Chapter 1
The Impact of ICTs on Accessible Tourism:
Evidence Based on a Systematic Literature Review

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ABSTRACT

There is a clear need to address the technological effects of providing conditions for accessibility in tourism. Accessible tourism is becoming very important, and technology may be the tool which will surpass barriers to accessibility in tourism. New information technologies focus not just on the divulgation of information, but also on making sure everything is connected, which in the case of accessible tourism has significant value. Therefore, this chapter aims to share the results of a systematic literature review conducted on the topic of the impact of ICTs on accessible tourism. The research will be done via analysis of a range of bibliometric indicators present in the main academic and research databases. This approach will allow the characterization of the main technologies in the service of accessible tourism and an understanding of how they can enhance the quality of tourism experiences for people with disabilities.

INTRODUCTION

Information and communications technologies (ICT) have been responsible for technological growth in many sectors (Sedlar et al., 2018). The *Cambridge* dictionary defines ICT as: "the use of computers and other electronic equipment and systems to collect, store, use, and send data electronically" ("ICT", 2019). Within this perspective, ICT can be described as a combination of "devices, networking components, applications and systems (technologies) that allows people and organizations to interact in the digital world" (Rouse, 2014: 1). ICTs, in their different forms, are responsible for assuring that information and knowledge are spread, playing a central position in modern economies now and in the upcoming years (Byrne & Corrado, 2017). In fact, technological innovations are creating waves of change across many service providers and business strategies, with particular relevance in the tourism sector and in particularly in accessible tourism.

Accessible tourism can be defined as: "a form of tourism that involves collaborative processes between stakeholders that enables people with access requirements, including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services, and environments" (Buhalis & Darcy, 2011: 10-11). Often, tourism products on offer have some problems with accessibility (Avis, Card, & Cole, 2005; Buhalis & Darcy, 2011: 50; Figueiredo et al., 2012; Popiel 2016), implying many barriers for people with disabilities (PwD). **Lack of information** (Waschke, 2004), about the accessibility level of tourism products is a particularly big obstacle because it hinders answers to basic questions related to tourism activity, like how to travel and what to explore. Information is undoubtedly the foundation for accessible tourism, which makes ICTs crucial tools in this area. Accessible tourism is becoming very relevant for the social and economic sector, and ICTs can represent important tools to surpass accessible barriers in this area. The role of ICTs is not just to focus on divulgation of information, but also making sure it is accessible to PwD, since by using ICTs it is possible to connect everything in real time.

With the evolution found across ICTs, a new reality for tourism is starting to appear. The entire process of creating, managing and promoting tourism products is changing radically. Increasingly, the impacts of ICTs are becoming more evident, as networking, dynamic interfaces with consumers and partners and the ability to re-develop tourism products proactively and reactively are critical for the competitiveness of tourism organizations (Buhalis & Law, 2008). ICTs are essential for tourism, as they contribute to improving the sector and make the connection between tourism and technological innovation possible. Therefore, this study aims to share the results of a systematic literature review, conducted on the topic related to the impact of ICTs in accessible tourism. The research will be done by analysing a range of bibliometric indicators, present in one of the main academic and research database – Scopus. This approach will allow the characterization of the main technologies at the service of accessible tourism and understand how they can enhance the quality of tourism experiences for PwD.

The studies selected are related to the use of technologies in tourism. This review analysed a total of 65 documents. The main objective was to identify the main technologies and understand their contribution to the development of accessible tourism. To accomplish these objectives, this chapter is organized into four sections. After this introduction, in section 2, the methodology that was used to select and analyse the papers is explained. The main findings are reported in section 3. Attention was given to the distribution of papers over time, among journals, subject areas, authorship, the geographical contexts, the studied segment of the accessible market analysed, the ICT studied and the research method, as well as the key results found, regarding the impact of ICT in the development of accessible tourism. Finally,

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