

THE INFLUENCE OF SNS TOURISM INFORMATION ON CITY ATTRACTIVENESS AND BEHAVIORAL INTENTION

Ji-HEE JUNG AND JAE-IK SHIN*

Department of Distribution
Gyeongnam National University of Science and Technology
33 Dong Jin-ro, Jinju, Gyeongnam 52725, Korea
aboutjee@naver.com; *Corresponding author: sji@gntech.ac.kr

Received August 2019; accepted November 2019

ABSTRACT. *Recently, tourists are using SNS to gather various travel information and communicate with other tourists. It is very important to attract tourists by employing SNS. In addition, the city attractiveness, which can be expressed as a city's image, impression, emotion, and interest, has been said to be a significant factor in the tourism industry. It would be interesting to see how much of the nature of SNS tourism information affects the formation of city attractiveness and positive behavioral intention. Based on previous studies, the objective of this paper is to find out the relationship between SNS tourism information, city attractiveness, and behavioral intention. 168 questionnaires were used in the final analysis and a structural equation modeling of AMOS 21.0 was performed to test the hypotheses. The results indicated that first, interaction, reliability, and spread of SNS tourism information have a positive impact on city attractiveness but usefulness does not. Reliability has the most impact on city attractiveness, while spread has the least impact. Second, usefulness, interaction, reliability, and spread of SNS tourism information have a positive impact on behavioral intention. Reliability has the most impact on behavioral intention, while interaction has the least impact. Reliability is identified as the most important factor in the formation of city attractiveness and behavioral intention. Third, city attractiveness has a positive impact on behavioral intention. The conclusion section presents the implications and limitations of the study.*

Keywords: SNS tourism information, Usefulness, Interaction, Reliability, Spread, City attractiveness, Behavioral intention, Structural equation modeling

1. Introduction. In order to attract tourists, gathering and acquiring information about tourism destinations using SNS is very important. The importance of tourism information is determined by the user's needs, and it is preferred that the content of the information is clear as of the latest data [1]. Online tourism information has a great influence on the selection of tourism destinations by the development of IT and increased demand of tourists [2].

A survey of local governments' social media channel operations at the Korea Regional Promotion Foundation in 2018 confirmed that 243 local governments in the country operated a total of 849 channels. Preferred channels were shown on Facebook (239), Naver Blog (192), and Twitter (181). Local brands are also using social media as means of culture, tourism, festivals, specialty products and promotion. The general definition of an online community for a tourist destination is a social group where people with a common interest or purpose gather in a virtual space through an Internet network and interact with digital tools such as online bulletin boards, instant messaging, and web logs in relation to their interests [3]. Therefore, marketing managers should try to use SNS to deliver organization value [4].

Recently, urban tourism in Europe is on the rise and it is most notably driven by increases in leisure time and changes in holiday preferences [5]. They suggested that to stimulate tourism attractiveness, cities' communications should thus emphasize the elements associated with the tourist belt, and effectively utilize Internet and social media to convey its characteristics. While the role of city attractiveness is important in tourism, there is not much research on the antecedents and consequences of it.

The purpose of this study is to investigate the relationship between SNS tourism information, city attractiveness, and behavioral intention for city brand improvement. Therefore, this paper analyzes the influence relationship between the constructs presented in the research model to gain basic knowledge and insights into consumer behavior. Theoretical background is reviewed, and an empirical study is conducted to provide useful discussion and interpretation in the remaining part of the paper.

2. Theoretical Background and Hypothesis. SNS is a new marketing tool that attracts and secures customers and enhances consumer buying behavior. These SNS services are being used as the best marketing tool by forming a visible relationship between firms and customers. Pyo and Lim [6] divided the characteristics of SNS tourism information into cognitive and technical characteristics, and suggested that cognitive characteristics are information consistency, information vividness, community interaction, and usefulness of information. Muñiz, Jr. and O'Guinn [7] distinguished community characteristics by their fellow consciousness, degree of information sharing, and moral responsibility, and argued that the interaction between users is based on credibility. Consumers are more likely to make purchases based on information provided by other consumers' experiences in the community rather than information provided by companies [8].

People in their 20s who are familiar with the use of mobile devices have formed their advertising attitude by the influence of smart phone's ability to provide information, so exposure to advertising on mobile devices is essential [9]. In particular, as it becomes difficult to recognize the difference between cities, mobile advertising conducted on city brands requires effective strategic planning to indirectly experience and obtain information before a direct experience [10].

The city has its own traditions, values, and heritage through its growth process based on its own history. These cultural assets are created, inherited and recreated by the people of various groups living in the city and the attractiveness of the city only can be expressed. It is confirmed that the attractiveness of cities affects the choice of tourism destinations [11]. As social media is known to be a major factor in shaping emotional behavior, cities that lead the tourism industry are creating a desire to experience city brands through mobile advertising. Mobile ads using social media are not only used to enhance understanding of cities, but also to improve the pride and bond of city members [12].

Tourism behavioral intention can be defined as a future action plan for the tourist destination based on the belief or attitude formed by past tourism experience [13]. The higher the interactivity and vividness of information on social networks, it is more likely to form a positive attitude toward goods and behavioral intention [14]. Thus, the following hypotheses are presented to investigate the relationship between SNS tourism information, city attractiveness, and behavioral intention.

H1-1: The usefulness of SNS tourism information will have a positive influence on the attractiveness of cities.

H1-2: The interaction of SNS tourism information will have a positive influence on the attractiveness of cities.

H1-3: The reliability of SNS tourism information will have a positive influence on the attractiveness of cities.

H1-4: The spread of SNS tourism information will have a positive influence on the attractiveness of cities.

H2-1: The usefulness of SNS tourism information will have a positive influence on tourism behavioral intention.

H2-2: The interaction of SNS tourism information will have a positive influence on tourism behavioral intention.

H2-3: The reliability of SNS tourism information will have a positive influence on tourism behavioral intention.

H2-4: The spread of SNS tourism information will have a positive influence on tourism behavioral intention.

H3: The city attractiveness will have a positive influence on tourism behavioral intention.

3. Research Method. This study investigates how SNS tourism information affects city attractiveness and behavioral intention, and a research model is presented as shown in Figure 1. Table 1 is the operational definition of this study variable.

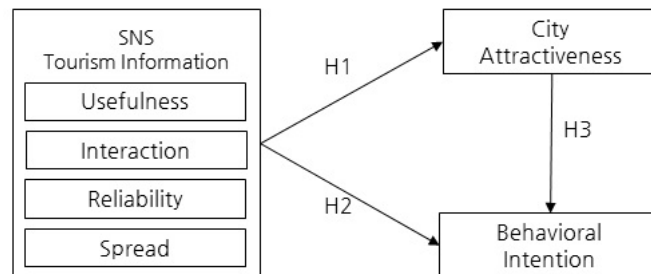


FIGURE 1. The research model

4. Results. The survey was conducted from March 2 to May 31, 2019 for SNS users. Of 185 retrieved questionnaires, 168 were finally used for analysis. SPSS 25.0 and AMOS 21.0 were used to analyze the collected data. Of the demographic characteristics, 66 (39.3 percent) were males and 102 (60.7 percent) were females. Those in their 20s and 30s who actively use SNS were 72 (42.8 percent) and 64 (38.1 percent) respectively. The number of office workers was 75 (44.6 percent).

Confirmatory factor analysis (CFA) was conducted to evaluate the overall model fit of the measurement model (see Table 2). The model fit indices indicated that $\chi^2 = 179.478$, $df = 113$, $p = 0.000$, $GFI = 0.900$, $RMR = 0.046$, $TLI = 0.949$, $CFI = 0.962$, and $RMSEA = 0.059$, suggesting that the measurement model reasonably fits. The reliability of each construct was highly reliable since its composite reliability and Cronbach alpha values are above 0.7 [16]. Also, convergent validity was supported since all confirmatory factor loadings exceeded the accepted level of 0.05 [17]. Discriminant validity was acceptable since a correlation between two constructs was lower than the squared root of the AVE value for any of the two constructs [18].

A structural equation model was performed to test H1 through H3. The model fit indices of the path model indicated that the model reasonably fits ($\chi^2 = 180.292$, $df = 113$, $p = 0.000$, $GFI = 0.900$, $RMR = 0.044$, $TLI = 0.948$, $CFI = 0.962$, $RMSEA = 0.060$).

H1-1 (The usefulness of SNS tourism information will have a positive influence on the attractiveness of cities) was rejected since it was not significant at the level of 0.05 (path coefficient = 0.084 and $p = 0.260$). H1-2 (The interaction of SNS tourism information will have a positive influence on the attractiveness of cities) was accepted since it was significant at the level of 0.01 (path coefficient = 0.240 and $p = 0.002$). H1-3 (The reliability of SNS tourism information will have a positive influence on the attractiveness

TABLE 1. Items of research constructs

Construct	Operational definition	Questionnaire question	Reference
Usefulness	The value which tourist information is available from SNS	U1. Tourism information provided by SNS is useful. U2. Tourism information provided by SNS matches the information I want. U3. Tourism information provided by SNS is helpful to me. U4. Tourism information provided by SNS is worth reading.	[2,6,8]
Interaction	The degree to which information is exchanged or communicated and related among SNS users	I1. It allows me to communicate with other users of SNS. I2. Information exchange with other users of SNS is actively made. I3. Exchange of opinions with other users of SNS is done quickly. I4. It allows me to know the reactions of other users of SNS.	
Reliability	The expertise and reliable level of tourist information provided by SNS	R1. Tourism information provided by SNS is always reliable. R2. Tourism information provided by SNS is useful and valuable. R3. Tourism information provided by SNS gives faith to facilitate decision making. R4. Tourism information provided by SNS has expertise.	
Spread	The degree to which tourist information is shared and communicated to third parties through SNS	S1. SNS tourism information is contents I want to bring to the SNS that I use. S2. SNS tourism information is contents I want to share with others. S3. SNS tourism information is enough to be empathy. S4. SNS tourism information is contents I want to convey to others.	
City Attractiveness	The extent to which SNS users feel about cities' image and impression	CA1. A city image introduced in SNS tourism information is good. CA2. A city impression introduced in SNS tourism information is favorable. CA3. I have good feelings about this city introduced in SNS tourism information. CA4. I am interest in this city introduced in SNS tourism information.	[15]
Behavioral Intention	The extent to which SNS users revisit, recommend, and tell positively tourism destinations	BI1. I will visit this tourism destination. BI2. I will visit this tourism destination often. BI3. I will recommend people around me to visit this tourism destination. BI4. I will actively encourage people around me to visit this tourism destination.	[13]

TABLE 2. Confirmatory factor analysis

Construct	Item	Standardized loadings	S.E.	t-value	Composite reliability	Cronbach's α	AVE
Usefulness	U1	0.784	–	–	0.865	0.852	0.682
	U2	0.885	0.097	11.498			
	U3	0.796	0.110	10.866			
Interaction	I1	0.777	–	–	0.879	0.863	0.707
	I3	0.818	0.096	10.701			
	I4	0.879	0.103	11.149			
Reliability	R2	0.812	–	–	0.871	0.843	0.693
	R3	0.894	0.093	11.957			
	R4	0.738	0.100	10.272			
Spread	S2	0.773	–	–	0.863	0.847	0.679
	S3	0.883	0.096	11.006			
	S4	0.768	0.098	10.175			
City attractiveness	CA1	0.732	–	–	0.881	0.859	0.714
	CA2	0.912	0.108	11.630			
	CA4	0.818	0.106	11.171			
Behavioral intention	BI1	0.821	–	–	0.899	0.879	0.749
	BI2	0.928	0.080	13.849			
	BI3	0.773	0.084	11.716			

$\chi^2 = 179.478$, $df = 113$, $p = 0.000$, $GFI = 0.900$, $RMR = 0.046$, $TLI = 0.949$, $CFI = 0.962$, $RMSEA = 0.059$

TABLE 3. Discriminant validity analysis

Construct	(1)	(2)	(3)	(4)	(5)	(6)
(1) Usefulness	0.826					
(2) Interaction	0.292	0.841				
(3) Reliability	0.240	0.278	0.832			
(4) Spread	0.256	0.228	0.229	0.824		
(5) City attractiveness	0.318	0.391	0.386	0.336	0.845	
(6) Behavioral intention	0.367	0.411	0.400	0.344	0.566	0.865

The diagonal bold is the square root value of the AVEs.

of cities) was accepted since it was significant at the level of 0.01 (path coefficient = 0.251 and $p = 0.001$). H1-4 (The spread of SNS tourism information will have a positive influence on the attractiveness of cities) was accepted since it was significant at the level of 0.01 (path coefficient = 0.190 and $p = 0.009$).

H2-1 (The usefulness of SNS tourism information will have a positive influence on tourism behavioral intention) was accepted since it was significant at the level of 0.10 (path coefficient = 0.147 and $p = 0.052$). H2-2 (The interaction of SNS tourism information will have a positive influence on tourism behavioral intention) was accepted since it was significant at the level of 0.10 (path coefficient = 0.139 and $p = 0.083$). H2-3 (The reliability of SNS tourism information will have a positive influence on tourism behavioral intention) was accepted since it was significant at the level of 0.05 (path coefficient = 0.184 and $p = 0.023$). H2-4 (The spread of SNS tourism information will have a positive influence on tourism behavioral intention) was accepted since it was significant at the level of 0.05 (path coefficient = 0.158 and $p = 0.031$).

H3 (The city attractiveness will have a positive influence on tourism behavioral intention) was accepted since it was significant at the level of 0.01 (path coefficient = 0.386 and $p = 0.000$).

The summary of the results is presented in Table 4.

TABLE 4. The results of hypothesis testing

Hypothesis	Path	Standardized coefficient	S.E.	t -value	p -value	Result
H1-1	Usefulness → City attractiveness	0.084	0.074	1.126	0.260	Rejected
H1-2	Interaction → City attractiveness	0.240	0.077	3.108	0.002***	Accepted
H1-3	Reliability → City attractiveness	0.251	0.078	3.230	0.001***	Accepted
H1-4	Spread → City attractiveness	0.190	0.073	2.595	0.009***	Accepted
H2-1	Usefulness → Behavioral intention	0.147	0.076	1.941	0.052*	Accepted
H2-2	Interaction → Behavioral intention	0.139	0.080	1.735	0.083*	Accepted
H2-3	Reliability → Behavioral intention	0.184	0.081	2.275	0.023**	Accepted
H2-4	Spread → Behavioral intention	0.158	0.073	2.157	0.031**	Accepted
H3	City attractiveness → Behavioral intention	0.386	0.097	3.983	0.000***	Accepted

*: $p < 0.10$, **: $p < 0.05$, ***: $p < 0.01$, $\chi^2 = 180.292$, $df = 113$, $p = 0.000$, GFI = 0.900, RMR = 0.044, TLI = 0.948, CFI = 0.962, RMSEA = 0.060

5. Conclusions. The empirical results of this study are as follows. First, the interaction, reliability, and spread of SNS tourism information have a positive effect on the attractiveness of cities, but the usefulness does not affect. Interestingly, the reliability of the information is shown to have the most impact on city attractiveness, while the spread of it has the least effect. This shows that tourism information provided on SNS can have the most effect on city attractiveness, depending on whether it is reliable, useful, and valuable. In other words, it is very important to enhance the reliability of the information provided on SNS in order to strengthen city attractiveness.

The interaction of SNS tourism information was identified to have the second-most impact on city attractiveness. This implies that communication, information and opinion exchange with others using SNS tourism information, and other people's reactions can play a part in enhancing city attractiveness. Contrary to expectation, the usefulness of tourism information provided on SNS did not affect city attractiveness. Although the importance of information includes usefulness, such result can be assumed since the nature of SNS has the availability and help of information.

Second, the usefulness, interaction, reliability, and spread of SNS tourism information have a positive effect on tourism behavioral intention. The reliability of the information has the most impact on behavioral intention, while the interaction of it has the least effect. This indicates that tourism information provided on SNS can have the most

influence on behavioral intention, depending on whether it is reliable, useful, and valuable. The interaction has the least effect on behavioral intention since users of SNS tourism information are more likely to perceive it as less important. It is very important to increase the reliability of the information in order to improve behavioral intention.

It was confirmed that the characteristics of SNS tourism information are determined by users rather than by suppliers through this study. This shows that the creation of customer value can change from supplier-centric to user-centric through the use of SNS tourism information. Finally, the characteristics of SNS tourism information should be managed from the user's perspective in order to elicit improvements in city attractiveness and behavioral intention.

Third, the city attractiveness has a positive effect on tourism behavioral intention. This indicates that the higher the attractiveness of a city in tourism, the better tourists' behavioral intention. In other words, if SNS users appreciate the city's image and impression highly, it shows that they are more likely to revisit, recommend and tell positively the tourism destination to people around. City attractiveness has been an important factor in tourism. This part was reaffirmed in this study. Thus, a city should strengthen its attractiveness in improving behavioral intention of tourism.

The limitations of this study to be improved in future research are as follows. First, a longitudinal study is required to identify changes in the relationship of the study model over time. Second, in order to generalize the results of this study, it is necessary to improve the representative of the sample. Third, by applying the constructs used in this study to services other than SNS tourism information, the research could be further developed. Finally, further expansion of the study could be achieved through additional analysis to identify differences in demographic characteristics (gender, age, etc.) of this study.

REFERENCES

- [1] J. H. Lee and K. H. Kim, A study on the training an expert in tourism information management, *Journal of Foodservice Management Society of Korea*, vol.10, no.2, pp.183-201, 2002.
- [2] X. Y. Zhang and S. D. Ceon, A study on the effect of SNS tourism information characteristics on spread, trust and tourism attraction preference: Focusing on Chinese tourists visiting Korea, *Tourism Research*, vol.39, no.4, pp.25-45, 2014.
- [3] T. L. D. Efraim, M. Ephram and W. James, *Information Technology Management: Transformation Organizations in the Digital Economy*, 5th Edition, Jhon Wiley & Sons, NJ, 2006.
- [4] C. Li and J. Bernoff, *Groundswell: Winning in a World Transformed by Social Technologies*, Harvard Business Press, Boston, 2008.
- [5] M. Boivina and G. A. Tanguay, Analysis of the determinants of urban tourism attractiveness: The case of Québec City and Bordeaux, *Journal of Destination Marketing & Management*, vol.11, pp.67-79, 2019.
- [6] W. J. Pyo and K. H. Lim, The influence of a special quality of social network service (SNS) tourism information on information-searching behaviors of tourist, *Journal of Tourism Management Research*, vol.16, no.2, pp.285-308, 2012.
- [7] A. M. Muñiz, Jr. and T. C. O'Guinn, Brand community, *Journal of Consumer Research*, vol.27, no.4, pp.412-432, 2001.
- [8] K. Ogawa, *Social Media Marketing*, Softbank Creative Corp, 2010.
- [9] M. H. Choi and B. H. Lim, A study on the informativeness and the effect on the purchase intention based on types of smart phone mobile advertising, *Asia-Pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology*, vol.7, no.7, pp.701-714, 2017.
- [10] Y. J. Kim, A study on the direction of city marketing policy based on mobile advertisement characteristics, *Journal of the Korea Entertainment Industry Association*, vol.13, no.3, pp.363-372, 2019.
- [11] M. J. Enright and J. Newton, Tourism destination competitiveness: A quantitative approach, *Tourism Management*, vol.25, pp.777-788, 2004.
- [12] S. Hudson, M. S. Roth, T. J. Madden and R. Hudson, The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees, *Tourism Management*, vol.47, pp.68-76, 2015.

- [13] H. J. Kim and S. J. Kim, Effect of tourist attractions choice attributes and experiential value on behavioral intention: Focus on Baekje Historical Relics District, *The Geographical Journal of Korea*, vol.46, no.2, pp.147-159, 2012.
- [14] J. R. Coyle and E. Thorson, The effects of progressive levels of interactivity and vividness in web marketing sites, *Journal of Advertising*, vol.30, no.3, pp.65-77, 2001.
- [15] W. J. Jo and J. H. Seo, The effect of relational benefits on e-loyalty in SNS, *Korea Research Academy of Distribution and Management Review*, vol.15, no.1, pp.73-86, 2012.
- [16] J. F. Hair, R. Anderson, R. Tatham and W. Black, *Multivariate Data Analysis*, 5th Edition, Prentice-Hall, NJ, 1998.
- [17] J. C. Anderson and D. W. Gerbing, Structural equation modeling in practice: A review and recommended two-step approach, *Psychological Bulletin*, vol.103, no.3, pp.411-423, 1988.
- [18] C. Fornell and D. Larcker, Evaluating structural equation models with unobservable variables and measurement error, *Journal of Marketing Research*, vol.18, no.1, pp.39-50, 1981.
- [19] J.-H. Jung and J.-I Shin, The influence of SNS tourism information on city attractiveness and behavioral intention, *Proc. of the 14th International Conference on Innovative Computing, Information and Control*, Soongsil University, Seoul, Korea, p.66, 2019.