Chapter 16

Smart Applications in Tourism

Cemal Ince
https://orcid.org/0000-0003-2005-7090
Gaziosmanpaşa University, Turkey

Gülforma Samatova
Kyrgyz-Turkish Manas University, Kyrgyzstan

ABSTRACT

Technology process that started with the reservation provided many services in accommodation establishments such as online room selection, room colour selection, air conditioning adjustment, temperature and light control, virtual scenery creation, and online service. Another area that is affected by technology is food and beverage services. Food and beverage businesses also benefit from technology while serving their guests. Many services are provided through technological revolutions such as online reservation, online service, smart tables, robots, and so on. Today, technology also affects museums and museum services positively. Virtual reality museums offer visitors the opportunity to visit their works online. Online ticket sales also save visitors time. Credit cards and ticket sales provide economic convenience to the guests. With the help of technology, heat and light adjustments can be made in museums and technology helps to protect the works exhibited in these museums.

INTRODUCTION

One of the factors that play an important role in the improvement of tourism is technological developments. Without technological advances today people would not be able to make an economic, comfortable journey in such a short time. Hospitality companies could not offer such quality service to their guests in a short time and quality. The hotel rooms would not have been so clean. The museums could not bring such works together and present them to their visitors. Food and beverage establishments would not be able to prepare and offer their guests such a wide range of food and beverages satisfyingly, economically in a healthy way and in a short time. Establishments offering recreation and entertainment services would not be able to offer businesses, entertainment and leisure services so easy, economic and of good quality. People who with travelling would not be able to cross country borders so easily and would have

to deal with bureaucracy. These explanations show that technology made a positive contribution on all components of tourism and became an important factor in the development of tourism. Stipanuk (1993) states that technology plays six main roles in tourism. These roles are creative, protective, developer, focal point, vehicle and destructive roles. Five of these roles are positive and one of them is negative which is a destructive role.

Law, Leung, Buhalis (2009) examined the evolution of information technologies in terms of consumers, businesses and technology. In this context, they stated that information technologies become more critical for tourism and hospitality businesses to provide competitive advantage and to manage their distribution and marketing on a global scale.

Xiang et al. (2015) in their study about travel, information technology and consumer behaviour stated that in general, the adoption of the Internet has reached a level of saturation in travel and some traditional channels such as online travel agencies (OTAs) continue to dominate travel planning. They found that traditional internet use for travel planning is common in all customer segments, and that social media use is common among Y generation travelers. That is why, it is stated that traditional internet usage will continue in online travelers but for groups such as generation y, large enterprises are obliged to search for new sources of information and transaction channels.

Gretzel et al. (2015) in their study about the tendency in present smart tourism applications revealed the technologic and commercial foundations of smart tourism. The key point of smart tourism emphasizes the adaptation of information and communication technologies to the physical system. Smart tourism is not a component of a destination but rather a social phenomenon generated from the integration of information and communication technologies with tourism experience (Hunter et al., 2015). Smart tourism experience is particularly personalization of technology-mediated tourism experiences, context awareness and real-time experiences. Within this scope, smart tourism consists of an intelligent information layer aimed at collecting data, an intelligent transformation system that supports interconnection (a Web-based system), and an intelligent processing system that enables data analysis, visualization and intelligent use (Tu and Liu, 2014).

BACKGROUND

The relationship between tourism and technology has started to attract the attention of scientists especially after 1980s. Since the 1980s, information communication technologies (ICT) has been playing an important role in the global development and transformation of tourism (Poon, 1993; Sheldon, 1997; Porter, 2001). Many scientists working in the field of tourism examined the relationship between tourism and technology from various perspectives.
