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Are the days of tourist information centers gone? Effects of the ubiquitous information environment

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HIGHLIGHTS

- Tourism authorities reconsider the current TIC operation due to mobile devices.
- The ubiquitous information technology affects tourist demand for TIC visits.
- Tourists make a sequential decision about their TIC use behaviors.
- The diffusion of Internet decreases TIC demand quantity by 27.6 percent.
- The use of SNS increases the number of visits to TICs by 28.4 percent.

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ABSTRACT

The advent of on-line and cloud access through mobile devices has led to a reconsideration of the traditional role of tourist information centers. Derived from a sample of Korean domestic tourists, this paper suggests means by which tourist information centers can respond to new demands for travel information. Study results indicate a negative relationship between general Internet usage and demand for tourist information center visitation. Using different econometric models, this study denotes that heavy social media users tend to show more visits to tourist information centers. This finding may be due to the characteristics of social media users and equally implies that the conventional engines of tourism promotion should engage more in social media.

1. Introduction

The revolution of information communication technology has fundamentally transformed people's everyday lives. A number of prior studies (e.g., Buhalis & Law, 2008; Ho, Lin, & Chen, 2012) have provided empirical evidence supporting that tourist behaviors in searching for relevant travel information are not free from the irreversible changes. With the extensive diffusion of mobile devices, such as smartphones and wireless tablet computers, tourists are now able to access travel information anywhere and at any time (Okazaki & Hirose, 2009). Frommer (2013) indeed released a survey report stating that almost nine out of ten smartphone users in the United States reported searching for travel information, using a variety of applications, for an average of 93 min a month. The tourism industry in Korea may not be immune to the effect of increasing importance of mobile devices in that the country ranked first, worldwide, in the smartphone penetration rate in 2012 (Korea Herald, 2013). The Korea Communication Committee (2013) reported that the number of smartphone users in the country reached more than 35 million in December, 2012, indicating that about seventy percent of Koreans were able to access online travel information with their mobile devices.

The rapid evolution toward the ubiquitous information era is likely to have a substantial effect on several travel information providers, particularly tourist information centers, known as the most conventional external source (Beatty & Smith, 1987). According to Wong and McKercher (2011), the typical mission of tourist information centers (hereafter called TICs) is the direct provision of travel information about tourist destinations, which visitors find helpful for making their optimal decisions. These tourism facilities also play a key role in determining tourists' first impressions of particular destinations, and ultimately improving the quality of their experiences (Perdue, 1995). Accordingly, many

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tourism organizations have made efforts to diversify their strategies for successful TIC operations (Dimanche & Taylor, 2006).

The advent of the ubiquitous information environment raises a significant question about those traditional functions of TICs. The increasing amount of travel information available with the use of the cutting-edge mobile devices suggests that tourism organizations have to reconsider the current operation of TICs (Wallace, Walton, & Crabtree, 2009). While there is a consensus that the effortless access to online information sources requires different roles of TICs, only a few studies (e.g., Connell & Reynolds, 1999; Wallace et al., 2009) have examined how the development of information communication technology affects the importance of the tourism facilities. In particular, there is limited information on the intricate relationships between tourist demand for TIC visits and the multifaceted nature of the ubiquitous information environment.

The major goal of this study is to provide constructive TIC management implications, which can help the conventional engines of tourism promotion in adjusting to the dramatically changing information environment. This study also aims to examine how and what aspects of the rapid technology development, characterized by the wide dissemination of mobile devices, affect tourist demand for TIC visits. With a sample of Korean domestic tourists, this study intends to enhance our understanding of how tourists make their decisions to visit a variety of TICs through a comparison of several econometric models.

2. Literature review

2.1. Tourist information centers (TICs)

Tourism authorities have regarded TICs as the most important element in tourism promotion, encouraging tourists to stay for a longer period of time and spend more money within their territories (Fesenmaier, Vogt, & Stewart, 1993; Tierney, 1993). Ballantyne, Hughes, and Ritchie (2009) indicated that TICs contribute significantly to the socio-economic and recreational well-being of particular communities by facilitating tourists to experience local attractions and events, and to financially support local retails, accommodations, and restaurants. In this regard, tourism organizations in many destinations have exerted a variety of efforts to develop the tourism facilities and implement successful TIC operations (Stewart, Lue, Fesenmaier, & Anderson, 1993).

A report released by the Korea Association of Travel Agencies (KATA) (2012) showed that there are more than 300 TICs available across Korea. Those facilities are known to employ about 1200 staff members, each with the ability to communicate in at least one foreign language, and to provide useful conveniences such as computers, printers, fax machines, water fountains, and public toilets. While most TICs in the country were established prior to the 2002 FIFA World Cup to offer travel-related information to international tourists, more than nine out of ten visitors were reported to be domestic tourists in 2008 (Korea Tourism Organization (KTO), 2009). Different from TICs in the United States—commonly known as “welcome centers” or “visitor centers”—which are chiefly located in the border areas of each state, Korean TICs are operated near tourist attractions in local areas (e.g., national parks, historic and cultural sites), and major transportation facilities (e.g., bus terminals, train stations, airports). Those tourism facilities are administrated by several public organizations, such as the tourism departments of local governments, KTO, and KATA, as well as by different public companies, including the Korea Expressway Corporation and the Korea Railroad.

A large percentage of prior studies on TICs were presented in major tourism journals for a decade, until the mid-1990s. This may be because several state tourism departments in the United States made efforts to launch and improve their facilities during that time period. Accordingly, those studies on the chief engines of tourism promotion focused on limited topics: behavioral differences between TIC visitor and non-visitor groups (e.g., Howard & Gitelson, 1989; Stewart et al., 1993), tourist motivations for visiting the facilities (e.g., Fesenmaier, 1994; Gitelson & Perdue, 1987), and TIC site preferences (e.g., Pennington-Gray & Vogt, 2003; Perdue, 1995). While a couple of studies (e.g., Fesenmaier & Vogt, 1993; Tierney, 1993) attempted to utilize an economic approach, concentrating on the impacts of TIC development and services on tourist expenditures, there is no comprehensive research available on tourist demand for TIC visits.

2.2. Tourist information search behaviors & mobile devices

Tourist information search is often referred to as “a dynamic process wherein individuals use various amounts and types of information sources in response to internal and external contingencies to facilitate travel planning” (Fodness & Murray, 1997, p. 506). While searching for relevant travel information, tourists attempt to reduce uncertainty and seek to enhance the quality of their trips (Lehto, O'Leary, & Morrison, 2004). In order to obtain appropriate travel information during the travel planning stage, and to make adequate onsite decisions about attractions, accommodations, activities, and restaurants, tourists utilize two different ways of searching for information: internal and external (Kim, Lehto, & Morrison, 2007). Internal search represents the application of travel information derived from long-term memory to solve their problems (Okazaki & Hirose, 2009). Past experiences of using travel products and visiting particular destinations comprise an important basis for internal search behaviors (Engel, Blackwell, & Miniard, 1995). When this search cannot provide useful information, tourists utilize external sources such as friends and relatives, brochures, magazines, and travel agents, in addition to TICs, to acquire information and expand their knowledge (Wicks & Schuett, 1991).

According to Fodness and Murray (1997) classifying travel information sources by using two criteria of commercial and communication characteristics, TICs fall into the quadrant of non-commercial and personal communication sources. Based on this taxonomy system, many Internet websites accessible with mobile devices can be classified as impersonal sources regardless of commercial nature. The use of mobile devices is known to provide more advanced computing capabilities and easier accessibility to information sources than traditional equipment (Charlesworth, 2009). Thus, prior studies (e.g., Wang, Park, & Fesenmaier, 2012; Xiang & Gretzel, 2010) suggested that the unique flexibility in both time and space of mobile devices allows tourists to successfully solve their problems, share experiences, and compile memories.

Concomitant with the progress in information communication technology, there is a wealth of research examining how tourists adapt to the ubiquitous information environment. In particular, the technology acceptance model (TAM), originally proposed by Davis (1989), has been the most popular conceptual framework to help understand the effects of the technology development on tourist information search behaviors. Basically, the TAM is known to be advantageous for viewing the complicated relationships among personal belief, attitudes, and behavioral intentions (Hsu & Lu, 2004). Among several elements in the model, the two main concepts of perceived usefulness and perceived ease of use serve as the fundamental factors to predict users' levels of technology acceptance (Davis, Bagozzi, & Warshaw, 1989). The concept of perceived usefulness is defined as the extent to which the use of a technology improves an individual's performance, while perceived ease of use