# Chapter 3 Digitalisation in the Tourism and Hospitality Industry: Perspectives of the Supply and Demand Sides

Nil Sonuç https://orcid.org/0000-0002-7572-9192 İzmir Katip Çelebi University, Turkey

Merve İşçen https://orcid.org/0000-0003-2305-5824 İzmir Katip Çelebi University, Turkey

## ABSTRACT

This chapter aims to review the evolution of digitalisation and its effects on the tourism and hospitality industry. A holistic perspective is adopted providing a review and analysis of digitalisation in the tourism and hospitality sector comprising both supply and demand sides for the originality of the content. The supply side, as well as the demand side, is analysed through a literature review of academic resources, policy documents published by international organisations and related websites. The existing literature and the industrial practices are reviewed to find out and classify the state of proposal and implementation of innovative technologies and the trends followed by suppliers and the demand side to use them. Furthermore, the effects of digitalisation on managerial processes on the supply side (actors, entrepreneurs, businesses, destinations) and decisional and behavioural processes on the demand side (consumer, tourists) are taken into consideration to provide a holistic perspective of digitalisation and its effects on the given sector.

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#### INTRODUCTION

Digitalisation in the tourism and hospitality industry with its evolutionary nature comprises the fact of being an innovation driving hyper-personalisation and requiring expertise in the creation of high-quality service. Under the subtitles concerning the supply side in this chapter, a comprehensive classification of digitalisation in the tourism industry is probed. For the demand side, the existing studies related to the implication and effects of digitalisation in tourism demand are mentioned including the aspects of new generation consumer needs and behaviours. Additionally, the specific methods used for marketing such as neuromarketing in tourism and suggestions are made accordingly for further studies. However, as the tourism sector is becoming more participative, cooperative and co-creative, the transition between both sides is sometimes inevitable. Consequently, this comprehensive analysis of digitalisation in the tourism and hospitality sector is aimed to inspire and contribute to the evolution of further academic studies.

#### BACKGROUND

Innovative information and communication technology has an evolutionary effect on many sectors and industries. One of the most representative industries of the world economy, tourism has got and will get its share inevitably (Buhalis & Law 2008, Buhalis & O'Connor 2005, Ip et al, 2011, Law et al. 2014). Tourism 1.0, 2.0, 3.0, 4.0 and 5.0; the versions augment at a pace that humans can hardly reach. The production industry has been first to acquaint with the mentioned chronological development of information and communication technologies and their effects. The innovations such as internet technologies, smart robots and tools have created both pleasing and terrifying effects on humankind.

The aspect pleasing the managers include the increasing profitability and quality (Law et al., 2009), as the smart technologies never get tired and work with zero defects. The unpleasing angle includes the insufficiency of online security measures and the replacement of the workforce resulting in growing unemployment. Covering an important portion of the service industry, the importance of face-to-face communication on the co-creation of quality touristic experiences is still undeniable for tourism and hospitality. The cancellation of the use of robots at a hotel (The Henn-na) in Japan for certain period shows that robots have not yet reached the level required for tourism services and human contact still has high validity and acceptance.

In this chapter, the content and evolutionary phase of innovative technologies for the tourism sector are described. The innovative technologies used by hotels (Gonzalez et al, 2019), travel agencies, tour guides, museums, destinations and the tourists are described and exemplified. Additionally, the effects of technology on the management (Leung & Law, 2005) of touristic establishments, destinations and the employees (Jeong et al., 2016) on the supply side are examined. Additionally, on the demand side, the creation of experiences of tourists in relationship with the internet and other related technologies (Gretzel & Jamal, 2009) are also implied. The suggestions and proposals of co-advancement of digital technology and tourism harmoniously are determined accordingly. As indicated by Buhalis (2000: 56), the future success in tourism and hospitality depends on the ability to produce a good synergy of "the information technologies, intellect and management vision".

The concept of digitalisation, which emerges with the continuous development of information technologies, is very important in the tourism industry as in every field. Digitalisation that occurs in tourism businesses plays an important role not only for businesses but also in sharing tourist experiences (Huang 22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/digitalisation-in-the-tourism-and-hospitalityindustry/296185

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