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An analysis of the utilization of Facebook by local Korean governments for tourism development and the network of smart tourism ecosystem

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ABSTRACT

This study investigated the utilization of Facebook by local Korean governments for the purposes of tourism development. The results indicate that most local Korean governments actively manage online tools such as Facebook, to communicate with the public and offer a wide range of information to promote tourism. A notable finding is that the level of local governmental could affect the level of social networking site use for tourism. It is claimed that the varying level of social networking site use is because the scale of the tourism industry and the level of information and communication technology innovation could vary with different types of municipalities. Through network analyses, the study also shows that Korean local governments' Facebook pages are co-related in the Facebook system as part of a smart tourism ecosystem, and that the smart tourism ecosystem facilitated by Facebook offerings is associated with governmental utilization of Facebook for activating local tourism.

1. Introduction

The use of advanced information and communication technology is ubiquitous in most business sectors. The tourism industry is no exception. The tourism experience has never been this 'smart.' Thanks to the GPS and augmented reality functions of smartphones, visitors are updated with real-time information on dining options, weather, currency rates, accommodations, and nearby points of interest. A travel guide application that runs on smartphones operates in several different languages and offers a variety of services such as audio guides, interactive street maps and transportation information such as real-time bus schedules and bus fares.

In correspondence with the ever increasing 'smartness' of the tourism experience, the concept of smart tourism has gained currency recently in academia as well as in the tourism industry. What is intriguing is the role of state and local governments in promoting smart tourism. Most notably, China and Korea have been driving the smart tourism agenda forward by funding initiatives to build infras-

tructure and develop interactive digital technologies, all of which constitutes the foundation of a so-called smart tourism ecosystem (Gretzel, Koo, Sigala, & Xiang, 2015; Gretzel, Sigala, Xiang, & Koo, 2015; Koo, Shin, Kim, Kim, & Chung, 2013). For instance, the Korean Tourism Organization has both domestic and international Smart Tourism Departments which oversee the development and operation of multiple platforms, including multilingual websites and smartphone applications like Korea Everywhere and Visit Korea, which offer location-based information about tourist destinations and local events (Koo et al., 2013).

Social media, social networking sites (SNSs), take a central place in smart tourism by local governments. Social media are more than just a cost-effective marketing tool that can instantly reach millions of people; they can also be used to create a hub that brings together local governments, tourism agencies, industry partners, and other institutions interested in developing business relationships in this sector. Increasingly it is not uncommon to see local governments, e.g. recently the Welsh government, create LinkedIn business pages to build networks of different players in the tourism industry. Social media can offer support to tourism businesses by providing information about investment opportunities, tourism industry research results, PR opportunities, and travel trade opportunities. Furthermore, the social media strategies of many local governments can facilitate sustainable growth for other multimedia sectors because

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audio and video have become increasingly important as marketing tools. Lee (2012) recommends a more innovative use of social media, "social media marketing podcasting," by proposing that Korean local governments produce a podcast called "Korean Tourism 100," which includes not only conventional tourist information but also special lectures, seminars, storytelling, and forums. Recently, the number of shared video posts on Facebook exceeded those of YouTube (O'Reilly, 2014). Given the growing importance of video posts in social media, this visual material can go viral and be seen by millions, making it an ideal platform for promoting local tourism.

Among various aspects of smart tourism, this study pays attention to the ways in which local governments utilize SNSs to promote tourism. More specifically, this study investigated how local governments in Korea utilize Facebook for the purposes of tourism development. In a country well-known for cutting-edge mobile, smart technologies, Korean governments have taken active roles the tourism initiatives, developing a variety of tour-related services (Koo et al., 2013). While this study is specific to the use of Facebook by Korean local governments, it more generally provides insights into both theoretical and practical implications of smart tourism.

This exploratory study first identifies the characteristics of smart tourism. Then the study discusses how local governments can take an active role in smart tourism and contribute to a larger smart tourism ecosystem. With Korean local governments in focus, this paper explores the degree to which local governments actively manage Facebook as an online tool to communicate with the public and promote tourism. Through network analyses, the study suggests that Korean local governments' Facebook pages are co-related in the Facebook system as part of a smart tourism ecosystem, and that the smart tourism ecosystem facilitated by Facebook offerings is associated with governmental utilization of Facebook for activating local tourism.

1.1. Conceptualizing smart tourism

Smart tourism is a slippery term that has a wide range of meanings in academic research, corporate settings, and government sectors. While the term smart tourism abounds in popular discourse, a sheer dearth of academic work exists regarding the identification of its key characteristics. Although the term is used inconsistently, this study attempts to identify three popular usages of smart tourism based on observations of a variety of documents and popular websites.[1] First, smart tourism can be defined as intelligent services that intend to satisfy the needs of tourists by helping them make the most out of their visits to unknown destinations. With the rapid increase in domestic and international tourism, particularly FITs (free and independent travelers), the demand for customized tourism services has increased. One can easily find online travel agencies (e.g., globallysmart.com) developed with the intention of producing smart and intelligent tourists. Smart tourism agencies offer more than just traditional services like organizing flight tickets and hotel bookings. They also offer comparison services, customized travel packages, and an online space where travelers can share their own experiences. For instance, Smart Tourism Marketing Group, a travel agency based in New Zealand, provides guests and visitors with personalized itinerary services. This smart service allows its users to "create tourism," which Epstein and Vergani (2006) identify as the process whereby tourists become active producers of their tourism experiences rather than passive consumers. As Molz (2012) notes, smart tourism develops "open-ended adventures that allow tourists to create their own narrative trajectory through a city (p. 57)."

Second, smart tourism is concerned with tourism-related corporations' marketing services, including tourism marketing strategies, online marketing (e.g., social media strategies), and promotional campaigns. Also included in this category are digital service interface development and project management platforms such as the development of tourism-related websites and smartphone applications. Trento Rise in Italy, for example, is a company that has developed a "smart tourism platform" for enhanced and innovative tourism management. Likewise, Smarttourismwebsite.com offers web marketing solutions for tourism businesses.

Finally, smart tourism refers to the combination of technology and tourism. Apparently, web-based tour services such as hotel reservations, food, transportation, and healthcare are not new. The application of information and communication technology (ICT) to the tourism sector has a long history. Technological innovation in this industry can be traced back to the 1950s when airlines developed computerized reservation systems (CRSs) for scheduling and booking (Alt & Zimmerman, 2015). The global distribution system (GDS) and the World Wide Web (WWW) revolutionized the tourism sector and have facilitated the development of a globally operating, internet-based tourism environment (Smith, Macleopd, & Robertson, 2010). As early as the 1980s, scholars like Poon (1988) began to discuss the implications of adopting new technologies to improve the organization, management, and distribution of tourism services. How then is the current notion of smart tourism different from the traditional concept of information technology in tourism? Does smart tourism represent a significant departure from the e-tourism of the past? While smart tourism can be seen as an advanced form of e-tourism, it distinguishes itself from earlier form of tourism. Gretzel, Koo et al. (2015), Gretzel, Sigala et al. (2015) have outlined the differences between e-tourism and smart tourism in six different fields.

Central to smart tourism is the advancement of mobile technologies (Buhalis & Law, 2008; Wang, Park, & Fesenmaier, 2012). Between 2013 and 2017, mobile phone penetration is expected to rise from 61.6% to 69.4% of the global population (eMarketer, 2014). The development and spread of personal smart devices and ICT infrastructure are expected to have a profound impact on the tourism industry and to stimulate smart tourism practices. The Organization for Economic Co-operation and Development (OECD) defines smart as "an application or service able to learn from previous situations and to communicate the results of these situations to other devices and users" (Guest Author, 2013). For instance, mobile-device GPS functions and Quick Response (QR) codes enable a variety of location-based, real-time interactive touristic services such as interactive street maps, augmented reality features, and access to transportation information in different languages. Location-aware mobile applications offer otherwise invisible place-based information tools that enhance tourists' experiences. Molz (2012) defines smart tourism as multi-sensuous since it "opens up possibilities of touching, smelling, feeling, tasting and gazing as tourists inhabit and move through a city" (pp. 57–58). A smart tourism project entitled SMART (Scotland's Museums Augmented Reality Tourism) at the University of St Andrews aims to provide visitors with a digital-physical experience where overlaid, personalized, multi-lingual text and rich audiovisual information are presented when a visitor maintains his or her focus on a specific artifact in a museum.

Smart tourism emerged in the context of revolutionary advancement in communication infrastructures and interactive digital technologies, widely referred to as the "smart revolution" (Yoo, 2012). The smart revolution has opened up the possibility of profound transformation in the ways that individuals and orga-

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[1] To identify the popular usage of the term smart tourism, we used the Google search engine to find websites that use the term. We examined over 50 websites and non-academic documents (in both the English and Korean languages) that employed the notion of smart tourism.