THE MEDIATING ROLE OF TIME ON THE EVALUATION OF TOURIST DESTINATION HOME PAGES

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INTRODUCTION

Travel information search on the Internet is often initiated by using a search engine (such as Google) to find a useful website that supports the task of trip planning. Travelers' interaction with a search engine can be understood as an iterative process between a search engine website(s) and selected websites (Kim & Fesenmaier, 2005). Additionally, the selection of a website is in many cases made based upon the first impression induced through an instant interaction. Although studies of "first impression" have a long history in cognitive psychology in explaining human's decision-making and behavior, it has received relatively less attention from researchers in website development (Gladwell, 2005; Hu et al., 2004). First impression may be understood as a short-term attitude in a particular context and may have a long-lasting impact on the subsequent decision/behavior. However, it is different from "attitude" in that the focus is on an "instant" reaction towards an object being observed/evaluated. However, a very important question still remains unanswered on the mediating role of time on the formation of first impression. Based upon an understanding of the information search process of travel planners using the Internet, the goal of this study was to address the following research questions: 1) What is the time frame for travel information searchers to infer qualities of a website?, and 2) What are the design characteristics of a destination website that induces a favorable impression during the evaluation time of the website?

BACKGROUND

The literature on persuasion and attitude change has demonstrated the importance of the order on measures of learning, memory, attitude, decision-making, and choice. It can be concluded that decision-making based upon first impression is consistent with the position effect (primacy) of messages in human information processing (Asch, 1946; Hovland, 1957). Primacy refers to the substantial influence of the first piece of information on the following decision-making/choice. A number of researchers (Ansari & Mesa, 2003; Drèze & Zufreden, 2004; Murphy, Hofacker, & Mizerski, 2006) have examined the order effect of advertising message to the online environment. They suggest that there is a monotonic effect between a link order (i.e., position of links in a webpage) and clicking behavior on links. These studies tracked information searchers' eye movement and actual behavior of click in email and webpages and found empirical evidence indicating that primacy was more likely to determine information searchers'

behavior in cyberspace. In other words, the higher a link's position in a list of links, the greater the probability that information searchers will click on that link.

One critical issue that must be examined in the formation of first impression is a mediating role of evaluation time on websites. According to the literature on advertising and communication, mere exposure to advertising contents can immediately induce message recipients' responses (including change of long-term attitude) (Zajonc, 1968; 2001). Additionally, merely being exposed to repeated messages has a direct positive impact in leading to a favorable affective response to a certain level by increasing familiarity. As such, timing effect (e.g., mere exposure, the number of frequency, and time frame of being exposed to, etc.) is very significant in understanding diverse consumer responses to an object.

METHODOLOGY

This study was conducted with an aim of exploring the role of evaluation time on one's first impression of a destination website. The scales developed by Kim and Fesenmaier (2005) were adopted in this study to measure the persuasiveness and first impression towards destination webpages; the scales included the following six dimensions: 1. Informativeness, 2. Usability, 3. Credibility, 4. Inspiration, 5. Involvement, and 6. Reciprocity. Following Gretzel (2004), first impression was measured by assessing an overall impression toward the website using 11 items (including affective, cognitive, and overall impression) on a 7-point semantic differential scale. The literature on cognitive psychology indicates that humans form a first impression very quickly, (Hotchkiss, 2006; Lindgaard, Fernandes, Dudek, & Brown, 2006; Perfetti, 2005; Ramsey, 2004). Therefore, four different time frames (3 sec., 7 sec., 15 sec. and 30 sec.) were chosen to evaluate the impact of time.

The homepage is often the entry point to a website, and as a result, it was decided to use the homepages from fifty official state tourism websites as treatments. In order to minimize respondent fatigue each survey instrument included snapshots of 12 official state homepages; the snapshots of two major US cities were used as a warm-up exercise. A systematic random sampling design was used to allocate the home pages whereby every fourth state was selected from a list of US states listed in alphabetical order. The time frames were applied in a random order. In addition, the viewing time of each treatment was restricted whereby respondents could not review the home page for longer than the allotted time.

An online system was created to show subjects treatments and a paper-based questionnaire was provided so that respondents could record their answers. A "Don't Know" option was included in the questionnaire to infer the rationale of subjects' responses (i.e., the lack of time to examine webpages; an absence/presence of design cues helping/hindering Web visitors infer the quality). Students taking a class at a major university located in the east coast of the United States were invited to participate in the study through an instructor responsible for class. Extra credit was provided to increase a response rate.

DATA ANALYSIS AND FINDINGS

Eighty seven students out of one hundred nineteen students participated in the study; in total, 1,131 webpages were evaluated; this represents a response rate of 73.1 percent. Data analysis was performed in three stages. First, a descriptive analysis was performed to provide a profile of subjects. Second, the evaluation rate of the design categories was obtained by exposure time to infer if subjects were able to detect the "cues" displaying quality of a website within the

given time. Last, multiple regression analyses were performed to examine the decisive design categories on the formation of an impression towards the respective home pages.

The results of multiple regression analysis are presented in Table 1. It can be seen that the majority of subjects were able to assess the informativeness, usability, inspiration, and involvement of the webpages at all time periods. Only about fifty percent of subjects detected the "cues" of credibility and reciprocity within three seconds; however, the completion rate of these two dimensions went up as the inspection time increased.

The result of multiple regression analyses indicates that inspiration-related design elements played a significant role in drawing a positive response to the treatments. The inspiration design category was significant ($p < .05$) at every exposure time and its effect was at least more than 2.5 times in every time threshold (B =.252 at 3 seconds; B =.346 at 7 seconds; B =.306 at 15 seconds; B =.275 at 30 seconds). Additional design factors with a significant impact were found at different time frames (3 seconds: Reciprocity; 7 seconds: Credibility; 15 seconds: Reciprocity; 30 seconds: Informativeness). It was discovered that an additional benefit (discounts, rewards, tailored service, etc.: the reciprocity design category) was the determinant of forming a favorable impression when a Web inspection was completed very instantly (3 seconds); however, the subjects valued more informativeness when they spent longer time for a treatment evaluation.

Table 1. The Influence of Perceived quality of Web Design Categories on the Formation of First Impression towards Tourists Destination Webpages by Inspection Time.

Dependent Variable: Overall Impression towards Tourists Destination Webpages Formed through an Interaction/Observation during the Given Time

	Multiple R = .468	R^2 = .219	Adjusted R^2 = .197	*SE* = .642			
	Independent Variable	B	*SE* B	Beta	*T*	Sig.	
Time 1: 3 seconds	**Reciprocity**	**.334**	**.133**	**.182**	**2.508**	**.013**	**
	Inspiration	**.252**	**.059**	**.330**	**4.269**	**.000**	**
	Information	.068	.085	.062	.797	.426	
	Usability	.058	.085	.049	.677	.499	
	Credibility	.038	.138	.020	.276	.783	
	Involvement	-.034	.105	-.028	-.322	.748	
	Constant	2.181	.459		4.750	.000	
	Multiple R = .597	R^2 = .357	Adjusted R^2 = .342	*SE* = .651			
	Independent Variable	B	*SE* B	Beta	*T*	Sig.	
Time 2: 7 seconds	**Credibility**	**.468**	**.117**	**.253**	**4.007**	**.000**	**
	Inspiration	**.346**	**.052**	**.410**	**6.678**	**.000**	**
	Information	.039	.067	.040	.583	.560	
	Usability	-.022	.076	-.019	-.285	.776	
	Involvement	.039	.084	.033	.466	.642	
	Reciprocity	.084	.126	.042	.666	.506	
	Constant	1.304	.403		3.233	.001	
	Multiple R = .491	R^2 = .241	Adjusted R^2 = .227	*SE* = .866			
	Independent Variable	B	*SE* B	Beta	*T*	Sig.	
Time 3: 15 seconds	**Reciprocity**	**.417**	**.143**	**.173**	**2.924**	**.004**	**
	Inspiration	**.306**	**.065**	**.307**	**4.709**	**.004**	**
	Information	-.031	.081	-.027	-.385	.701	
	Usability	.036	.094	.028	.385	.700	
	Credibility	.137	.117	.072	1.176	.240	
	Involvement	.099	.105	.069	.942	.347	
	Constant	**1.585**	**.445**		**3.561**	**.000**	
	Multiple R = .599	R^2 = .358	Adjusted R^2 = .342	*SE* = .790			
	Independent Variable	B	*SE* B	Beta	*T*	Sig.	
Time 4: 30 seconds	**Inspiration**	**.416**	**.074**	**.384**	**5.653**	**.000**	**
	Information	**.275**	**.092**	**.243**	**2.991**	**.003**	**
	Involvement	.222	.117	.155	1.898	.059	
	Usability	.004	.105	.003	.042	.967	
	Credibility	-.147	.118	-.091	-1.251	.212	
	Reciprocity	-.159	.110	-.094	-1.440	.151	
	Constant	2.615	.360		7.257	.000	

IMPLICATIONS

This study examined the impact of time within the context of website evaluation. The results indicate that the subjects were able to find the necessary "cues" conveying quality of destination website and that the impact of these cues varies significantly depending upon the length of time taken to inspect the website. The findings of this study suggest that it is extremely worthwhile for tourist destination marketers to integrate the effect of inspection time on websites into their website design. That is, the capability of users to infer website quality in a quick manner must be reflected into the website design.

The primary role of DMOs' websites is long believed to be a provision of travel information to potential tourists. Destination marketers have strived to include variety, useful, accurate information to meet the informational needs of the visitor. The finding of this study, however, suggests that such an endeavor could be in vain if the format of website is not supportive to its contents. That is, Web contents must be presented in the optimized format. Thus, format cannot be separated from content because it is a tool delivering the "value" of website. In that sense, destination websites must assign the design "cues" in an easily prominent place of a webpage. Therefore, it is strongly recommended that destination homepages include the combination of the design factors with the greatest impact on the formation of favorableness for an information source.

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