

TRAVEL INFORMATION SEARCH BEHAVIOR AND SOCIAL NETWORKING SITES: THE CASE OF U.S. COLLEGE STUDENTS

Sung-Bum Kim
Hotel & Restaurant Management
University of Missouri

and

Dae-Young Kim
Hotel & Restaurant Management
University of Missouri

ABSTRACT

Social networking sites (SNSs) have proliferated rapidly in the last few years and continue to grow in popularity. In many sectors, college students are considered a major market. This study argues that social network services play a pivotal role in a college students' trip information search behavior. Thereby, this study's primary objective is to identify antecedents that influence college students' behaviors to use SNSs in searching for travel information. The online survey was provided to college students in the Midwest United States. The total valid sample size was 156 individuals. 58.4% ($n = 87$) of the respondents were male and 41.6% ($n = 62$) were female. Hierarchical regression analysis was employed to test the hypotheses. The results indicate that social life documenting and community forum participation are the key factors affecting behaviors to use SNSs for travel-related information seeking. It is also observed that interaction to others on the systems significantly increase the use of SNS. Implications and suggestions for future research were discussed.

Keywords: *social network services, U.S. college students, information search behavior,*

INTRODUCTION

To date, rapid developments in information technology (IT) have brought breakthrough communication methods to the hospitality and tourism industry. The global rise of the Internet has enabled tourists to communicate with others regarding travel information and to search for travel-related information (Carson, 2008). Recently, social media Web sites have emerged as an important information channel that include various forms of consumer-generated content (CGC), including blogs, virtual communities, wikis, social networks, collaborative tagging, and media files. Such CGC, shared on sites such as YouTube and Flickr, has gained substantial popularity in online travelers' use of the Internet (Gretzel, 2006). Social networking sites (SNSs) in particular have proliferated rapidly in the last few years and continue to grow in popularity.

In many sectors of the hospitality and tourism industry, college students are considered a major market; indeed, college students spend about US \$14.8 million annually on domestic and international travel (Richard & Wilson, 2004). In general, the number of college students has increased gradually, and their school vacations and extended holidays contribute to the

growing youth tourism market. In relation to social networks, research has shown that 59% of students used at least one social networking site or application in 2008, representing a significant increase from 33% in 2006 (eMarketer, 2008). According to a Web article appearing on Ypulse (2010), teens and college students spend an average of 11.4 hours per week on social network Web sites. Many of these social media Web sites assist consumers in posting and sharing travel-related comments, opinions, and personal experiences, which then serve as information for others. Due to the huge amount of information available, however, searching has become an increasingly dominant mode in travelers' use of the Internet, including social media (Xiang & Gretzel, 2010). Given these factors (increasing numbers of college students and greater use of social networking, etc.), this study argues that social network services play a pivotal role in a college students' trip information search behavior.

Most prior studies of hospitality and tourism have focused primarily on the role and effect of the social media and its impact on marketing and advertising strategies. Despite the number of studies focused on social networking services and the importance of the college market, a paucity of research is evident regarding the trip information search behaviors of college students using social networking services. In addition, few studies have identified what motivations influence college students' behavior to use a social networking service to find information in the tourism field. Many tourism studies that have involved college students have just examined market segmentation (Kim et al., 2003, 2006); trip behaviors and motivations (Field, 1999; Kim et al., 2007); and online vacation planning (Bai et al., 2004). With this realization, therefore, this study's primary objective is to identify antecedents that influence college students' behaviors to use SNSs in searching for travel information. Among other things, this study will give practitioners insights into social networking sites and how to develop such sites to promote their destinations and services to travelers, including college students.

LITERATURE REVIEW

Related to the growth of social networking sites, some studies in recent years have examined various areas such as travel information search with social media (Xiang & Gretzel, 2010); purchase intention and involvement (Huang et al., 2010); topics related to travel blogging (Carson, 2008; Pan et al., 2007; Schmallegger & Carson, 2008; Sharda & Ponnada, 2008; Thevenot, 2007; Wenger, 2008).

Antecedents on the use of social network service

Social media exist in a variety of forms and serve numerous purposes. Consumer-generated content supported through social media is "a mixture of fact and opinion, impression and sentiment, founded and unfounded tidbits, experience" (Blackshaw & Nazzaro, 2006). As such, the functions of social networking Web sites largely consist of self-expression, life documentation, comments, forum postings, and information seeking. Boyd and Ellison (2007) stated that social networking sites are Web-based services that allow individuals to (1) construct a public or semipublic profile within a bounded system; (2) articulate a list of other users with whom they share a connection; and (3) view and traverse their list of connections and those made by others within system. Online social networking sites are digital networks in which users feel an intrinsic connection to other members (Wellman & Gulia, 1999). The core of a social networking site is the personalized user profiles. Individual profiles are usually a combination of users' images (or avatars); lists of

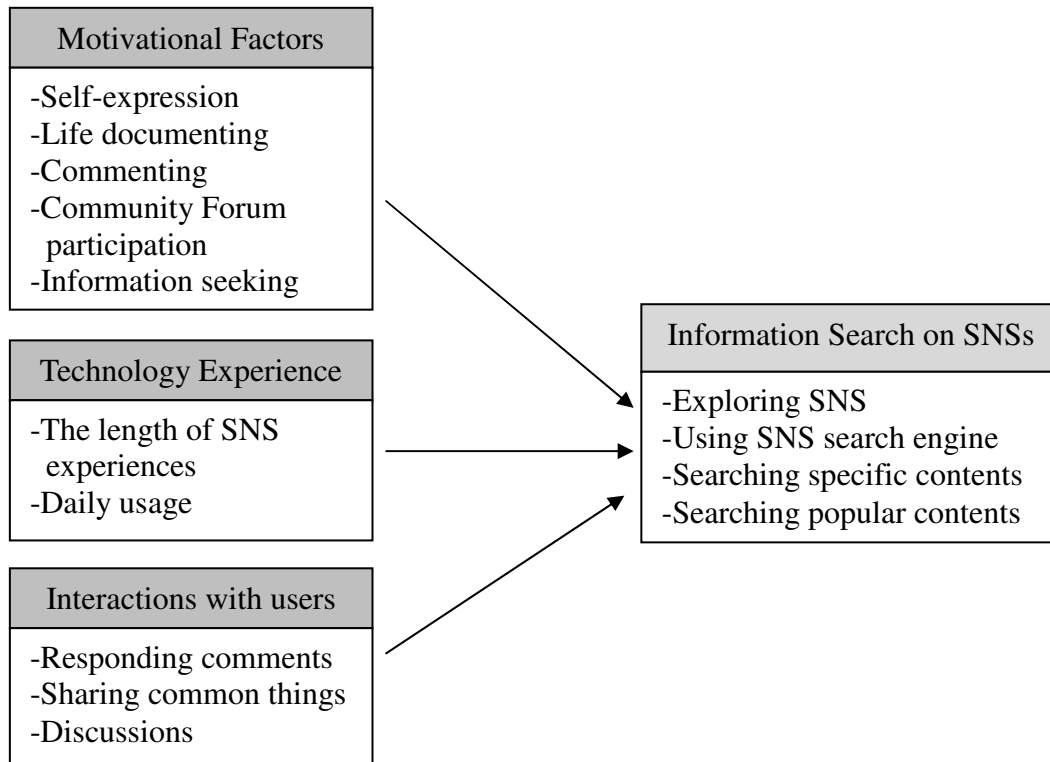
interests; and music, book, and movie preferences. Typical social networking sites allow a user to build and maintain a network of friends for social or professional interaction. Profile holders acquire new friends by browsing and searching through the site and sending “friend” requests (Trusov et al., 2009). SNS users can also share information each other. As such, SNS are a means for self-presentation and for building and maintaining contact with friends and acquaintances (Boyd, 2006; Donath & Boyd, 2004; Ellison et al., 2007). The users have profiles, which usually include their picture and information about their age, hobbies, favorite music and books, and so on. Users can leave short messages on the profiles of other members, which can be viewed by other users (Utz, 2009). In this sense, the motivations to write on social networking sites include self-expression, life documenting, commenting, community forum participation, and information seeking.

Motivation is the major antecedent leading to actual behavior (Huang et al., 2007). Grounded in the aforementioned literature reviews and Huang et al.’s (2007), researchers have developed five motivations: (1) to express deeply felt emotions; (2) to provide commentary and opinions; (3) to document users’ life experiences; (4) to articulate ideas through writing, and (5) to form and maintain community forums. Researchers have treated self-expression as a single, important driver. It has also been noted that an important neglected factor is information seeking. Social networking sites help users gather information they need. In this study, it is presumed that self-expression and life documenting are important factors that motivate travel information search behavior. In terms of commenting, people seek more information to solidify their grounds and to elaborate their viewpoints in the attempt to influence people by commenting on various topics (Lyons & Henderson, 2005). Huang et al. (2007) stated that one of the convenient avenues to prepare the materials for contribution to a forum is to gather or refer to content. Finally, in the information behavior literature, it is established that information seeking motivation relates to goal-directed, situationally-bound constructing activities (e.g., Savolainen, 1995; Wislon, 1999). Experience is considered a fundamental predictor of individuals’ information search behavior and channel choice (Gursoy & McCleary, 2004). For example, distance shoppers modify their behavior and responses to marketing actions as their experience of the new environments increases. Previous empirical studies have shown a significant relationship between such an experience and behavior (e.g., Dahlen, 2002; Lohse et al., 2000; Modhal, 2000; Shim et al., 2002). Experience also refers to using products or services (e.g., Marks & Olson, 1981). Information search behavior can be facilitated though advice emanating from social interactions via social networking services (Huang et al., 2007).

CONCEPTUAL MODEL

As shown in Figure 1, the proposed model for this study is developed and refined from Huang et al. (2007) to investigate the relationships of five antecedents and information search behavior using SNSs. Grounded in the literature review, interaction, technology experience, and frequency are also examined. To attract potential tourists, this study will suggest more effective strategies to destination marketing organizations (DMOs) through a proposed model.

Figure 1
The Proposed Model in the Study



Based upon the proposed model, especially the following hypotheses within the context of information search behavior and social networking sites are as follows.

- H1. Self-expression will have a significantly positive influence on trip information search behavior using social networking sites.
- H2. Life documenting will have a significantly positive influence on trip information search behavior using social networking sites.
- H3. Commenting will have a significantly positive influence on trip information search behavior using social networking services.
- H4. Participating in community forums will have a significantly positive influence on trip information search behavior using social networking sites.
- H5. Information seeking will have a significantly positive influence on trip information search behavior using social networking sites.
- H6. Technology experiences will have a significantly positive influence on trip information search behavior using social networking sites.
- H7. Interaction will have a significantly positive influence on trip information search behavior using social networking sites.

METHODOLOGY

Sample

A total of 212 undergraduate students at a university in the Midwest United States were employed for this study. The online survey set presumed students had Internet connections. Furthermore, to qualify for the sample, respondents had to be older than 18 years of age with trip experience during the previous 12 months. In addition, to ensure the sample represented all students at the university, two general requirement classes under instructors' agreements were used as the sampling frame.

Procedure and data collection

Developing the measures used in this study began by reviewing the relevant literature. All variables were measured with multi-item scales. Items were adapted and developed from previous research (Huang et al., 2007). The researcher conducted a pilot test of the questionnaire with four graduate students before officially collecting data. As a result of the pilot test, several measures and items were modified and adjusted, and a final set of questions was generated for the official survey. In the next phase, the online survey was provided to college students in the Midwest United States between August and October 2010. It was presumed that participants had Internet connections. To fulfill the goals of this study, a web-based survey was employed to collect data associated with university students. This method was adopted based on its potential advantages. Unlike other survey methods, such as mail and on-site surveys, a Web-based survey helps reduce research costs, responses are obtained quickly, the format generates high response completeness, and follow-up is easier (Kim et al., 2006). With the development of the Internet, increasing numbers of researchers have used Web-based surveys (e.g., Han et al., 2009; Kim & Ok, 2009; Kim et al., 2009).

To extract a valid sample from all completed surveys, the respondents were asked "Did you take any domestic or international trip during last one year?" for recent trip research. All of the variables except the items intended to measure experiences with technology (e.g., "How long have you been using online social networks?" "On average per day, how much time do you spend for updating online social networks or participating in online social networks?") used 5-point Likert scales (1 = strongly disagree to 5 = strongly agree). Specifically, self-expression was measured using three items. A sample question is: "I express myself by writing in my online social networks." Life documenting was measured using two items. A sample question is: "I use my online networks as my diary to document my life." Commenting was measured using three items. A sample question is: "I'm willing to comment on what other online social network users say." Participating in forums was measured using three items, with a sample question being "Online social networking helps me to make more like-minded friends." Three items measured information seeking. A sample question is: "Online social networking helps me extract information behind events that interest me." Interaction in online social networks was measured by four items, with a sample question being "I am used to sharing what I think and feel about travel on my online social networks." Travel information search behavior was measured with four items. A sample question is: "For travel, I'm used looking for travel information by exploring online social networks." Finally, two sets of questions asked for the respondents' demographic information.

RESULTS

The profile of respondents

Of a 212 survey responses, a total 156 students' responses were identified as valid samples for this study, creating a response rate of approximately 74%. Table 1 shows that the respondents' demographic characteristics. The total valid sample size was 156 individuals. Among these, 58.4% ($n = 87$) of the respondents were male and 41.6% ($n = 62$) were female. In terms of class position, juniors were the largest responding group (30.3%), while seniors, sophomores, and freshmen accounted for 29.6%, 23.2%, and 16.9%, respectively.

Table 1
Characteristics of the Respondent

Variable	Frequency	%
Gender ($n = 149$)		
Female	87	58.4
Male	62	41.6
Grade ($n = 142$)		
Freshman	24	16.9
Sophomore	33	23.2
Junior	43	30.3
Senior	42	29.6

Table 2
Trip Behaviors and Experiences of Social Network Service

Variable	Frequency	%
Experience of online social networks use ($n = 156$)		
Less than 1 year	2	1.3
1 to < 2 years	11	7.1
2 to < 5 years	73	46.8
More than 5 years	68	43.6
Never used	2	1.3
Frequency of online social networks use per day ($n = 155$)		
Less than 1 hour	63	40.6
1 to < 3 hours	68	43.6
3 to < 5 hours	21	13.5
More than 7 hours	1	0.6
Never used	2	1.3
Purposes of trip ($n = 156$)		
Business trip	7	4.4
Meetings & events	15	9.6
Leisure vacation	116	74.3
Visit friends or family/relatives	83	53.2
Others	13	8.3

*all items on purpose of trip are multiple choice questions.

Table 3
Information Channels of Respondents for Information Search

Variable	Frequency	%
Main information source (<i>n</i> = 156)		
TV	34	21.7
Brochures/fact sheets	21	13.4
Word-of-Mouth (friends, relatives, etc.)	86	55.1
Radio	3	1.9
Magazine	11	7.1
Calling 1-800 numbers	2	1.2
Newspaper	3	1.9
Calling travel agent	14	8.9
Others	10	6.4
Internet (websites, search engine, etc.)	116	74.3
Blogs vs. SNSs (<i>n</i> = 156)		
Travel blog websites	2	1.2
Social networking services (e.g., facebook, myspace)	154	98.8

*all items on information source are multiple choice questions.

The hypotheses were tested using hierarchical regression. As shown in Table 5, in Model 1, five factors estimated the relationship with information search behavior. The results show that life documenting ($\beta = 0.355$, $p < .01$) and community forum participation ($\beta = 0.212$, $p < .05$) have a significantly positive influence on information search behavior by using SNSs. Thus, H2 and H4 were supported. On the other hand, self-expression ($\beta = 0.013$, n.s.), commenting ($\beta = -0.087$, n.s.), and information seeking ($\beta = 0.127$, n.s.) showed no significance, lending no support to H1, H3, and H5.

In Model 2, technology experience and frequency were added to the regression, because it is logically assumed that information search behavior would vary depending on respondents' technology experience and frequency. Unlike the expected outcome, however, it was observed that these variables did not affect the information search behavior using social network services among this group of respondents. Thus, H6 was not supported. Overall, the explanation power was decreased ($R^2 = 0.238$).

Finally, in Model 3 a third analysis was performed to examine the effect of interaction on information search behavior using social networking sites. Interestingly, as can be seen in Model 3, interaction significantly increases accounted variance ($R^2 = 0.293$, $p < .01$), while community forum participation does not have significant effect in this case. This represents a significant increase over previous models. H7, thus, was supported. The correlation matrix in table 4 reflects moderate to moderately-high correlations, with the exception some relationships.

Table 4
Correlation Matrix among Measured Variable

Variables	1	2	3	4	5	6	7	8	9
Interaction									
Information	0.461**								
Experience	0.142	0.029							
Frequency	0.176	0.096	0.419						
SE	0.404**	0.276**	0.027	0.188*					
LD	0.383**	0.410**	-0.01	0.133	0.497**				
C	0.360**	0.119	0.073	0.139	0.341**	0.219**			
CFP	0.597**	0.327**	0.028	0.102	0.375**	0.256**	0.432**		
IS	0.414**	0.241**	0.157	0.166*	0.287**	0.105	0.256**	0.453**	
Mean	3.192	2.743	3.37	1.80	3.034	2.49	3.393	3.318	3.463
SD	0.789	0.827	0.692	0.878	0.835	0.932	0.587	0.616	0.706

*SE=Self Expression; LD=Life Documenting; C=Commenting; CFP=Community Forum Participation; IS=Information Seeking; * $p < .05$; ** $p < .01$

Table 5
The result of Hierarchical Regression Analysis

Variables	Model 1	Model 2	Model 3
SE	0.013 (0.145)	0.001(0.012)	-0.011(-0.126)
LD	0.355** (4.286)	0.357** (4.262)	0.290** (3.519)
C	-0.087(-1.072)	-0.093 (-1.138)	-0.108 (-1.380)
CFP	0.212* (2.404)	0.222* (2.467)	0.084 (0.898)
IS	0.127 (1.560)	0.118 (1.415)	0.074 (0.927)
Experience		0.014 (0.172)	
Frequency		0.013 (0.158)	
Interaction			0.313** (3.372)
R ²	0.239	0.238	0.293
Adjusted R ²	0.213	0.202	0.264
F	9.397**	6.556**	10.267**

*SE=Self Expression; LD=Life Documenting; C=Commenting; CFP=Community Forum Participation; IS=Information Seeking; * $p < .05$; ** $p < .01$; the regression coefficients are standardized regression coefficients with t-value in parentheses

Comparing the three models indicates that the addition of interaction to the relationship of the five motivations and information search behavior significantly improved model performance. That is, interaction was revealed as a significant factor in respondents' information search behavior using social network services. It is worth noting that this result confirms the importance of the interactive functions of social media when an individual is searching for travel information.

CONCLUSION AND IMPLICATIONS

This study can draw some conclusions and implications that may help destination management organizations (DMOs) who strive to maintain a competitive position for their destinations. For both academics and industry practitioners, it is crucial to examine the impact of the social networking service on consumer behaviors and the overall marketing

environment and tourism industry. The purpose of this study was to explore five prominent antecedents that influence the use of SNS for seeking trip information in the context of college student information search behaviors. The results indicate that social life documenting and community forum participation are the key factors affecting behaviors to use SNSs for travel-related information seeking. In addition, it is observed that interaction to others on the systems such as sharing common things with other users significantly increase the use of SNS.

Study findings hold both theoretical and practical implications. In terms of a theoretical contribution, this study proposes a conceptual model along with salient antecedents on the use of social network system, and expands the understanding of information search via social networking services. Considering the importance of social network service, relatively fewer studies have identified antecedents influencing tourists' behaviors to use social networking services for travel-related information seeking. From an organizational standpoint, several practical implications can be inferred from this study's results. First, the study suggests that all public and private tourism organizations should utilize online social networking services (e.g., facebook.com) for bettering soliciting college students. The omitted results indicate that virtually all students (98.8%) use online networking service as their main online activity. That is, the SNSs give opportunities to marketers for disseminating their information more efficiently compared to other communication channels. Second, significant antecedents, social life documenting, community participation and interaction with others should be reflected in marketing strategies and designing promotional contents on SNSs. By elaborating the influential factors, marketers would have more sophisticated and attractive contents which convert would-be surfers to repeated visitors on the system. Understanding these findings and taking actions that resonate with this market will help travel-related companies and agencies to better design marketing strategies as well as effectively target student travelers by meeting their individual needs and desires.

LIMITATIONS AND FUTURE RESEARCH

As with all studies, the current research has notable limitations to discuss. First, the major limitation of the study is the sample employed. The sample was drawn from college students in the Midwest region in US. In addition, this study used convenience sampling. The significance of the results can be improved through more comprehensive samples and geographic dispersion. Thus, the results should be cautious to generalize and more future studies are needed to examine the research model. Follow-up longitudinal studies are also recommended because the characteristic of individual's information search behavior has an historical contingency (Park and Kim, 2010). Second, other psychological determinants like self-efficacy could be examined in order to extend the conceptual model. Additionally, future research can be investigated demographic factors, like gender difference, traditionally examined in communication and information technology field as a moderator. This study serves as a stepping-stone for further understanding of the social networking service phenomenon.

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