ONLINE INFORMATION SEARCH: DIFFERENCES BETWEEN GOAL-DIRECTED AND EXPERIENTIAL SEARCH

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Travelers’ use of the Internet as an information source has been the subject of research in the past. Most studies focus on the search process; however, the influence of the actual search goal on search behavior has been neglected. Travelers’ interactions with a website may depend on whether they search for precise factual information or rather stimulus driven and unplanned. This article provides an overview of literature on information search and shows how searchers who are browsing a website just for fun or are searching for factual information differ in their perception. A survey among 445 travelers will give insight into search behavior depending on the search setting. The results indicate that the main drivers for value and satisfaction for a goal-directed search are content quality followed by usefulness. These effects are attenuated for the experiential search. Further, ease of use is only significant for the goal-directed search group while enjoyment only exhibits effects for experiential searchers.

Key words: Information search behavior; Goal-directed and experiential information search; e-Tourism

Introduction

The growing importance of the Internet as an information source is without doubt (Fodness & Murray, 1999; Gursoy & McCleary, 2004; Luo, Feng, & Cai, 2004). The main driver of Internet usage is provision of information in all phases of search by reducing search cost, increasing shopping convenience, and offering a huge amount of product options (Alba et al., 1997; Bakos, 1998). Service purchases hold higher risk than tangible products (Engel, Blackwell, & Minard, 1995). Therefore, it is of particular importance for service industries to know how and when people access information. For the information-oriented tourism industry understanding search strategies is imperative as the tourism product is complex, a good experience that cannot be tested in advance (Nelson, 1974), and decision making and consumption are separated. Characteristics of the
tourism industry (Werthner & Klein, 1999) and its confidence goods (Nelson, 1974) require content and information to close the gap between consumer and supplier.

There is a substantial amount of research on information search, pretravel planning (Crompton, 1979; Mansfeld, 1992), and information search behavior (Gursoy & McCleary, 2004; Jang, 2005; Snepenger, Meged, Snelling, & Worrall, 1990). Cotte, Chowdhury, Ratneshwar, and Ricci (2006) investigate the relationship between time, planning style, and hedonic and utilitarian benefits sought from website usage, and highlight the differences between these factors. Depending on the users’ aims for either precise factual information or a hedonic entertainment focused information search users choose the sources accordingly. Therefore, the system needs to provide different benefits depending on whether the search is goal directed or experiential (Dickinger, 2010; Wendel & Dellaert, 2005). The desired outcome of an information search determines which elements of a website are perceived as satisfying and valuable by travelers (Bloch, Sherrell, & Ridgway, 1986; Hoffman & Novak, 1996; Janiszewski, 1998; J.-I. Kim, Lee, & Kim, 2004).

In contrast to other studies, this research compares two different search tasks performed on the same website. This allows drawing conclusions on the goal-directed versus experiential search. Other authors focus on one system and investigate the fun or the utilitarian benefits involved. We argue that depending on a goal-directed or experiential search task the drivers of value of a website as well as loyalty intentions differ. Therefore, this article provides: i) an extensive overview of online information search literature, ii) an understanding of search depending on the search setting (goal directed vs. experiential), and iii) insights into website conceptualization or design catering to travelers needs.

**Literature Review**

The literature review first introduces streams of research on information search strategies and then presents factors specific to search in tourism, such as travel characteristics, sources used by tourists, and environmental factors.

**Information Search and Strategies**

In terms of knowledge building information search can be an ongoing process aiming at building up a significant knowledge base or get specific information before a certain buying situation (temporal search strategy). Therefore, search behavior can either be goal directed, meaning people search for specific information, or experiential, which is browsing existing information sources (Hoffman & Novak, 1996). Ellis (1989) notes that browsing is a semidirected or semistructured way of looking for information. There are numerous practices of browsing, such as scanning and encountering, but there are not enough shadings of terms “to describe and discuss various forms or degrees of browsing” (Chang & Rice, 1993, p. 233). Case (2007) summarizes synonyms for browsing of various disciplines: environmental scanning (Correia & Wilson, 2001), navigation (Thompson & Croft, 1989), information discovery ( Proper & Bruza, 1999), grazing, and zapping (Heeter & Greenberg, 1985). Finding information by accident is a special case of browsing called serendipity, information encountering, sensing, or incidental learning (Erdelez, 1999). Integrating both types of search into one search setting we arrive at a scenario where a user searches for A but finds useful information for B (Boyce, Meadow, & Kraft, 1994). Chang and Rice (1993) provide an overview of browsing concepts and Case (2007) summarizes that well-defined search is called formal search or retrieval; semidefined search is called foraging, scanning, or browsing; poorly defined search is denoted browsing, grazing, navigating, or scanning; and undefined search is called encountering or serendipity. It already becomes obvious that the field of search and the terminology used is vast. Therefore, we focus first on information search from an information retrieval perspective, then investigate concepts from information foraging, and finally, look into behavioral approaches and tourism search models.

The field of information retrieval offers approaches to the topic of search. The classic information retrieval model is based on the idea that a single query by a user yields in one appropriate output set (Robertson, 1977). In order to optimize received output sets, the classic model is extended
by iterative feedback loops (Salton, 1968). However, it turned out that this approach is too simplistic, as users not only modify search keywords but also the query (Bates, 1989). Thus, information search and decision making is an evolving, nonlinear process not leading to one single best information output set (Bates, 1989; Um & Crompton, 1990; Van Raaij & Francken, 1984). If a search is a “series of selections of individual references and bits of information at each stage of the ever-modifying search” people retrieve a bit-at-a-time following a berry-picking strategy (Bates, 1989, p. 409). Six ways how people may follow this strategy in manual environments are described by Bates (1989), highlighting that some can involve the following: footnote chasing (i.e., people chain backward through bibliographies), citation searching (i.e., a citation index is used to find out who cites a certain citation, which is used as a starting point), journal run (i.e., the central journal for a certain topic is identified and all relevant issues are searched through), area scanning (i.e., material that is physically collocated is used), subject searches and author searches in bibliographies, and abstracting and indexing services.

Pirolli and Card (1999) propose a search strategy called foraging following an evolutionary ecological perspective related to evolutionary psychology (Barkow, Cosmides, & Tooby, 1992) and rational analysis (J. R. Anderson, 1990). The information-foraging theory stresses the challenge of meaningfully allocating attention to the huge amount of information available. Based on a certain search task, the aim is to understand how information seekers adapt to constraints in given environments. In information-rich environments, the foraging strategy is used for ill-structured problems having an explicitly defined goal. Given a certain information search task, the ultimate information forager is one that best solves the challenge of “maximizing gains of valuable information per unit cost” (Resnikoff, 1989, p. 97). If people search for travel information, they have to minimize ways within and between different “patches” (i.e., within and between sources), but also within and between searches. Generally, the search within one single source will continue until received gains are higher than costs; consequently, if costs increase, foraging will be continued by accessing a different source. Usually, between-patch foraging is an integration of “enrichment following” or a “scent following” activity (Pirolli & Card, 1999, p. 9). Process or environmental enrichment is a searcher’s endeavor to reduce costs between (e.g., minimize ways between information sources) and within (e.g., refine combination of search keywords used) information patches. The scent-following model says that people judge source relevance by certain cues, such as the perceived information proximity, titles, keywords, abstracts, and citations.

The dynamic computational cognitive model of information foraging (ACT-IF) proposed by Pirolli and Card (1999) stipulates that people only have access to information they are aware of or that they have gained from previous experiences (i.e., declarative memory). In addition to the declarative memory comprising words and word associations, the model consists of the production memory that follows a match–execute cycle. During the match phase information is matched against knowledge in memory. If there is a match, information is evaluated and ranked. This is an ongoing gathering process where a spreading activation model delineates how a set of cues is clustered or reclustered. In doing so, information is ignored, deselected, or selected depending on the value of each independently related cue. Only the most valuable information is chosen and executed. According to Pirolli and Card (1999) there are various information-foraging models, depending on how one defines search constraints, depending on how much time people spend for searching, and how they handle it (i.e., how far information searchers move in the environment). They are on a continuum between sit-and-wait-foragers and widely foraging. They may either be time or resource maximizers by improving the return rate (Hames, 1992). In either case, the outcome is uncertain because invaluable information might be accessed, wasting time, which in turn might lead to insufficient information gathered until a certain deadline. The extreme variance rule model (Stephens & Charnov, 1982) and the dynamic optimization models of foraging account for risk-aversiveness and time-pressure (Mangel & Clark, 1988). All foraging models include components such as state of space, a set of
constraints, strategies, an optimization criterion, and dynamic descriptions (Mangel & Clark, 1988; Pirolli & Card, 1999).

“The totality of human behavior in relation to sources and channels of information, including both active and passive information seeking and information use” is dealt with under the term “human information behavior” (Wilson, 2000, p. 49). Encountering sources and gathering information can be on purpose (i.e., planned) or accidental (i.e., unplanned). If it is intended there is a whole variety of strategies from various disciplines and different contexts (Case, 2006). Information search is an important aspect in the process of decision making. There is extensive research on information search as part of the customer buying decision process (Bettman, 1979) as well as on information search in the pretravel plan (Crompton 1979; Jun, Vogt, MacKay 2007; Mansfeld 1992). Consumers want to make good consumption decisions (Engel et al., 1995), thereby reducing risk, resolving conflicts (Fodness & Murray, 1999), increasing expertise, and satisfaction (Bloch et al., 1986). In doing so, consumers search for information as long as they perceive received rational and emotional benefits (Nahl & Bilal, 2007) to be higher than financial costs, opportunity costs (Hames, 1992), time spent, and cognitive effort (Selnes & Villads Troye, 1989). In this respect, quantity and availability of information (Case, 2006), the interface structure between people and sources (Pirolli & Carsd, 1999), and related theories play a crucial role.

Various concepts investigate tourists’ information search strategies. After identification of needs, customers may first start an internal search, using existing knowledge, which is also dependent on the consumers’ ability to access stored knowledge (Engel et al., 1995). If internal search is not successful, the customer continues with external search. Research has focused on the source of information used in the process (Peterson & Merino 2003) and how much time travelers devote to the whole process or to different sources. Vogt and Fesenmaier (1998) developed a model of information search and source utilization. They included consumer behavior traits (attitude toward information search, involvement in information search), information roles (functional, hedonic, innovation, aesthetic, and sign), and information source types (social, personal, marketing, and editorial).

Jeng and Fesenmaier (2002) identify two main research streams in their literature review. The first one is the holistic, alternative based; the second one is analytical, or so-called attribute based. Furthermore, they developed a hierarchical model of the travel decision-making process. This hierarchy includes the traveler’s context, behavioral components, and cognitive components, all of which influence each other in the trip decision hierarchy. They propose that the process is multidimensional, sequential, and contingent (Jeng & Fesenmaier 2002). Gursoy and McLeary (2003) developed a model of tourist information search behavior integrating internal and external search, cost of search, and concepts of familiarity, expertise, and previous visits with involvement and learning of the individual.

During the dynamic process of searching for a destination, with whom to go, when to go, where to stay, where to eat, what to see, what to do (Fodness & Murray, 1999), information is retrieved not only to get new insights but also to validate, legitimate, and reformulate decisions (Cross, Rice, & Parker, 2001). As accentuated by the previous paragraphs, the process of gathering information for travels is complex due to the fact that services and products are provided by distinct stakeholders, a great variety of sources is available, and the amount of accessible online information exploded. In order to cope with this situation of information overload, travelers are either motivated to acquire information or to avoid it (Johnson, 2009) and information is processed only selectively.

Some of the mentioned factors driving information search, such as sources, traveler traits, and trip characteristics, are now investigated in more detail.

**Information Sources**

Each individual information search starts in more or less static information fields containing resources, constraints, and information about channels and sources (Johnson, 1996). Travelers first search internally by looking for knowledge in their memories; if this is insufficient they search externally (Fodness & Murray, 1997, 1998). The search sequence from internal to external (i.e., spatial information) is also reflected in the “circle of trust”
indicating that the highest level of trust is towards oneself (i.e., internal search). Research shows that friends, guide books, regional and destination information brochures, and tourist boards are very important channels (Bieger & Laesser, 2004). However, the most trustful external source is family and friends, followed by people with shared interests and experts. The lowest level of trust is given to people not belonging to any of the previously mentioned groups. Dickinger (2011) shows that the trustworthiness of online sources (editorial, marketing, and service provider) varies depending on the search goal (exploratory and goal directed).

External sources are accessed following a certain sequence; with increasing search experience habitual pathways and/or plans for retrieving information from diverse sources might emerge (J. D. E. Johnson, Case, Andrews, Allard, & Johnson, 2006). With respect to information source selection, Pescosolido (1992) integrated the social context and identified cascades or strings. Depending on the combination of sources used, the operational search strategy is either contributory or decisive (Fodness & Murray, 1999; Snepenger et al., 1990).

Bieger and Laesser (2004) investigate the use of different information sources for decisions at different levels of the travel decision process. There is some evidence that depending on what people are looking for they choose different information sources (Vogt & Fesenmaier, 1998). The Internet provides new ways of information presentation with respect to speed and scope of access, interactivity, and presentation mode flexibility (Dholakis & Baggozzi, 2001). Which sources people use and information search strategies are influenced by situational variables, potential payoff, cost of search, conflict, and conflict resolution, as well as search contingencies and travelers’ characteristics (Decrop & Snelders, 2005; Fodness & Murray, 1998).

Literature confirms that specific information sources are used to meet specific information needs (Wendel & Dellaert, 2005). This means that the information source depends to a large extent on the travel planning process and the aspect of the trip information is needed for (Zins, 2009). Bieger and Laesser (2004) also show the differences in information channels before and after a trip decision is made. Information search outcomes such as feedback loops, satisfaction or frustration due to contradicting or misleading recommendations have to be integrated in search models (Johnson, 2009) and theories must deal with social contexts (Pescosolido, 1992), ignorance, and irrationality (Nahl & Bilal, 2007).

**Searchers’ Characteristics**

Personality factors impact on constructs contributing to a satisfying information search experience (Sproles & Kendall, 1986). D.-Y. Kim, Lehto, and Morrison (2007) provide evidence for gender differences in terms of attitudes towards information channels, with respect to preferred features provided on a website and the way information is processed. Reasons for differences are found in the brain structure of men and women resulting in variances regarding information processing; males are selective processors, while females elaborate a broad variety of information, from various sources in greater detail. Women are more visually oriented (Holbrook, 1986), more stimuli driven, and are more sensitive to situational cues pertaining to self-evaluations than their male counterparts (Lenney, Gold, & Browning, 1983). However, gender differences disappear if men are highly involved in a certain information search process (Darley & Smith, 1995; Meyers-Levy & Sternthal, 1991). Apart from different processing modes and learning styles (Shute, 1993), gender roles impact on judgments and behavior (Bussey & Bandura, 1999). Among others, the following factors influence search behavior: sociodemographics (Bimber, 2000; Morrison, 1996; van Raaij, 1986; Wilkes, 1995), travel experience and philosophy, knowledge, search expertise, ability, learner control (MacGregor, 1999), decision styles (Decrop & Snelders, 2005), and psychographics such as motives, attitudes, interests, and opinions (Bandura, 1977; Cohen, 1972; D. Davis, Allen, & Cosenza, 1988; Madrigal & Kahle, 1994; Tobias, 1994). Finally, how a person feels while seeking information impacts on search behavior (Mittal, 1988), as well as technology affinity (Mitchell & Walsh, 2004; Shashaani, 1997), and Internet or more generally preferred media usage (Ono & Zavodny, 2003).

**Travel Characteristics and Environmental Factors**

Previous research found that the characteristics of the trip the traveler is searching for also impacts
search. More specifically, examined travel characteristics are time, length of stay, number of destinations visited, the amount of attractions visited, entertainment expenditures (Fodness & Murray, 1999), activity participation, accommodation preferences, travel style, and travel budget (Snepenger et al., 1990). Further studies analyze the relationship between information search behavior and the trip purpose (being a business trip, visiting friends or relatives, and other pleasure trips), the mode of transport (Fodness & Murray, 1999), the travel party composition (McIntosh & Goeldner, 1990), and the travel distance (Etzel & Woodside, 1982). Multidestination travel models account for the wish of various travel parties to visit distinct destinations during a single trip (Lue, Crompton, & Fesenmaier, 1993).

Environmental factors also need to be considered. Market issues are neither related to personality nor to product/service characteristics. Thus, environmental factors comprise the market environment (Beatty & Smith, 1987), culture (Bloch et al., 1986; Lyonski, Durvasula, & Zotos, 1996), geophysical environment or surroundings, social settings and physical conditions (Belk, 1975; Decrop & Snelders, 2005), and social and cultural trends.

Visualizing Information Search

In addition to social and psychological theories, such as principle of least effort (Zipf, 1949), uses and gratification (Katz, Blumler, & Gurevitch, 1974), sense making (Dervin, 1992), the play theory (Stephenson, 1967), and the entertainment theory (Mendelsohn, 1966) are relevant in information-seeking research. Previous research put a lot of effort in depicting travel information search sequence as flow charts and in summarizing impacting issues (e.g., industry characteristics, information sources, travelers’ characteristics, and contingencies) in well-arranged models (Case, 2006). Popular flow chart models are the information retrieval interaction model (Schamber, 1994), the general model of information seeking and retrieving (Saracevic, Kantor, Chamis, & Trivison, 1988), the information seeking functions (Marchlonini, 1992), and the information search process (Kuhlthau, 1991, 2004). Further information-seeking models are described in the book Looking for Information by Donald O. Case (2007). In the field of tourism, well-known flow chart models are choice set models dealing, for instance, with how travelers decide for a certain destination (Crompton & Ankomah, 1993; Um & Crompton, 1990). Flow chart models often fall short in capturing the complexity of real search situations; aspects such as why and when information is retrieved are not incorporated.

To conclude this literature review, it should be noted that people often do not search exhaustively but stop searching as soon as they have a somehow plausible result for a certain problem (D. J. Johnson, 1996). Further, people do not use one single search strategy but adapt it to their particular needs. To cater several tactics communication and information systems interfaces have to be designed accordingly by providing various feature combinations (Bates, 1989). While research primarily focuses on the act of searching and surrounding factors like psychographics and demographics of the searcher, trip characteristics, and types of information sources used, less research focused on the reason for searching, the actual search task. Thus, the following study approaches search from an experiential and goal-directed search perspective to investigate the different perceptions of travelers depending on the search task.

Conceptual Framework and Research Model

For this research, the main focus is on search settings, more specifically on goal-directed and experiential search. Klein and Ford (2003) found some evidence that there are differences regarding the search depending on the search motivation buying or shopping. Goal-oriented or directed search behavior is driven by utilitarian benefits, which involve external motives to use the Internet as a source of problem solving. This means users are looking for specific information to fulfill their goals. Hence, they are searching for information on the Internet. Experiential or nondirected search behavior is driven by hedonic benefits and involves internal motives. Putting it differently, people use the Internet for entertainment, fun, and emotional satisfaction. Thus, people are browsing the Internet (Hoffman & Novak, 1996; J.-I. Kim et al., 2004; Pedersen & Nysveen, 2003). This reasoning is based on the theoretical distinction between
motivational characteristics like intrinsic and extrinsic motivation.

Csikszentmihalyi (1977, 1990) introduces the notion of flow and describes it as “the process of optimal experience” achieved when a sufficiently motivated user perceives a balance between his/her skills and challenges of interaction. According to the orientation, the involvement, the kind of a user’s motivation, as well as the kind of search and received benefits, two types of flow can be differentiated: goal-directed flow and experiential flow (Hoffman & Novak, 1996).

Depending on the search motive and the object of involvement (goal, product, process), one or the other type of flow can be achieved. Goal-directed flow is important for task-specific use, such as pre-purchase information seeking. Experiential flow is relevant for providing entertainment and recreation, as well as for generally increasing users’ product knowledge (Hoffman & Novak, 1996). According to Bloch et al. (1986), experiential flow activities are guided by the process itself and not by the goal or outcome. Thus, information search can either be goal directed or experiential. The first comprises search for specific information (e.g., product attributes) while the second is stimulus driven and not planned (Janiszewski, 1998). Thus, depending on the objectives or the search task, the perception of information provided will differ. Generally, the design for each type of flow will differ, since users have different search requirements and consequently demand for diverse websites (De Marsico & Levialdi, 2004).

The above discussed streams of research guide theory development for this article. To show the difference in customer perceptions of an information source depending on the search goal, the following section introduces well-established hypotheses for website value (Hypotheses 1–6) and furthermore, the hypotheses testing for the differences regarding search tasks (Hypotheses 7a–f).

**Usefulness and Ease of Use**

According to Davis (1989), to evaluate users’ acceptance of new technology, researchers have to include usefulness and ease of use, as well as additional variables relevant for the technology, the target group, and the context investigated. Consumers searching online look for an efficient way to get information. Studies on online shopping argue that e-consumers are goal focused and utilitarian. Consequently, the concept of usefulness is included as a driver of value (Wolfinbarger & Gilly, 2001). Usefulness is the degree to which people believe that a system will help them to perform better (Davis, 1989). As such, it is a fundamental determinant of system use. However, people may perceive a system useful but simultaneously it may be hard to use. Customers want to complete their tasks efficiently and in a convenient manner (Childers, Carr, Peck, & Carson, 2001). Hence, perceived ease of use and usefulness are important antecedents for the usage of a system and are included in the research model. Both perceived usefulness and perceived ease of use influence users’ perceived value of a website.

H1: Usefulness has a direct positive effect on value.
H2: Ease of use has a direct positive effect on value.

**Enjoyment**

The experience of consuming or searching can be rich in value (Mathwick, Malhotra, & Rigdon, 2001). Often the concept of intrinsic value is used to describe perceived fun and enjoyment of a task. According to Babin, Darden, and Griffin (1994), fun and playfulness are the drivers of intrinsic value perception. In such a case, the value derives from “appreciation of an experience for its own sake, apart from any other consequence that may result” (Holbrook, 1994, p. 40). This enjoyment-focused concept in some cases is stronger than the value from the actual task completion. People who participate in a task due to pleasure and enjoyment and not because there is some extrinsic motivation may get in a playfulness state (based on flow theory by Csikszentmihalyi, 1977), which in turn may lead to increased perceived value and satisfaction (Moon & Kim, 2001).

Related effects were included in surveys on online shopping and the intention to return to a website (Koufaris & Hampton-Sosa, 2002). Additionally, it was found that hedonic use also drives adoption (Venkatesh & Brown, 2001) and the intention to use a website (Van der Heijden, 2003). Thus, we propose:
H3: Enjoyment has a direct positive effect on value.

Content Quality

High-quality content is information tailored to users' needs and ready for consumption. Information needs to be relevant, easy to understand and read, and it needs to be offered in a suitable format (Barnes & Vidgen, 2000). The link between quality, value, and satisfaction is in accordance with previous literature published in the field of consumer behavior (Cronin, Brady & Hult, 2000). Nevertheless, relatively few studies are focusing particularly on the content–value–satisfaction chain. Only recently, the impact of content quality on perceived value was investigated in the area of information system success, more precisely in the context of accepting m-learning by Yi, Liao, Huang, and Hwang (2010). Further, in the context of retail websites, a study by H. Kim and Niehm (2009) shows that content quality affects perceived value. As already mentioned earlier, value is the assessment of perceptions of what users received from a service or product (Zeithaml, 1988). Thus, since websites are used as a source of information, a high level of content quality is imperative for websites to be seen as worthwhile. Hence, we propose the following:

H4: Content quality has a direct positive effect on value.

The Value, Satisfaction, and Loyalty Chain

Literature confirms that positive evaluations lead to improved value and satisfaction attributions. These positive value attributions directly influence satisfaction (Cronin et al., 2000). This relationship is based on Bagozzi’s (1992) framework of appraisal influencing emotional response, which in turn is a coping framework. In other words, the evaluation of a service, such as a website, leads to value and an emotional reaction (satisfaction with the site) and impacts future behavior. In order to increase perceived value and to satisfy customers, the usage of a service has to arouse positive feelings (Cronin et al., 2000; Rust & Oliver, 1994). From a manager's perspective, satisfaction matters to the degree it affects customers behavioral intentions (Parasuraman, Zeithaml, & Malhotra, 2005; Zeithaml, Berry, & Parasuraman, 1996). Following the satisfaction literature, there is a direct link from customer satisfaction to outcome measures, such as positive word of mouth, repurchase intentions, and customer loyalty (Cronin et al., 2000; Fornell, 1992; Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Oliver, 1997). Loyalty is the “deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour” (Oliver, 1997, p. 392). In an online context, the loyalty concept deals with a user’s intention to use a website in the future and the tendency to recommend others to use a website (Moon & Kim, 2001).

H5: Value has a direct positive effect on satisfaction.
H6: Satisfaction has a direct positive effect on loyalty.

The Effect of Goal-Directed Versus Experiential Search on the Website Evaluation

Searching and surfing the Web can be an end in itself; thus, in an online environment for many users the experiential process outranks the final result (Hoffman & Novak, 1996; Wolfinbarger & Gilly, 2001). As such, for an experiential search task enjoyment might be more important. In an experiential setting browsing the Web can be a form of recreation for those motivated by enjoyment (Bloch et al., 1986). For a utilitarian, goal-directed task users of an information system may be more committed to the outcome of the search than the fun involved in searching (Wolfinbarger & Gilly, 2001). For a goal-directed search the content as such and the usefulness of the site should be the main drivers. Furthermore, people searching for specific information want an efficient and timely way to get to their ultimate goal, and usefulness and ease of use become even more important (Childers et al., 2001). Thus, difference in intrinsic motivation should impact the hypothesized relationships.

H7: For goal-directed searchers, the relationship between: a) usefulness and value is strengthened; b) ease of use and value is strengthened; c) enjoyment and value is attenuated; d) content quality and value is strengthened.
Since the website used for the search task conveys multiple features for graphical search support (e.g., tag clouds, semantic map), we suggest that for experiential searchers the overall satisfaction is higher and leads to repeat visits and recommendations of the site. Thus, we hypothesize:

H7: For goal-directed searchers, the relationship between: e) value and satisfaction is attenuated; f) satisfaction and loyalty is attenuated.

Figure 1 presents the proposed research model reflecting the hypotheses developed earlier. Apart from testing the overall model, the difference between the two groups of users (i.e., goal-directed vs. experiential search) is analyzed, thus allowing for a comparison of the path estimates between the experiential and goal-directed search task.

Methodology

Study Design

Data were collected through an online survey. The first page of the questionnaire invited respondents to participate and explained the purpose of the study. The next page provided the goal-directed and experiential search task (i.e., users either searched for specific information or they browsed the website stimulus driven and just for fun). The task was randomized to attract an equal number of respondents for the two information search scenarios. Several search scenarios were included in the pretest to identify realistic ones. The search tasks that discriminated best were chosen for the survey and are presented in Table 1. Following the search instructions, a link led to the website the respondents were asked to base their responses on.

Operationalization

Following the hypotheses, seven constructs were included in the study. Numerous researchers have discussed antecedents for e-value during the search process and constructs for measuring e-customer satisfaction (Flavián, Guinalíu, & Gurrea, 2006; Liu & Arnett, 2000; McKinney, Yoon, Zahedi, & Fatemah, 2002). Thus, questionnaire items were selected based on an extensive literature review. The online questionnaire consists of previously developed and tested multiple item Likert-type scales (Table 2).

In order to control for the success of the manipulation, respondents had to indicate how they
perceived the search task by answering the following questions on a 4-point semantic differential scale: How did you search for the information required for this survey? Which adjective suits your search for information best? The response options for the questions were semantic differentials with anchors rationally–instinctively for the first one. The second questions had three sets of semantic differentials (thought out–emotional; goal oriented–experiential; time saving–extensive). A pretest among 35 students scrutinized the measurement instrument and provided clarity and readability of the questionnaire.

Analyses

The research model is tested using Structural Equation Modeling (SEM) employing Mplus, a
second-generation SEM software tool (Muthén & Muthén, 1998, 2007). A prerequisite of SEM is normally distributed data. An inspection of data regarding skewness and kurtosis shows that most of the variables are approximately symmetric (–0.38 to +0.17), and that only four items are moderately skewed (–0.50, –0.90, –0.82, and –0.56). Concerning kurtosis, all the variables are platykurtic. This data distribution is confirmed by a screening of the histograms, as well as a highly significant Kolmogorov-Smirnov test. Multivariate normality is a condition often required by SEM tools, but hardly met in behavioral research. Mplus provides estimators not requiring normal distribution and metric data. Furthermore, it offers a multiple group analysis function allowing testing for the hypothesized differences between the directed and the experiential search task. For the study at hand, the robust estimator MLM is used (Satorra & Bentler, 1994). First, the measurement model is calculated allowing for a confirmatory assessment of both discriminant validity and convergent validity (Campbell & Fiske, 1959). Following the assessment of the measurement model, the structural model is evaluated. This is a confirmatory assessment of nomological soundness (Cronbach & Meehl, 1955). In order to test the overall fit of the model, a combination of stand-alone fit indices and incremental fit indices is used. Muthén and Muthén (2007) recommend two incremental fit indices, namely the Tucker-Lewis index (TLI) and the comparative fit index (CFI). Concerning stand-alone fit indices, the Satorra-Bentler scaled chi-square and the root mean squared error of approximation (RMSEA), a non-centrality-based measure, are considered (for further information see Hu & Bentler, 1995). Concerning multigroup analysis the notion of Baron and Kenny (1986) is followed. Thus, three models are estimated. First, the overall model is calculated without taking into account the groups and then the estimation is done again for the groups (goal-directed and experiential search), applying the multigroup analysis procedure of MPlus. Results reported are based on standardized solutions.

Results

Sample Profile

After data cleaning, the final sample consists of 445 fully completed questionnaires. Gender is nearly equally distributed with 41.6% female and 58.4% male respondents. The average age of the sample is 28.3 years. Concerning the profession, 43.8% are students, 26.3% are white collar workers, 12.4% are self-employed, and the rest are comprised of housewives, unemployed, blue collar workers, and retired persons. The respondents can be considered as experienced regarding Internet usage with 84.3% constantly or several times a day online. Only 7.2% use it several times per week or less frequently. Respondents indicated to search for information for around 8 hours in an average week. The results do not reveal any difference regarding Internet experience between respondents of the goal-oriented and the experiential search task. Furthermore, the manipulation check indicates that the respondents truly perceived the two tasks to be different, in that one is experiential and the other one goal directed (result of t-test). Thus, the manipulation can be considered successful ($p < 0.01$ for all but one item). The allocation between the two groups was about equal, with 224 assigned to the goal-directed search task and 221 to the experiential setting.

Core Model

The assessment of the measurement model shows that all items load in excess of 0.7 on the underlying latent concepts. Factor loadings range from 0.72 to 0.96. Hence, individual item reliability is given in that all squared correlations between a construct and its indicators exceed the threshold of 0.5. In accordance with the Fornell and Larcker (1981) approach, all levels of the average variance extracted (AVE) satisfy the cutoff of 0.5 by ranging between 0.62 and 0.87 (see diagonal in Table 3). As can be seen in Table 3, convergent validity (CR) is well above the recommended threshold of 0.7. Now, by comparing AVE and the correlation of the latent concepts, we assess discriminant validity. This criterion is met for all but one concept. The AVE of content quality does not exceed the correlation between satisfaction and content quality. As a first indication, we would assume that discriminant validity is not satisfied for these two concepts. However, by inspecting the measurement items and assessing the similarity of these concepts from a substantive point of view, we can argue that they
are sufficiently different from each other. Overall, for all the seven latent constructs, we can summarize that the concepts discriminate rather well from each other. Moreover, the constructs measurement is unidimensional, which is demanded by some researchers (i.e., a model with simple structure and no correlated measurement errors) (J. C. Anderson & Gerbing, 1988; Gerbing & Anderson, 1988; Hattie, 1985).

The Satorra-Bentler scaled chi-square is significant ($\chi^2 = 594.3$, $p < 0.001$); thus, the modification indices are examined. However, no theoretically reasonable paths could be added. A further investigation of stand-alone and incremental fit indicators shows that there is evidence that data actually fit the model rather well. The TLI should be above the level of 0.9 (Hu & Bentler, 1995) that is achieved by 0.93. Then, the CFI is consulted and is above the
required level with 0.94. The RMSEA is at a satisfying level of 0.06.

We now report the results of the overall model. The estimation of the SEM indicates that content quality has the strongest effect on value with a beta-coefficient of $\beta = 0.556$ ($p < 0.001$), followed by usefulness with an effect of $\beta = 0.306$ ($p < 0.001$). Ease of use has a weak but still significant impact at a significance level of 0.10 ($\beta = 0.084$, $p < 0.060$). The hypothesized effect of enjoyment on value does not show a significant result. The effects of value on satisfaction, as well as the effect of satisfaction on loyalty show very strong and highly significant results with beta-coefficients of $\beta = 0.927$ ($p < 0.001$) and $\beta = 0.799$ ($p < 0.001$), respectively.

**Moderator Search Task**

To test the moderating effect of the search task (i.e., goal directed vs. experiential) multiple group path analysis is carried out. As mentioned in the analysis section, the recommendations of Baron and Kenny (1986) are followed. In the study, the group membership is predefined through the experimental treatment. Thus, this serves as the grouping variable. A careful estimation of three models ensures that the change in $\beta$-coefficients is due to a change in the hypothesized relationships and not due to measurement error (Steenkamp & Baumgartner, 1998). Table 4 presents the estimates.

After the multiple group analysis is carried out, a $t$-test reveals significant group differences. Results indicate that path estimates show significant differences for the two groups exhibited by the $p$-values in Table 4. This confirms that there is a major difference between the experiential and goal-directed search scenario.

The results indicate that for the goal-directed task, we find positive effects of content quality (H7d: $\beta = 0.588$, $p < 0.001$) followed by usefulness (H7a: $\beta = 0.322$, $p < 0.001$). The same is true for the experiential setting but with weakened effects (H7d: $\beta = 0.565$, $p < 0.001$, H7a: $\beta = 0.297$, $p < 0.001$). Further, in contrast to the findings for the experiential search, ease of use is significant in the goal-directed setting ($H_{8b}$: $\beta = 0.105$, $p < 0.096$) at a 0.10 level. Enjoyment, however, does not exhibit a significant effect in the goal-directed setting but is significant for experiential searchers ($H_{8c}$: $\beta = 0.109$, $p < 0.046$). As expected, value has a positive effect on satisfaction for both groups but is attenuated for the goal-directed search ($H_{8e}$: $\beta = 0.948$, $p < 0.001$; $\beta = 0.956$, $p < 0.001$). Finally, as hypothesized, there is an attenuated effect for goal-directed searchers compared to experiential searchers regarding the effect of satisfaction on loyalty ($H_{8f}$: $\beta = 0.758$, $p < 0.001$, $\beta = 0.841$, $p < 0.001$). This confirms four of the hypothesized effects; one showed a moderator effect that was contrary to what was proposed and one was not significant.

**Discussion**

For the overall model, the hypothesized effects were confirmed to a great extent. All but one concept exhibited the effects hypothesized based on a thorough literature review. Only the effect of enjoyment was not significant. Thus, we can conclude that in the overall setting content quality is the main driver of value of an online source in an information search context, while enjoyment is not an end in itself and motivation to search online.

### Table 3

<table>
<thead>
<tr>
<th>Discriminant Validity and Convergent Validity</th>
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<tbody>
<tr>
<td>CR</td>
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<tr>
<td>-----</td>
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<tr>
<td>1</td>
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<td>2</td>
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</table>
The multiple group analysis exhibited a different picture. The first insignificant effect of enjoyment became significant in the experiential setting, while ease of use was not significant anymore. This is in line with the argument that depending on the search task intrinsic motivators such as enjoyment become effective. The empirical evidence shows that the experiential process outranks the final result (Hoffman & Novak, 1996; Wolfinbarger & Gilly, 2001). If a person is motivated by fun, the process of search can be considered as enjoyment. This is also confirmed by the nonsignificant effect of ease of use. This driver becomes obsolete when fun is the central motivation.

Contrary to that, in the goal-directed setting indeed enjoyment does not exhibit a significant effect. This finding is strengthened by the significant effect of ease of use and the strong effect of usefulness. These three paths show that in a goal-directed setting, users are committed to the outcome of the search task (Wolfinbarger & Gilly, 2001). The fun involved in the task is not important, but getting to the goal in an efficient way (ease of use) and finding the right results (usefulness) with an adequate level of quality are the main drivers. This is in line with Childers et al., (2001) arguing that when specific information is searched usefulness and ease of use become even more important.

Thus, basic assumptions on one correct model for search need to be reconsidered.

### Implications and Future Research

#### Implications for Research

The aim of this research was to investigate the usage of a website based on two different search scenarios. The results show that there are significant differences between users who search stimulus driven (experiential search task) and those who search for specific information (goal-directed search task). As hypothesized, the impact of the main drivers of value for the experiential search task (content quality and usefulness) is strengthened for the goal-directed search task. The contrary is true for the effect of satisfaction on loyalty.

In contrast to other studies, this research compares two different search tasks performed on the same website. This allows drawing conclusions on the goal-directed versus experiential search. Other authors focus on one system and investigate the fun or the utilitarian benefits involved. The results indicate that aggregate models of explaining search need to be considered with caution, as search is dependent on various contextual factors. This study shows that the search goal fundamentally moderates perceptions of value of an information source.

#### Managerial Implications

Regarding managerial implications means that website designers have to take usefulness and content quality into account, no matter if the user is focused on experiential and goal-directed search. Hence, usefulness and content quality might be

<table>
<thead>
<tr>
<th>Path Estimates</th>
<th>Overall Model</th>
<th>Hypothesized Effect for Goal-Directed Task</th>
<th>Goal-Directed Task</th>
<th>Experiential Task</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness→value</td>
<td>0.306*</td>
<td>strengthened</td>
<td>0.332*</td>
<td>0.297*</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Ease of use→value</td>
<td>0.084***</td>
<td>strengthened</td>
<td>0.105***</td>
<td>(0.048)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Enjoyment→value</td>
<td>(0.045)</td>
<td>attenuated</td>
<td>(–0.013)</td>
<td>0.109**</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Content quality→value</td>
<td>0.556*</td>
<td>strengthened</td>
<td>0.588*</td>
<td>0.565*</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Value→satisfaction</td>
<td>0.927*</td>
<td>attenuated</td>
<td>0.948*</td>
<td>0.959*</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Satisfaction→loyalty</td>
<td>0.799*</td>
<td>attenuated</td>
<td>0.758*</td>
<td>0.841*</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Values in parentheses are not significant.

*Significant at a 0.01 level.
**Significant at a 0.05 level.
***Significant at a 0.10 level.
seen as basic requirements. However, website designers have to find a way to entertain experiential searchers. The results of the present study show that experiential searchers are prepared to take a certain effort to learn how to use an entertaining website. Ease of use did not show a significant impact for experiential searchers; however, it did for goal-directed information searchers. For this group ease of use significantly impacts value of the website, while design elements do not. Hence, in order to develop a worthwhile website it also needs to be based on the intended information search behavior of the target group.

Limitations and Directions of Future Research

Although the study offers new insights into influences of different search settings, there are still various research avenues to pursue. A first limitation lies within the data available to us. While many website evaluation studies use survey data including statements on behavioral intention, follow-up studies should consider actual behavioral data. Hence, limitations of intentional measures can be overcome.

The empirical evidence shows that future research has to focus on different drivers of value and satisfaction depending on search behaviors in order to increase loyalty. Future explorations of information sources based on search scenarios should include other generally known antecedents for value and satisfaction not included in the present study, such as believability, design, aesthetics, informativeness, or attitude. Thereby, further insights into website conceptualization will allow for adapting websites according to the users’ goals/needs. Hence, website providers will be able to more accurately match users’ mental model and site architecture, thus increasing the recommendation rate and repeat usage.

Only one website was included in the study. Future studies should compare different search tasks across different websites. This would further our knowledge on the influence of website design and their effect on value and the search task.

Biographical Notes

Astrid Dickinger was Assistant Professor at the Institute for Tourism and Leisure Studies of Vienna University of Economics and Business Administration (WU Wien) before joining MODUL University Vienna. Astrid holds a Master degree (2002), Doctorate (2006), and Habilitation (2010) from WU. She was a visiting scholar at the University of Western Australia and Temple University. Her research interests are in the areas of service quality in electronic channels, electronic and mobile service usage, and Web 2.0.

Brigitte Stangl holds a doctorate from the WU Vienna. Between 2006 and 2010 she undertook duties as a Research and Teaching Assistant at the Institute for Tourism and Leisure Studies, WU Vienna, and since November 2010 she has been employed as Project Manager at the Institute for Tourism and Leisure Research, Switzerland. Her main research interests lie in the areas of decision support systems, website evaluation, and social media.

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