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Searching for Experiences

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ARTICLES

Searching for Experiences: The Web-Based Virtual Tour in Tourism Marketing

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ABSTRACT. Destination marketers are increasingly providing opportunities for Web-based virtual tours in their destination promotion efforts. However, it appears that the concept of “virtual tour” remains undefined and little attention has been paid to the potential impact of virtual tours both from the industry and academic perspectives. The purpose of this study is to conceptualize the notion of Web-based virtual tour and examine the effects of Web-based virtual tour on tourism marketing. Propositions are developed throughout the paper to highlight the properties of the virtual tour. Implications are discussed as to how tour-

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ism organizations could better market their destinations by utilizing the Web-based virtual tour. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <getinfo@haworthpressinc.com> Website: <<http://www.HaworthPress.com>> © 2002 by The Haworth Press, Inc. All rights reserved.]

KEYWORDS. Virtual tour, WWW, Internet, experience marketing, information technology, destination marketing

INTRODUCTION

Tourists often make decisions under substantial uncertainty regarding the benefits of visiting a particular destination (Roehl and Fesenmaier, 1992; Vogt and Fesenmaier, 1998; Fesenmaier and Jeng, 2000). One reason for this uncertainty is the lack of "objective" criteria (i.e., physical attributes) that can be used to evaluate a particular destination (MacKay, 1995). Nelson (1970) referred to these uncertainties as "experiential attributes" because they can be identified only through experiences. The best way to examine experiential attributes of a destination and to form a mental image of the destination is to experience the destination by actually visiting the place (Gartner, 1993). However, it is impossible to have direct trial experience in tourism activities due to the unique nature of tourism products. Virtual experiences using environmental simulations such as sketches, photographs, and videos are, therefore, considered paramount to successfully creating and communicating an image of a destination (Cho and Fesenmaier, 2001; Mackay, 1995).

Virtual experiences using environmental simulation are providing more real-life experiences due to the advancement of information technology (Ruddle et al., 1997; Staats et al., 1997). Traditionally, destination marketers have communicated to potential visitors using a variety of mass media. In this process tourists are observers or receivers of the given information. However, the emergence of the Internet and virtual reality systems enable tourists to be active virtual participants, actually choosing what they want to "experience" so that they can better assess the destination.

The Internet as a tool for communication offers many advantages over traditional mass media in many aspects. It is interactive, fast, flexible and accessible worldwide (Werthner and Klein, 2000; Donthu and Garcia, 1999; Kiani, 1998) and has evolved into a dynamic source of information as well as an efficient communication tool for reaching consumers (Hoffman and Novak, 1996; Werthner and Klein, 2000). In addition, the World Wide Web makes it possi-

ble to deliver various types of information through interactive online communications and to offer a quality environmental simulation that enables users to have a “quality virtual experience” which is otherwise unavailable through other media.

Many tourism destination marketing organizations have invested substantially in creating Web-based virtual tours and it is considered an effective emerging tool for destination marketing. However, it appears that even the concept of “virtual tour” remains undefined and little attention has been paid to the effects of “virtual tour” both from the industry and academic perspectives. The purpose of this article is to: (1) conceptualize the notion of Web-based virtual tour by defining the concept of virtual experience, elaborating on the characteristics of Web-based virtual experience and Web-based virtual tour; and, (2) examine the effects of Web-based virtual tour on tourism marketing in the following areas: searchability of experiential attributes, efficiency of visual information search, destination image, confidence of expectation and satisfaction with actual travel experience. Five propositions are developed to highlight the potential importance of the virtual tour for destination marketing. Suggestions and implications are provided as to how tourism organizations could better market their destinations by utilizing the Web-based virtual tour.

CONCEPTUALIZATION OF WEB-BASED VIRTUAL TOUR EXPERIENCE

The term “virtual tour” is in wide use in tourism destination Web sites despite the inability of tourism researchers to arrive at a consensus definition of the term (Cho and Fesenmaier, 2001). Based on the given fact that virtual tour is a type of virtual experience, the concept of virtual experience needs to be defined. A virtual experience is defined here as an experience in a virtual environment using a computer-mediated environment and is based upon the concept of “telepresence.” Steuer (1992) defined telepresence as “the sense of being” in an environment mediated by a communication medium. Sheridan (1992), on the other hand, defined telepresence as the phenomenon in which a media user loses awareness of the physical environment, convinced that he/she remains within the virtual environment. Csikszentmihalyi’s (1975) concept of “flow” explains the notion of telepresence using the context of personal psychology. The flow experience is a state in which one concentrates so much on an activity that he/she becomes “unaware” of stimuli outside of the activity including awareness of self and the passage of time. Flow and telepresence are similar in that the most important characteristic of each is a high degree of involvement in a task or activity. In both cases concentration on the “now” ex-

cludes distracting stimuli to the point of loss of awareness of self. Virtual experience thus can be defined as the experience of “flow within a virtual environment.” Therefore, virtual tour refers to a particular type of virtual experience that includes a computer-mediated experience while visiting a travel destination.

Hoffman and Novak (1996) recently proposed the flow construct as essential to understanding consumer navigation behavior in online environments such as the Web. Previous researchers (Csikszentmihalyi and LeFevre, 1989; Ghani and Deshpande, 1994; Webster, Trevino and Ryan, 1993) have noted that flow is a useful construct for describing more general human-computer interactions. Hoffman and Novak (1996) defined flow as “the state occurring during network navigation which is: (1) characterized by a seamless sequence of responses facilitated by machine interactivity, (2) intrinsically enjoyable, (3) accompanied by a loss of self-consciousness, and (4) self-reinforcing.” They proposed that flow has a number of positive consequences from a marketing perspective including increased consumer learning, exploratory behavior, and positive subjective experience.

The nature of tourism makes the virtual tour experience important. When tourists are seeking information about a travel destination, what they want to know is not only about the physical characteristics of the destination, but also the experience of the destination. Researchers supported this argument with various definitions of destination. Hu and Ritchie (1993, p. 26) conceptualized the tourism destination as “a package of tourism facilities and services, like any other consumer product, which is composed of a number of multi-dimensional attributes.” Buhalis (2000) also argued that destinations are amalgams of tourism products that offer integrated experiences to consumers. Genereux et al. (1983) found that tourists by their nature have behavioral expectations that are appropriate for a given destination in order for them to evaluate the destination. Vogt and Fesenmaier (1998) examined tourist's information search process and found that tourists seek aesthetic and hedonic information as well as functional information. However, it is impossible to acquire all the needed information about a destination because the value of tourism product is in the “travel experience.” Thus, one might argue that tourists are more interested in the experience a destination offers than the physical destination itself. Recently, Pine and Gilmore (1998) suggested the concept of “experience economy” where they argued that “experiences” are a fourth economic offering which is as distinct from services as services are from goods and contributes significantly to the value of product. Their argument implies that experience itself has value and suggests that a destination marketer may add value through a virtual tour.

Although the virtual experience is available via various types of media, this paper focuses on the Web-based virtual environment because it appears to offer a number of advantages as a tool for communication. Due to the nature of tourism, flexibility and accessibility to tourism marketing tools are important. Tourists interested in a destination are located throughout the world and information about the destination needs to be updated frequently to keep up with the changes of attributes in the actual destination. Tourism marketing campaigns can be more effective when tourists can access information without temporal and spatial limitations (Werthner and Klein, 2000). In order to conduct more accurate and effective communications, tourism marketers should use flexible media with which they can update information immediately. Table 1 compares different media in terms of the potential to be an effective communication tool using virtual environments. In terms of flexibility and accessibility, the Internet has a number of advantages over traditional media such as magazines and television. The Internet is accessible from anywhere at anytime, and information on the Internet can be updated on a regular and timely basis. Another important factor of a tourism communication tool is the potential to offer high-level virtual experiences. The Web has the potential to provide a platform for inexpensive delivery of multimedia information, enabling online tourists to access graphics, sound and even movies. More importantly, the Web offers access to virtual hypermedia environments, enabling real-time interactivity between humans and computers (Werthner and Klein, 2000).

EFFECTS OF A WEB-BASED VIRTUAL TOUR

The usefulness and importance of Web-based virtual tours for destination marketing is based upon the ability of potential visitors to “experience” the destination, thereby enabling the virtual tourist to evaluate the value of actual travel experience more accurately. More specifically, recent studies (Buhalis,

TABLE 1. Comparison of Media by Their Potential for Virtual Experience as a Communication Tool

	TV-based	Virtual Reality-based	Web-based
Potential for Telepresence	Mid	High	Mid-High
Accessibility	Mid	Low	High
Flexibility	Low	Low	High

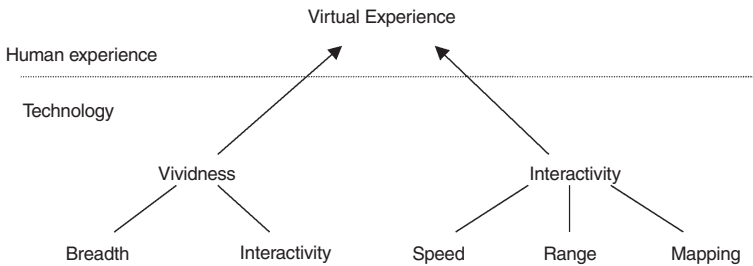
2000; Cho and Fesenmaier, 2001; Vogt and Fesenmaier, 1998; Werthner and Klein, 2000) suggest that virtual tours: (1) Enable tourists to effectively translate experiential attributes into “objective” evaluation criteria; (2) Provide the basis for more efficient information search; (3) Provide more extensive/rich information thereby increasing the quality of the destination image; (4) Increase users confidence of expectation, and (5) Increase visitor satisfaction. The following discussion details the nature of these impacts and resulting propositions that can be used to direct destination marketing efforts.

Experiential Attributes Become Searchable

Researchers have argued that the leisure experience cannot be represented by a single moment or by “tangible” attributes of the place. Recently, Henderson (1996) argued that leisure experiences are diverse and associated with multiple meanings. Furthermore, Stewart (1998) explained leisure experiences as being dynamic, emergent, and embedded in personal stories. Virtual experiences that closely simulate these multi-phase experiences are thus likely to be the best available information source for tourists. That is, when tourists experience the virtual destination in their own way, they have an opportunity to identify the particular types of experiential attributes they want to examine. Hoffman and Novak (1996) suggested that consumers who experience flow are more likely to retain more of what they perceived than consumers who do not. Webster, Trevino, and Ryan (1993) also argued that learning is a reasonable outcome of the flow experience because consumers develop and apply their abilities through exploratory behaviors that characterize flow interactions. These findings support the conclusion that the Web-based virtual tour enables visitors to transform various experiential attributes of a destination into “searchable attributes.”

Steuer (1992) suggested that vividness and interactivity of the virtual tour determines the number and richness of identifiable attributes; that is, when a virtual experience resembles actual experience most closely, users should be able to examine a variety of experiential attributes of the destination. Figure 1 summarizes the technical factors that determine the level of telepresence. It can be seen that technical media factors such as vividness and interactivity affect the level of media richness. Sheridan (1992) suggested that there are three somewhat similar determinants of telepresence level: the fidelity and richness of sensory information, dexterity of sensory control, and the ability to affect the remote environment. Slater and Usoh (1993) further argued that display quality, consistency of presentation across displays, and the ability to interact with the environment are internal determinants of the sense of being in a virtual environment.

FIGURE 1. Technological Variables Influencing Virtual Experience



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 Source: Steuer, J. (1992). "Defining virtual reality: Dimensions determining telepresence." *Journal of Communication*. V. 42(4): 73-93.

Vividness in this model refers to the level of sensorial richness of mediated environment. The level is mainly influenced by sensory breadth (number of sensory dimensions simultaneously presented) and sensory depth (resolution of each perceptual channel). Interactivity is defined as the degree to which users can participate in modifying the form and content of a mediated environment in real time. Three factors that contribute to interactivity include speed (the rate at which input can be assimilated into the mediated environment), range (the number of possibilities for action at any given time), and mapping (the ability of a system to map its controls to changes in the mediated environment in a natural and predictable manner) (Steuer, 1992). Thus, it can be concluded that:

Proposition 1: Web-based virtual tours enable tourists to effectively identify and evaluate experiential attributes of the destination prior to actual travel experience.

Efficient Visual Information Search

People generally search for information until they believe the cost of additional effort is greater than the expected benefit of the information search (Stiger, 1961; Bettman et al., 1998). When the information search process is interactive users can search information more efficiently and effectively because it enables an individual to follow inherently nonlinear information search processes. Landauer et al. (1982) indicated that most databases including linear text is often incongruent with the mind of the user. They argued that:

Typically the data in a database are logically arranged for efficient system processing. Unfortunately, there is no guarantee that the partitioning or connections of data objects in the system will correspond to partitioning or connections in the user's mind. (p. 249)

Recent cognitive psychology research found that nonlinear links to information overcome the problems raised in linear research due to this mismatch and argue that nonlinear links more closely resemble the way human memory operates (Motley, 1987; Shneiderman, 1989). Motely (1987) offered a versatile explanation that the associations of words in human memory are interconnected in a manner similar to a nonlinear system. Shneiderman (1989) also described nonlinear data structures in a manner similar to human cognition. He emphasized that the associations provided by the links in a hypertext database should facilitate memory, concept formulation, and understanding. For example, when people obtain information through television advertising, they watch all the given information in order to find the information they want. However, in a virtual tour they do not have to access all the visual images but rather only those found "useful." Thus, it is argued that virtual tours enable users to obtain information at lower costs.

Proposition 2: Web-based virtual tours enable tourists to save costs for information search and facilitate the search for experiential information.

Destination Image

Researchers have proposed a general model of the destination image formation process (Gartner, 1993). Walmsley and Jenkins (1984) defined destination image as a product of the mind that results from trying to process and "essentialize" huge amounts of data about a place. It represents a simplification of a large number of associations and pieces of information related to place. Mayo (1973) used the term "simplified impressions" to describe the concept of destination image. Fridgen (1987) further defined it as a mental representation of a place that is not physically before the traveler. These definitions focus on the cognitive and perceptual part of destination image. Other researchers defined image as a broader concept that includes consumer emotional response to the product or destination. Dichter (1985) recognized the affective part of destination image. Mazursky and Jacoby (1986) concurred arguing that the definition of destination image is a set of cognitions and emotions that represent an entity to an individual. Friedman and Lessig (1986) similarly described image as a person's subjective perception and affective reaction to stimuli. Dobni and Zinkhan (1990) proposed that image is formed

through a consumer's intellectual and emotional interpretation. The commonly accepted definition of destination image is that it consists of the information, beliefs, impressions, attitudes and emotional thoughts an individual has regarding a particular place (Kotler et al., 1993; Gartner, 1993).

The destination image formation process is summarized in Figure 2 and follows a four step process. It is posited that an "informative image" is formed based on the information that a person obtains through the information search process using traditional media such as television, radio, etc. It is further argued that an "evaluative image" developed during the virtual experience should be distinguished from an "informative image" based on the nature of the information obtained during the information search process. That is, the evaluative phase recognizes that through a virtual tour a tourist can evaluate destinations in his/her own way and extend the information search process as experiential attributes become searchable. The image developed *after* the actual travel experience is labeled "evaluated image" because the virtual experience cannot be identical with the actual experience of visiting the destination. Thus, one can conclude that the level of virtual experience (i.e., telepresence) determines to a large extent the nature of one's image of a destination and that an "evaluative image" will become closer to an "evaluated image" when the virtual experience is similar to the actual experience. Figure 3 describes possible relationships between the level of virtual experience and the resultant destination image, suggesting that the relationship level of virtual experience and image change is not necessarily linear.

FIGURE 2. Destination Image Formation Process with Virtual Tour

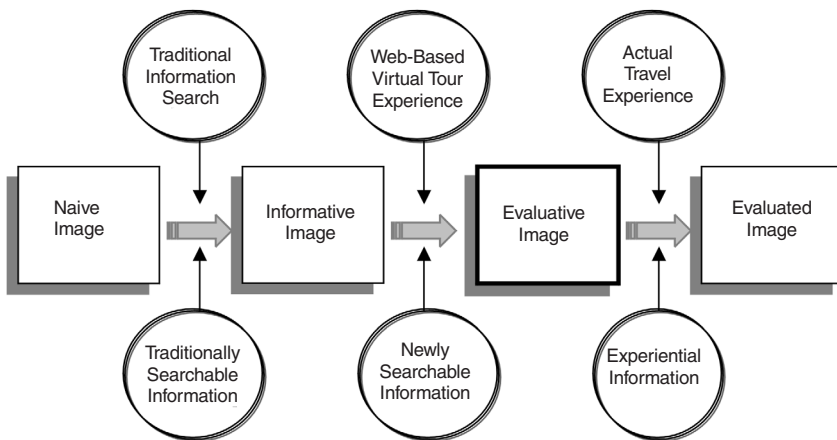
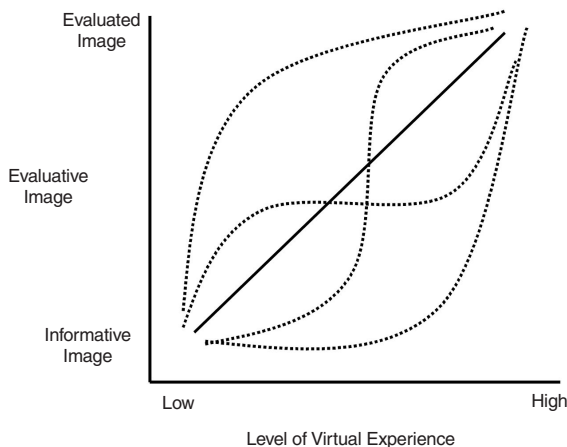


FIGURE 3. Effects of Virtual Experience Level on Destination Image



Proposition 3: A Web-based virtual tour modifies tourist's destination image.

Confidence of Expectation

Research focusing on the effects of direct experience (i.e., product trial) supports the contention that consumers become significantly more convinced about the attributes of the product after the direct product trial experience than after the exposure to advertisements (Smith and Swinyard, 1982, 1983, 1988). Virtual tours bear comparison to product sampling such as movie previews and demonstration versions of new computer software programs. Product trial is defined as a consumer's first usage experience with a brand and is a critical factor in determining brand beliefs, attitudes, and purchase intentions (Smith and Swinyard, 1982, 1983, 1988; Smith, 1993; Marks and Kaminis, 1988; Wright and Lynch, 1995; Kempf and Smith, 1998). Product sampling has been described as an excellent way to introduce new and unusual products (Freedman, 1986) and change the image of a product (Bettinger et al., 1979). Smith and Swinyard (1982) proposed an intuitively appealing chain of logic. They postulated that compared with advertising: (1) direct experience results in more strongly held beliefs, (2) which leads to more strongly held attitudes, (3) and culminates in higher attitude-behavior consistency. Smith and Swinyard (1988) and Marks and Kaminis (1988) found that belief confidence was higher after direct experience with the product than after exposure to advertising.

Marks and Kaminis (1988) found a similar relationship between belief confidence and attitudes. Smith and Swinyard (1983) support the third link with the finding that attitudes based on product trial are good predictors of purchase behavior.

Virtual experiences also seem to convince tourists of the expectation of attributes. When tourists are exposed to the information about attributes of destination using traditional information sources, they can evaluate the value of the attributes but they are not so certain if it will really happen in the actual travel experience. Through a virtual tour, tourists can become more confident that their expectation will be realized in actual travel. It is likely to reduce their levels of perceived risk and enable them to create clearer cognitive images of the destinations. Web-based virtual tours, therefore, help tourists plan what they will/can do at the destination and enable them to initiate their "personal story" prior to taking the actual trip. Following Pine and Gilmore (1998), these personal stories are defined around "memorable experiences" which, in turn, enhance the value of the travel experience.

Proposition 4: The Web-based virtual tour enables tourists to become more confident about their trip.

Tourists' satisfaction with travel is believed to be based upon the quality of match between what tourists expected and what they really experienced (Milman, 1998). One way to encourage this "match" is to provide tourists with accurate and reliable information about the available options. Mack and Thompson (1991), for example, examined the value of information provision to assist visitors in the use of time during visits to Rocky Mountain National Park and concluded that the new communication design could be successful in increasing activity participation by improving visitor knowledge of alternatives. Web-based virtual tours appear to offer the potential to increase tourists' satisfaction with actual travel in three aspects. First, tourists become able to identify their favorite experience in advance and make more detailed plans concerning how they will spend time at the destination. Second, one's evaluative image after virtual tour experience may be closer to the evaluated image than informative image. Virtual tours enable tourists to reduce the gap between expectation and actual experience that usually causes unpleasant surprise and dissatisfaction of tourists. Third, tourists become more confident about their expectation after virtual tour experience. That is, better informed tourists are more convinced that they made the best decision among the available decisions which, in turn, leads them to be more satisfied with the actual experience, regardless of the quality of actual experience. Thus, it can be concluded that:

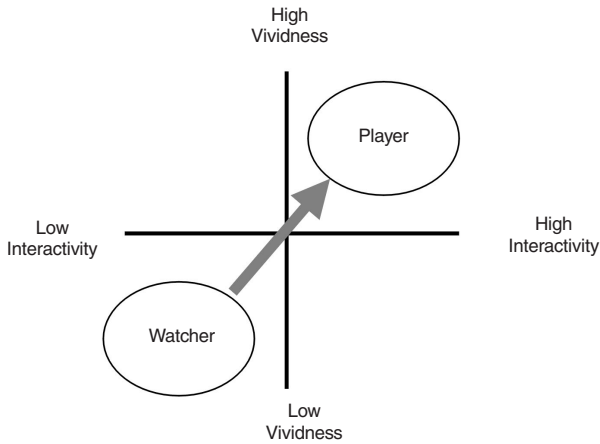
Proposition 5: The Web-based virtual tour will lead to increased satisfaction with actual travel experience.

DISCUSSION AND IMPLICATIONS

New communication environments exemplified by technologies such as the World Wide Web and virtual reality make travel information flow more “consumer-oriented” and thus, enable consumers to gain greater access to travel information. As a result these changes in the communication environment influence the process of searching for, and provision of, tourism information for both travelers as end-consumers and tourism organizations as suppliers. The Web-based virtual tour experience on the Internet has provided a new horizon for tourism organizations in their marketing efforts, and this is even so considering the nature of the tourism products and the unique decision-making process. In travel-related decision-making tourists need to understand as much as possible about destinations, and they seek information about their destinations to reduce the risks associated with their decision-making. However, tourists cannot avoid taking the risks in their trip decision-making process due to the inherent uncertainties associated with tourism products (Roehl & Fesenmaier, 1992). Virtual tours enable tourists to evaluate a destination in a unique and personal way. More specifically, it helps tourists evaluate potential destinations based on the spatial, factual and experiential information they may obtain. In addition, Web-based virtual tours enable tourists to obtain information represented through experiential aspects of the destination at less cost. Perhaps more importantly, virtual tours will enable one to evaluate memorable experience more accurately, enhance their associated memory, and create a personal story of the destination. Thus, the Web-based virtual tour appears to offer the potential to have substantial impact on destination marketing in the following aspects.

First, with the features of high level of interactivity, vividness, and thus high level of involvement with its users, virtual tourism enables visitors to transform experiential attributes into more searchable attributes. Thus, in a highly involved virtual environment tourism marketers should improve potential tourist's Web-based experience, moving tourist from the status of “watcher” (i.e., passive participation) to “player” (i.e., active participant) in the realm of experience (Pine and Gilmore, 1998) by increasing the level of interactivity and vividness. Figure 4 represents the improvement of experience level by utilizing the potentials of the Web. In traditional media tourists absorb information passively. However, with Web-based virtual tour tourists can become “players” who actively participate in virtual experience, and this virtual

FIGURE 4. Change of Virtual Experience Level



experience as a “player” provides tourists with opportunities of acquiring more “information about experiential attributes” prior to the actual travel experience, which will eventually reduce the level of uncertainties the potential tourists have about the destination.

Second, since users search information more efficiently and effectively when the information search process is interactive and dynamic, it is important for destination marketers to provide opportunities for virtual tourists to actively select activities and contents, to get more involved with what they are really interested in, and to keep their virtual tour a dynamic and selective rather than a static or linear process. Information obtained through this dynamic process will help them facilitate user’s memory and understanding of the destination.

Third, despite the nature of inseparability of the tourism products (Moutinho, 1987) in terms of consumption, virtual tours provide consumers with a trial opportunity with which to develop initial and/or confirm their expectations for the destination. This is made possible because of the uniqueness of virtual experience. It is similar to an indirect experience in that it is a “mediated” experience; it also resembles a direct experience because both are “interactive” in nature. Following from Biocca (1997), the virtual tour can potentially offer the advantages of pre-trial where it was found that pre-trial experiences enable consumers to be more confident in their decision making.

Fourth, tourism destination marketers should be very careful in manipulating the virtual tour experience, because this could impact tourist’s satisfaction. It is

argued that the destination image after virtual experience (evaluative image) will often be compared with the image after actual experience (evaluated image) to judge satisfaction level. Thus, information presented in the virtual tour should reflect the true characteristics of the destination so that tourists can form the right image of the destination, and match their perceptions with their expectations in their actual visit. Exaggeration of attractions in virtual tour may attract tourists in the short run, but could cause dissatisfaction of tourists with their actual experience, drive them away from repeat visits, encourage negative word-of-mouth, and damage the image of the destination in the long run.

It can be seen from the above discussion that Web-based virtual tours can be used as an effective marketing tool for tourism marketers. However, some guidelines should be followed in the design of virtual tours. As discussed previously, virtual experience derived from computer-mediated environment can be maximized by creating a higher level of "flow" or telepresence for the consumer, and consumers who experience the flow state in a hypermedia CME achieve increased learning, increased perceived behavioral control, increased exploratory and participatory behavior, and positive subjective experiences (Hoffman & Novak, 1996). However, destination marketers should not only focus on the positive consequences this flow state of virtual tour can bring about, but also should be aware of the antecedents for the flow state to occur. In creating the Web-based virtual tours, marketers should take into consideration the computer skills and challenges the virtual tour users might face, and try to keep a balanced match between them. If network navigation in a virtual tour does not provide for congruence of skills and challenges, then consumers either become bored or anxious and might exit the CME (Hoffman & Novak, 1996). Of course, the level of the flow states should be determined by the nature and purpose of the virtual tour: whether it is transaction-based or experience-based, since they require different level of involvement and search behavior, such as repurchase search or ongoing search (Vogt and Fesenmaier, 1998). Destination marketers should make a distinction between the two in designing virtual tours, since too much involvement and flow will distract the consumers from purchase-related activities if the destination virtual tour Web site is transaction oriented.

There are many interesting topics about Web-based virtual experience for future studies. This article provides a conceptualized framework of the notion of Web-based virtual tour and its effects on destination tourism marketing. Though this is an important starting point in studying this new communication media as a potential marketing tool, more research is needed to examine in a systematic and detailed way the determinants of virtual tour experience, and the relationship between virtual tour and its impacts on the traveler's decision-making process.

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