirical Comparison of German, Japanese, and United States Web Site Characteristics." *Journal of the American Society for Information Science and Technology*, 55(13): 1199-1208.

D'Ambra, J., and Rice, R.E. (2001). "Emerging Factors in User Evaluation of the World Wide Web." *Information and Management*, 38(6): 373-384.

Davori, P, Mazzoni, F., and Corradini, E. (2005). "Quality Assessment of Cultural Web Sites with Fuzzy Operators." *Journal of Computer Information Systems*, 46(1): 44-57.

De Wulf, K., Schillewaert, N., Muylle, S., and Rangarajan, D. (2006). "The role of pleasure in web site success." *Information and Management*, 43(4): 434-446.

Devaraj, S., Fan, M., and Kohli, R. (2002). "Antecedents of B2C Channel Satisfaction and Preference: Validating E-commerce Metrics." *Information Systems Research*, 13(3): 316-333.

Devaraj, S., Fan, M., and Kohli, R. (2003). "E-loyalty—Elusive Ideal or Competitive Edge?" *Communications of the ACM*, 46 (9): 184-192.

Donthu, N. (2001). "Does Your Web Site Measure Up?" *Marketing Management*, 10(4): 29-32.

Douglas, A., and Mills, J.E. (2004). "Staying a Float in the Tropics: Applying a Structural Equation Model Approach to Evaluating National Tourism Organization Websites in the Caribbean." *Journal of Travel and Tourism Marketing*, 17(2/3): 269-293.

Douglas, A., Muir; L., and Meehan, (2003). "E-quality in the E-services Provision of Legal Practices." *Managing Service Quality,* 13(6): 483-491.

Éthier, J., Hadaya, P., Talbot, J., and Cadieux, J. (2006). "B2C Web Site Quality and Emotions During Online Shopping Episodes: An Empirical Study." *Information & Management*, 43, 627–639.

Evanschitzky, H., Iyer, G.R., Hesse, J., and Ahlert, D. (2004). "E-satisfaction: A Re-examination." *Journal of Retailing*, 80: 239-247.

Fam, K.S., Foscht, T., and Collins, R.D. (2004). "Trust and the Online Relationship-an Exploratory Study form New Zealand." *Tourism Management*, 25(2): 195-207.

Field, J.M., Heim, G.R., and Sinha, K.K. (2004). "Managing Quality in the E-service System: Development and Application of a Process Model." *Production and Operations Management*, 13(4): 291-306.

Fink, D., and Laupase, R. (2000). "Perceptions of Web Site Design Characteristics: A Malaysian/Australian comparison." *Internet Research*, 10 (1): 44–55.

Flavián, C., Guinalíu, M., and Gurrea, R. (2006). "The Role Played by Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty." *Information and Management*, 43(1): 1-14.

Francis, J.E., and White, L. (2002). PIRQUAL: "A Scale for Measuring Customer Expectations and Perceptions of Quality in Internet retailing." *In Proceedings of the Winter Educators' Conference, American Marketing Association*, Chicago, IL, 438-443.

Friel, M., Sombert, A., and Crimes, B. (2000). "Service Dimensions of Travel Distribution: An Indian Case Study." In D.R. Fesenmaier, S. Klein, D. Buhalis (Eds.), *Information and Communication Technologies in Tourism*, pp. 200-208. Vienna, Austria: Springer.

Gartrell, R. B. (1994). *Destination Marketing for Convention and Visitor Bureaus*, 2nd Ed. Dubuque, IA: Kendall/Hunt Publishing.

Gefen, D. (2002). "Customer Loyalty in E-commerce." *Journal of the Association for Information Systems*, 3: 27-51.

Gladwell, M. (2005). *Blink*. New York: Little, Brown and Company.

Gommans, M., Krishnan, K. S., and Scheffold, K.B. (2001). "From Brand Loyalty to E-loyalty: A Conceptual Framework." *Journal of Economic and Social Research*, 3(1): 43-58.

Gounaris, S., and Dimitriadis, S. (2003). "Assessing Service Quality on the Web: Evidence from Business-to-Consumer Portals." *Journal of Services Marketing*, 17(4/5): 529-548.

Gounaris, S., Dimitriadis, S., and Stathakopoulos, V. (2005). "Antecedents of Perceived Quality in the Context of Internet Retail Stores." *Journal of Marketing Management*, 21: 669-700.

Gretzel, U. (2005). Destination Website Evaluation from a Persuasion Theory Perspective. *Proceedings of the TTRA Canada Conference*, November 2-5, Kelowna, BC.

Gretzel, U., Fesenmaier, D.R., Formica, S., and O'Leary, J.T. (2006). "Searching for the Future: Challenges Faced by Destination Marketing Organizations." *Journal of Travel Research*, 45(2): 116-126.

Gretzel, U., Yuan, Y., and Fesenmaier, D.R. (2000). "Preparing for the New Economy: Advertising Strategies and Change in Destination Marketing Organizations." *Journal of Travel Research*, 39 (Nov): 146-156.

Guertin, J., and Nantel, J. (2005). "The Evolution of NETQUAL: The Development of Measurement Model of Web Users' Perceived Added Value." Cahier de recherche N° 05-10-01, 1-30.

Gupta, H., Jones, E., and Coleman, P. (2004). "How do Welsh Tourism-SME Websites Approach Customer Relationship Management." In A. J. Frew (Ed.), *Information and Communication Technologies in Tourism*, pp. 525-536. Vienna, Austria: Springer.

Griffith, D.A., and Krampf. (1998). "An Examination of the Web-based Strategies of the Top 100 U.S. Retailers." *Journal of Marketing Theory and Practice*, 6(3): 12-23.

Hassan, S., and Li, F. (2005). "Evaluating the Usability and Content Usefulness of Web Sites: A Benchmarking Approach." *Journal of Electronic Commerce in Organization*, 3(2): 46-67.

Hernon, P., and Calvert, P. (2005). "E-service Quality in Libraries: Exploring its Features and Dimensions." *Library and Information Science Research*, 27(3): 377-404.

Hong, S., and Kim, J. (2004). "Architectural Criteria for Website Evaluation –conceptual Framework and Empirical Validation." *Behaviour and Information Technology*, 23(5): 337-357.

Huizingh, E. (2000). "The content and design of Web sites: An empirical study", *Information and Management*, 37(3): 123-134.

Hunter, J. E., Schmidt, F. L., and Jackson, G. B. (1982). *Meta-analysis: Cumulating Research Findings across Studies*. Beverly Hills, CA: Sage.

Iwaardena, J. V., Wiele, A., Ball, L., and Millen, R. (2004). "Perceptions about the Quality of Web Sites: A Survey amongst Students at Northeastern University and Erasmus University." *Information and Management*, 41(8): 947–959.

Janda, S., Trocchia, P.J., Gwinner, K.P. (2002). "Consumer perceptions of Internet retail service quality", *International Journal of Service Industry Management*, 13(5): 412-431.

Jayawardhena, C. (2004). "Measurement of service quality in Internet banking: The development of an instrument", *Journal of Marketing Management,* 20(1/2): 185-207.

Jeong, M., and Lambert, C. (1999). "Measuring the Information Quality on Lodging Web Sites." *International Journal of Hospitality Information Technology*, 1(1): 63–75.

Jeong, M., and Lambert, C. (2001). "Adaptation of an Information Quality Framework to Measure Customer' Behavioral Intentions to Use Lodging Web Sites." *Hospitality Management*, 20: 129-146.

Jiang, P., and Rosenbloom, B. (2005). "Customer Intention to Return Online: Price Pperception, Attribute-level Performance, and Satisfaction Unfolding over time." *European Journal of Marketing*, 39 (1/2): 150-174.

Jun, M. and Cai, S. (2001). "The key determinants of Internet banking service quality: a content analysis", *The International Journal of Bank Marketing*, 19(7): 276-291.

Jung, T.H., and Butler, R. (2000). "The Measurement of the Marketing Effectiveness of the Internet in the Tourism and Hospitality Industry." In D.R. Fesenmaier, S. Klein, and D. Buhalis (Eds.), *Information and Communication Technologies in Tourism*, 461-472. Vienna, Austria: Springer Verlag.

Kao, Y.F., Louvieris, P., Powell-Perry, J., and Buhalis, D. (2005). "E-satisfaction of NTO's Website Case Study: Singapore Tourism Board's Taiwan Website." In A.J. Frew (Ed.) *Information and Communication Technologies in Tourism*, 227-237. Vienna, Austria: Springer Verlag.

Kaplanidou, K., Vogt, C., and Morris, D. (2005). "Importance-performance Analysis of Destination Marketing Organization Websites." *Proceedings the 36th Annual Conference of Travel Tourism Research Association*, New Orleans, Louisiana, 9-16. Boise, ID: Travel and Tourism Research Association.

Kaplanidou, K., and Vogt, C. (2006). "A Structural Analysis of Destination Travel Intentions as a Function of Web Site Features." *Journal of Travel Research,* 45 (2): 204-216.

Kasavana, M.L. (2002). "eMarketing: Restaurant Websites that Click", *Journal of Hospitality & Leisure Marketing*, 9 (3/4): 161-178.

Kaynama, S., and Black, C. (2000). "A Proposal to Assess the Service Quality of Online Travel Agencies: An Exploratory Study." *Journal of Professional Service Marketing*, 21(1): 63-88.

Kim, D., Hwang, Y., and Fesenmaier, D.R. (2005). "Modeling Tourism Advertising Effectiveness." *Journal Travel Research*, 44 (August), 42-49.

Kim, H. and Fesenmaier, D.R. (2006). "First Impression and Persuasive Design in Destination Websites." *Proceedings of the 37th Annual Travel and Tourism Research Association Conference*, June 18-20, 2006, Dublin, Ireland. Boise, ID: Travel and Tourism Research Association.

Kim, M., Kim, J-H., and Lennon, S.J. (2006), "Online service attributes available on apparel retail web sites: an E-S-QUAL approach", *Managing Service Quality*, 16(1): 51-77.

Kim, S., and Fesenmaier, D. R. (2005). "Persuasive designs of tourism websites in the United States." *Proceedings the 36th Annual Conference of Travel Tourism Research Association*, New Orleans, Louisiana, 17-21. Boise, ID: Travel and Tourism Research Association.

Kim, S., and Stoel, L. (2004). "Dimensional Hierarchy of Retail Website Quality." *Information and Management*, 4: 619–633.

Kim, W.G., and Lee, H.Y. (2004). "Comparison of Web Service Quality between Online Travel Agencies and Online Travel Suppliers." *Journal of Travel and Tourism Marketing*, 17(2/3): 105-116.

Kline, S. F., Morrison, A.M., and John, A. (2004). "Exploring Bed and Breakfast Websites: A Balanced Scorecard Approach." *Journal of Travel and Tourism Marketing*, 17 (2/3): 253-267.

Kotler, P., Bowen, J.T., and Makens, J.C. (2006). *Marketing for Hospitality and Tourism*, 4th Ed. Upper Saddle River, NJ: Prentice Hall.

Law, R. and Bai, B. (2006). "Website Development and Evaluations in Tourism: A Retrospective Analysis." In Murphy J., Sigala, M. and Hitz, M. (Eds.), *Information and Communication Technologies in Tourism*, pp. 1-10. Vienna, Austria: Springer.

Law, R. and Hsu, C. (2006). "Importance of Hotel Website Dimensions and Attributes: Perceptions of Online Browsers and Online Purchasers. *Journal of Hospitality & Tourism Research*, 30(3): 295-312.

Law, R., and Leung, K. (2002). "Online Airfare Reservation Services: A Study of Asian-based and North American-based Travel Web Sties." *Information Technology and Tourism*, 5(1): 25-33.

Law, R., and Wong, J. (2003). "Successful Factors for a Travel Web Site: Perceptions of On-line Purchasers in Hong Kong." *Journal of Hospitality and Tourism Research*, 27(1): 118-124.

Lee, D., and Sohn, C. (2004). "Trust and Switching Cost as a Way to Build E-loyalty in Internet Markets." *International journal of internet and enterprise management*, 2(3): 209-220.

Lee, G., and Lin, H.(2005). "Customer Perceptions of E-service Quality in Online Shopping." *International Journal of Retail and Distribution Management*, 33 (2): 161-176.

Lee, H.Y., and Kim, W.G. (2002). "Comparison of Dimensions Affecting Web Service Quality between Online Travel Agencies and Online Travel Suppliers." *Seventh Annual Graduate Education and Graduate Student Research Conference in Hospitality and Tourism,* 364-369.

Lee, Y. and Kim, J. (2002). From Design Features to Financial Performance: A Comprehensive Model of Design Principles for Online Stock Trading Sites. *Journal of Electronic Commerce Research*, 3(3): 128-143.

Liang, K., and Law, R. (2003). "A Modified Functionality Performance Evaluation Model for Evaluating the Performance of China based Hotel Websites." *Journal of Academy of Business and Economics*, 2 (2): 193-208.

Lin, H., and Wang, Y. (2006). "An Examination of the Determinants of Customer Loyalty in Mobile Commerce Contexts." *Information and Management,* 43(3): 271-282.

Lin, C. S., Wu, S., and Tsai, R. J. (2005). "Integrating perceived playfulness into expectation-confirmation model for web portal context." *Information and Management*, 42(5): 683-693.

Lindgaard, G., Fernandes, G., Dudek, C., and Brown, J. (2006). "Attention web designers: You have 50 milliseconds to make a good first impression." *Behaviour & Information Technology*, 25(2): 115-126.

Liu, C., and Arnett, K.P. (2000). "Exploring the Factors Associated with Web Site Success in the Context of Electronic Commerce." *Information and Management*, 38 (1): 23-34.

Lociacono, E.T., Watson, R.T., and Goodhue, D. (2002). "WebQual: A Measure of Web Site Quality." *In Proceedings of the Winter Educator's Conference, American Marketing Association*, Chicago, IL, 432-437.

Long, M., and McMellon, C. (2004). "Exploring the Determinants of Retail Service Quality on the Internet." *Journal of Service Marketing*, 18: 78-90.

Luarn, P., and Lin, H. (2003). "A Customer Loyalty Model for E-service Context." *Journal of Electronic Commerce Research*, 4 (4): 156-167.

Ma, Q., Pearson, J.M., and Tadisina, S. (2005). "An Exploratory Study into Factors of Service Quality for Application Service Providers." *Information and Management*, 42: 1067–1080.

Madu, C.N., and Madu, A.A. (2002). "Dimensions of E-quality." *International Journal of Quality and Reliability Management*, 19(3): 246-258.

McKinney, V., Yoon, K., and Zahedi, F. (2002). "The Measurement of Web-customer Satisfaction: An Expectation and Disconfirmation Approach." *Information Systems Research*, 13(3): 296-315.

Mich, L., Franch, M., and Gaio, L. (2003). "Evaluating and Designing Web Site Quality." *IEEE Multimedia*,

Jan-Mar: 34-43.

Mich, L., Franch, M., and Martini, U. (2005). "A Modular Approach to Quality Evaluation of Tourist Destination Web Sites: The Quality Model Factory." In A. J. Frew (Ed.)*, Information and Communication Technologies in Tourism*, 555-565.

Miller, B. (2004). "Building E-loyalty of Lodging Brands: Avoiding Brand Erosion." *Journal of Travel and Tourism Marketing*, 17(2/3): 133-142.

Mills, J.E. and Morrison, A.M. (2003). "Measuring Customer Satisfaction with Online Travel." *In A.J. Frew, M. Hitz, P. O'Connor Proceedings of Information and Communication Technologies in Tourism*, Helsinki, Finland, 10-19.

Morrison, A. M., Taylor, S. and Douglas, A. (2004). "Website Evaluation in Tourism and Hospitality" *Journal of Travel and Tourism Marketing*, 17(2/3): 232-251.

Morrison, A.M., Taylor, S., Morrison, A.J., and Morrison, A.D. (1999). "Marketing Small Hotels on the World Wide Web." *Information Technology and Tourism*, 2: 97-113.

Murphy, J., Forrest, E.J., Wotring, C.E. and Brymer, R.A. (1996). "Hotel management and marketing on the Internet", *Cornell Hotel & Restaurant Administration Quarterly*, 37(3):70-82.

Muylle, S., Moenaert, R., and Despontin, M. (2004). "The Conceptualization and Empirical Validation of Web Site User Satisfaction." *Information and Management*, 41: 543–560.

Negash,S., Ryan, T., and Igbaria, M. (2003). "Quality and Effectiveness in Web-based Customer Support Systems." *Information and Management*, 40: 757–768.

Nysveen, H., Methlie, L.B., and Pedersen, P.E. (2003). "Tourism Web Sites and Valued-added Services: The Gap between Customer Preferences and Web Sties' Offerings." *Information Technology and Tourism*, 5: 165-174.

O'Connor, P. (2004). "Privacy and the Online Travel Customer: An Analysis of Privacy Policy Content, Use, and Compliance by Online Travel Agencies." In A. Frew (Ed.), *Information and Communication Technologies in Tourism*, 401-412. Vienna, Austria: Springer Verlag.

Olsina, L., and Rossi, G. (2002). "Measuring Web Application Quality with WebQEM." *IEEE MultiMedia*, 9(4): 20-29.

Palmer, J.W. (2003). "Web Site Usability, Design and Performance Metrics." *Information Systems Research*, 13 (2): 151-167.

Palmer, J.W., and Griffith, D.A. (1998). "An Emerging Model of Web Site Design for Marketing." *Association for Computing Machinery Communications of the ACM,* 41(3): 44-52.

Parasuraman, A., Zeithaml, V.A., and Malhotra (2004). "E-S-QUAL: A Multiple-item Scale for Assessing Electronic Service Quality." Working Paper, Report 04-112. Cambridge, MA: Marketing Science Institute.

Parasuraman, A., Zeithaml, V.A., and Malhotra, A. (2005). "E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality." *Journal of Service Research*, 7(3): 213-233.

Park, C., and Kim, Y. (2006). "The Effect of Information Satisfaction and Relational Benefit on Consumers' Online Shopping Site Commitments." *Journal of Electronic Commerce in Organizations,* 4(1): 70-90.

Paterson, B. L., Thorne, S. E., Canam, C., and Jillings, C. (2001). *Meta-Study of Qualitative Health Research*. Thousand Oaks, CA: Sage.

Perdue, R.R. (2001). "Internet Site Evaluations: The Influence of Behavioral Experience, Existing Images, and Selected Website Characteristics." *Journal of Travel and Tourism Marketing*, 11(2/3): 21-37.

Petre, M., Minocha, S., and Roberts, D. (2006). Usability Beyond the Website: An Empirically Grounded E-commerce Evaluation Instrument for the Total Customer Experience. *Behaviour & Information Technology*, 25(2): 189-203.

Posselt, T., and Gerstner, E. (2005). "E-satisfaction: Impact on Repurchase Intention and Overall Satisfaction." *Journal of Interactive Marketing*, 19(4): 35-47.

Powley, J.H., Cobanoglu, C., and Cummings, P.R. (2004). "Determinants of Online Travel Purchases from Third-party Travel Web Sites." In A. Frew (Ed.)*, Information and Communication Technologies in Tourism*, 424-524. Vienna, Austria: Springer Verlag.

Pröll, B. and Retschitzegger, W. (2000). "Discovering Next Generation Tourism Information System: A Tour on TIScover." *Journal of Travel Research*, 39(2): 182-191.

Ranganathan, C., and Ganapathy, S. (2002). "Key Dimensions of Business to-consumer Web Sites." *Information and Management*, 39 (6): 457–465.

Reeves, B. & C. Nass (1996). *The Media Equation*. Stanford, CA: CSLI Publications.Rice, M. (1997). "What Makes Users Revisit a Web Site." *Marketing News*, 31(6): 12-13.

Reichheld, F.F., and Schefter, P. (2000). "E-loyalty: Your Secret Weapon on the Web." *Harvard Business Review*, 78(4): 105-114.

Ribbink, D., van Riel, A.C. R., Liljander; V., and Streukens, S. (2004). "Comfort your Online Customer: Quality,

Trust and Loyalty on the Internet." *Managing Service Quality,* 14(6): 446-456.

Richard, M. (2005). "Modeling the Impact of Internet Atmospherics on Surfer Behavior." *Journal of Business Research,* 58(12): 1632-1642.

Rice, M. (1997). "What makes users revisit a web site?" *Marketing News*, 31(6): 12.

Rodgers, W., Negash, S., and Suk, K. (2005). "The Moderating Effect of On-line Experience on the Antecedents and Consequences of On-line Satisfaction." *Psychology and Marketing*, 22(4): 313–331.

Rowley, J. (2006). "An analysis of the e-service literature: towards a research agenda", *Internet Research*, 16(3): 339-359.

Santos, J. (2003). "E-service Quality: A Model of Virtual Service Quality Dimensions." *Managing Service Quality*, 13: 233-246.

Schaik, P.V., and Ling, J. (2005). "Five Psychometric Scales for Online Measurement of the Quality of Human-computer Interaction in Web Sites." *International Journal of Human-Computer Interaction*, 18(3): 309-322.

Schaffer, S., and Mills, J.E. (2004). "The Role of Trust on the Web: the Development of an Online Trust Creation Model for Etravel Agents." In A. Frew (Ed.), *Information and Communication Technologies in Tourism*, 413-423. Vienna, Austria: Springer Verlag.

Scharl, A., Wöber, K., and Bauer, C. (2004). "An Integrated Approach to Measure Web Site Effectiveness in the European Hotel Industry." *Information Technology and Tourism*, 6(4): 257-271.

Schaupp, L.C., and Belanger, F. (2005). "A Conjoint Analysis of Online Consumer Satisfaction." *Journal of Electronic Commerce Research*, 6(2): 95-111.

Schegg, R., Steiner, T., Frey, S., and Murphy, J. (2002). "Benchmarks of Web Site Design and Marketing by Swiss Hotels." *Information Technology and Tourism*, 5: 73-89.

Semeijn, J., van Riel, A.C.R., van Birgelen, M.J.H., and Streukens, S. (2005). "E-services and Offline Fulfillment: How E-loyalty is Created." *Managing Service Quality*, 15 (2): 182-194.

Shchiglik, C., and Barnes, S.J. (2004). "Evaluating Website Quality in the Airline Industry." *Journal of Computer Information Systems*, 44(3): 17-25.

Shim, J.P., Shin, Y.B., and Nottingham, L. (2002). "Retailer Web Site Influence on Customer Shopping: An Exploratory Study on Key Factors of Customer Satisfaction." *Journal of the Association for Information Systems*, 3: 53-76.

Sigala, M. (2004). "Designing Experiential Websites in Tourism and Hospitality: A Customer-Centric Value Approach*.*" In A. Frew (Ed.), *Information and Communication Technologies in Tourism*, 161-171. Vienna, Austria: Springer Verlag.

Sigala, M. and Christou, E. (2002). "Use of Internet for Enhancing Tourism and Hospitality Education: Lessons from Europe." *In K. Wöber, A.J. Frew, M. Hitz (Eds.), Information and Communication Technologies in Tourism*, 299-238. Vienna, Austria: Springer Verlag.

Sigala, M., and Sakellaridis, O. (2004). "The Impact of Users' Cultural Characteristics on E-Service Quality: Implications for Globalizing Tourism and Hospitality Websites." In A. Frew (Ed.)*, Information and Communication Technologies in Tourism*, 106-117. Vienna, Austria: Springer Verlag.

Sing, N., Fassott, G., Chao, M., and Hoffmann, J. (2006). "Understanding International Web Site Usage." *International Marketing Review*, 23(1): 83-97.

Srinivasan, S.S., Anderson, R., and Ponnavolu, K. (2002). "Customer Loyalty in E-commerce: an Exploration of its Antecedents and Consequences." *Journal of Retailing*, 78: 41-50.

Surjadaja, H., Ghosh, S., Antony, F. (2003), "Determining and assessing the determinants of e-service operations", *Managing Service Quality*, 13(1): 39-44.

Szymanski, D.M., and Hise, R.T. (2000). "E-satisfaction: An Initial Examination." *Journal of Retailing*, 76(3): 309-322.

Taylor, S.A., and Hunter, G. (2003). "An Exploratory Investigation into the Antecedents of Satisfaction, Brand Attitude, and Loyalty within the (B2B) eCRM Industry." *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16: 19-35.

Tierney, P. (2000). "Internet-based Evaluation of Tourism Web Site Effectiveness: Methodological Issues and Survey Results." *Journal of Travel Research*, 39(2): 212-219.

Thatcher, J.B., and George, J.F. (2004). "Commitment, Trust, and Social Involvement: An Exploratory Study of Antecedents to Web Shopper Loyalty." *Journal of Organizational Computing and Electronic Commerce*, 14(4): 243-268.

Van Riel, A.C.R., Liljander, V., and Jurriens, P. (2001). "Exploring Consumer Evaluations of E-Services: A Portal Site." *International Journal of Service Industry Management*, 12(3/4): 359-377.

Van Riel, A.C.R., Semeijn, J., and Janssen, W. (2003). "E-service Quality Expectations: A case Study." *Total Quality Management*, 14(4): 437-450.

Vogt, C. and Fesenmaier, D.R. (1998). "Expanding the functional information search model." *Annals of Tourism*

*Research*, 25(3): 551-578.

Voss, C. (2000). "Developing eService strategy." *Business Strategy Review*, 11(1): 21-33.

Waite, K. (2006). Task scenario effects on bank web site expectations", *Internet Research*, 16(1): 7-22.

Wan, C.S. (2002). "The Web Site of International Tourist Hotels and Tour Wholesalers in Taiwan." *Tourism Management*, 23: 155-160.

Wang, Y. and Fesenmaier, D.R. (2006). *"*Identifying the Success Factors of Web-Based Marketing Strategy: An Investigation of Convention and Visitors Bureaus in the United States*."* *Journal of Travel Research*, 44 (Feb), 239-249.

Wang, M., and Huarng, S.A. (2002). "An Empirical Study of Internet Store Customer Post-Shopping Satisfaction." *Special Issues of Information Systems*, 3: 632-638.

Wang, Y., and Liao, Y. (2007). "The conceptualization and measurement of m-commerce user satisfaction." *Computers in Human Behavior,* 23, 381–398.

Wang, Y., and Tang, T. (2003). "Assessing Customer Perceptions of Website Service Quality in Digital Marketing Environments." *Journal of End User Computing*, 15(3): 15-31.

Wang, Y, Tang, T., and Tang, J.E. (2001).  "An Instrument for Measuring Customer Satisfaction toward Web Sites that Market Digital Products and Services." *Journal of Electronic Commerce Research*, 2(3): 89-102.

Weber, N., Murphy, H., Schegg, R., and Murphy, J. (2005). "An Investigation of Satisfaction and Loyalty in the Virtual Hospitality Environment." In A. Frew (Ed.)*, Information and Communication Technologies in Tourism*, 452-461. Vienna, Austria: Springer Verlag.

Weber. K., and Roehl, W.S. (1999). "Profiling People Searching for and Purchasing Travel Products on the World Wide Web." *Journal of Travel Research*, 37 (February): 291-298.

Werthner, H. and Klein S. (1999). *Information Technology and Tourism*. Vienna, Austria: Springer Verlag.

Wöber, K.W. (2003). "Evaluation of DMO Web Sites through Interregional Tourism Portals: A European Cities Tourism Case Example." In A. Frew, M. Hitz and P. O'Connor (Eds.), *Information and Communication Technologies in Tourism*, 212-221. Vienna, Austria: Springer Verlag.

Wöber, K.W., Scharl, A., Natter, M., and Taudes, A. (2002). "Success Factors of European Hotel Web Sites." In K. Wöber, A. Frew, and M. Hitz (Eds.), *Information and Communication Technologies in Tourism*, 387-406. Vienna, Austria: Springer Verlag.

Wolfinbarger, M., and Gilly, M.C. (2003). "ETailQ: Dimensionalizing, Measuring and Predicting eTail Quality." *Journal of Retailing*, 79(3): 183-198.

Wu, J., and Padgett, D. (2004). "A Direct Comparative Framework of Customer Satisfaction: An Application to Internet Search Engines." *Journal of Interactive Marketing,* 18 (2): 32-51.

Wulf, K.D., Schillewaert, N., Muylle, S., and Rangarajan, D. (2006). "The Role of Pleasure in Web Site Success." *Information and Management*, 43(4), 1-13.

Xiang, P., and Fesenmaier, D. (2004). "Assessing Interface Metaphors when Searching the Web for Travel Related Information." *Proceedings the 35th Annual Conference of the Travel and Tourism Research Association*, Montreal, Quebec, Canada. Boise, ID: Travel and Tourism Research Association.

Yang, Z. (2001). "Consumer Perceptions of Service Quality in Internet-based Electronic Commerce." *Proceedings of the 30th EMAC Conference*, May 8-11, Bergen, Norway.

Yang, Z., Cai, S., Zhou, Z., and Zhou, N. (2005). "Development and Validation of an Instrument to Measure User Perceived Service Quality of Information Presenting Web Portals." *Information and Management*, 42: 575–589.

Yang, Z., and Jun, M. (2002). "Consumer Perception of E-service Quality: From Internet Purchaser and Non-purchaser Perspectives." *Journal of Business Strategies*, 19(1): 19-41.

Yang, Z., and Peterson, R.T. (2004). "Customer Perceived Value, Satisfaction, and Loyalty: The Role of Switching Costs." *Psychology and Marketing*, 21(10): 799–822.

Yang, Z., Peterson, R.T., and Cai, S. (2003). "Service Quality Dimensions of Internet Retailing: an Exploratory Analysis." *Journal of Service Marketing*, 17: 685-700.

Yen, H. R. (2005). "An attribute-based model of quality satisfaction for Internet self-service technology", *The Service Industries Journal*, 25(5): 641-659.

Yenisey, M.M, Ozok, A.A., and Salvendy, G. (2005). "Perceived Security Determinants in E-Commerce among Turkish University Students." *Behaviour and Information Technology*, 24(4): 259– 274.

Yeung, T.A., and Law. (2004). "Extending the Modified Heuristic Usability Evaluation Technique to Chain and Independent Hotel Websites." *Hospitality Management*, 23: 307-313.

Yeung, W.L., and Lu, M.T. (2004). "Gaining Completive Advantages through a Functionality Grid for Web Site Evaluation" *Journal of Computer Information Systems*, 44(4): 67-77.

Yip, L., and Law, R. (2002). "User preferences for Web Site Attributes: A Study of the Hong Kong Disneyland." *Asia Pacific Journal of Tourism Research*, 7(1): 36-42.

Yoches, A., and Erdem, M. (2005). "A Preliminary Diagnostic Framework for Assessing Convention and Visitor Bureau Web Sites." *Proceedings the 36th Annual Conference of Travel and Tourism Research Association*, New Orleans, Louisiana, 476-480. Boise, ID: Travel and Tourism Research Association.

Yoo, B., and Donthu, N. (2001). "Developing a Scale to Measure the Perceived Quality of an Internet site (SITEQUAL)." *Quarterly Journal of Electronic Commerce*, 2(1): 31-45.

Zeithaml, V.A. (2002). "Service Quality in E-channel." *Managing Service Quality*, 12(3): 135-138.

Zeithaml, V.A., and Bitner, M.J. (2000). *Services Marketing: Integrating Customer Focus Across the Firm,* 2nd ed. Boston, MA: McGraw-Hill.

Zeithaml, V.A., Parasuraman, A., and Malhotra, A. (2000). "A Conceptual Framework for Understanding E-service Quality: Implications for Future Research and Managerial Practice." Marketing Science Institute Working Paper Series, Report NO. 00-115.

Zeithaml, V.A., Parasuraman, A., and Malhotra, A. (2002). "Service Quality Delivery through Web Sites: A Critical Review of Extent Knowledge." *Journal of the Academy of Marketing Science*, 30(4): 362-375.

Zhang, P., and von Dran, G.M. (2001). "User Expectations and Rankings of Quality Factors in Different Website Domains." *International Journal of Electronic Commerce*, 6(2): 9–33.

Zhang, P., von Dran, G.M., Small R., and Barcellos, S. (1999). "Websites that Satisfy Users: A Theoretical Framework for Web User Interface Design and Evaluation", *Proceedings of the 32nd Hawaii International Conference on System Sciences*, January 5-8, Maui, Hawaii.

Zhang, X. and Prybutok, V. R. (2005). "A Consumer Perspective of E-Service Quality", *IEEE Transactions on Engineering Management*, 52(4): 461-477.

Zins, A.H., Bauernfeind, U., Missier, F.D., Venturini, A., and Rumetshofer, H. (2004). "An Experimental Usability Test for Different Destination Recommender Systems." In A. Frew (Ed.)*, Information and Communication Technologies in Tourism*, 228-238, Vienna, Austria: Springer Verlag.

Zviran, M., Glezer, C., and Avni, I. (2005). "User Satisfaction from Commercial Web Sites: The Effect of Design and Use." *Information and Management*, 43(2): 157-178.