

Editorial

The Role of IT in Tourism*

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I. Introduction

Information Technology (IT) and tourism have been coming together since the 1970s, revolutionizing tourism products and services. Indeed, tourism has become a complex system integrating Computer Reservations Systems (CRSs) in the 1970s, Global Distribution Systems (GDSs) in the late 1980s, the Internet in the late 1990s [Buhalis and Law, 2008], and smart technologies in the 2010s. The Smartphone now fully mediates the tourism experience, and has fully re-articulated the tourism experience [Wang et al., 2014]. In the end, IT plays a crucial and central role in the tourism industry.

Information technology in tourism takes on many forms. Travel companies have adopted CRSs to obtain information and make bookings. Hotels have widely applied the technologies to integrate the front office, back office, and food

and beverage departments. Airlines have exploited technology for flight scheduling [Poon, 1988]. The synergistic interaction between information technology and tourism has driven tremendous changes in the efficiency and effectiveness of tourism organizations and traveler experiences. The role of IT in tourism has evolved from the wired (connected through the Internet) to the wireless (connected via mobile devices). Now, smart technology, (connected through sensors and data clouds) defines a new era of tourism.

In so far as the role of IT is concerned, it is not only CRS and GDS booking systems or Internet business or smart and connected tourism products and services that are being adopted and diffused, but a system of systems, based upon smart technologies. Moreover, it is not simply travel agents or tour operators, or airlines or heritage sites that are using the tech-

* This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2013S1A3A2043345).

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nologies, but holistic systems that span destinations. Indeed, the role of IT not only reshapes competition within tourism industries but expands tourism industry boundaries [Porter and Heppelmann, 2014]. Information technology that follows the changes in travelers' traveling styles are the vital cement of the travel context [Wang *et al.*, 2014].

Additionally, tourism suppliers have implemented a new concept of tourism production systems, comprising tourism products and services and embedded technological components such as sensors, processors, software, and connected products [Porter and Heppelmann, 2014]. This tourism production system can be designed as new value chains which include tourism product design, marketing, manufacturing, distribution [Poon, 1988], and tourism agent and travel consumer relations and after-sale service based on travelers' profiling and experience data and product data analytics [Porter and Heppelmann, 2014]. It has been found that the IT in tourism organizations, while necessary for efficient and effective travel commerce [Werthner and Ricci, 2004], also opens up new business opportunities involving third parties (transport, accommodation, restaurants, and leisure and heritage sites).

These new IT related developments in tourism alter the position of stakeholders by changing the focus from single business management to the digital convergence of value chains [Van Heck and Vervest, 2007]. IT plays a crucial role in providing digital networks and platforms that integrate core information-intensive areas of tourism operations, synthesizing general systems IT infrastructure, network communications, operating systems, platform and analytics data, cloud services, and added travel production

systems and applications.

In this context, this special issue deals with the role of IT in tourism from the consumer perspective as well as the tourism producer perspective. The main focus is on technologies and systems usage in tourism, rather than general tourism business. The objective of this special issue is to offer a more profound understanding of the diffusion and impact of IT in the tourism industry. Such an approach could help to enhance some commonly-held conceptions about tourism and IT. While IT has become an essential tool in tourism, scholarly work on IT in tourism is not sufficient in mainstream journals, in terms of both conceptual and empirical studies. In response, the *Asia Pacific Journal of Information Systems (APJIS)* presents a special issue that brings attention to recent research trends and findings in the tourism industry.

The first article, "Constructivist Research in Smart Tourism" written by William Cannon Hunter, Namho Chung, Ulrike Gretzel, and Chulmo Koo addresses the conceptual and theoretical foundations of smart tourism. It suggests that new ways of doing business, new patterns of behavior and new problems concerning tourism destination image management and marketing are emerging due to the ubiquitous presence and influence of the Internet and mobile devices. It describes the constructivist paradigm and associated research methodologies for interpreting how smart tourism works as a form of soft power. The second article, "The Effects of Social Media on Music-induced Tourism: A Case of Korean Pop Music and Inbound Tourism to Korea" written by Sehwan Oh, Joong Ho Ahn, and Hyunmi Baek, provides research on media-induced tourism that analyzes the im-

part of video-sharing social media on music-induced tourism with a case of Korean pop music and inbound tourism to Korea. This study found that consumption of Korean pop music video clips on YouTube is a significant predictor for the flow of inbound tourists to Korea. The third article, "Evaluating the Official Websites of SAARC Countries on their Web Information on Food Tourism" written by Dahiva Ashish and Duggal Shelley, provides a comparative content analysis of the official tourism websites of SAARC (South Asian Association for Regional Cooperation) nations to evaluate their performance from the perspective of promotion of culinary heritage on the world wide web. This study reflects on the relative strength and weakness of the tourism websites of SAARC nations in promoting food tourism and as well suggests remedial measures for catalyzing food tourism promotion through websites. The fourth article, "Constructivism in Smart Tourism Research: Seoul Destination Image" written by Jyoung Hwang, Hyoyeon Park, and William Cannon Hunter, builds on the constructivist paradigm in tourism research by providing an empirical case study on the online destination image of Seoul, Korea. The article explores the connection between traditional destination image projection via print media and online destination image. It also explores the relevance of certain forms

of destination imagery by using Q method to identify the residents' perspective. This research calls for more thoughtful development of destination image in the context of smart tourism. The fifth article, "Applying and Assessing the Effectiveness of Gamification in a Tourism Context: Behavioral and Psychological Outcomes of TripAdvisor's Gamification Users," written by Marianna Sigala describes how game mechanics can be designed for enhancing users' motivation, flow, task involvement and engagement with the 'play' tasks, and so, increasing the gamification's effectiveness.

These five papers explore, in different ways, the value of IT for tourism and the general implications of the role of IT in tourism. We hope this special issue will provide a significant step forward in enabling researchers and practitioners to understand the role of IT in tourism. We thank the authors for choosing this special issue as the outlet for publishing their research findings. We would like to thank those who have devoted their time to review the submissions and provide critical and constructive comments. Most importantly, we would like to thank the editor of *Asia Pacific Journal of Information Systems* for supporting this project. We believe this special issue will expand the boundary of the IS research domain and lead to more valuable insights into the role of IT in tourism.

⟨References⟩

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