Chapter 5
Smart Cities and Accessible Tourism:
A Systematic Review

Ana Dias
University of Aveiro, Portugal

Alexandra Queirós
University of Aveiro, Portugal

Gonçalo Santinha
https://orcid.org/0000-0002-4732-5959
University of Aveiro, Portugal

Carlos Rodrigues
https://orcid.org/0000-0001-6403-6959
University of Aveiro, Portugal

Mário Rodrigues
University of Aveiro, Portugal

Nelson P. Rocha
https://orcid.org/0000-0003-3801-7249
University of Aveiro, Portugal

ABSTRACT

Promoting accessibility in tourism can impact on other areas, including sustainable mobility, social inclusion, and territorial marketing, since it implies taking the needs of all people into account to access tourism products and services, including those with permanent or temporary disabilities. Smart cities may change the way people experience their surroundings and their ability to provide contextual services is a key aspect to make cities more accessible, comprehensible, and enjoyable. The systematic review reported by the present chapter aimed to identify relevant research studies supported by smart cities infrastructures with an impact on accessible tourism. The literature search and the analysis of the retrieved articles were performed according to the preferred reporting items for systematic reviews and meta-analyses (PRISMA) guidelines. The results identify the most relevant achievements related to accessible tourism in the context of smart cities, including the types of smart services being developed and their maturity level.

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INTRODUCTION

Smart cities promote the integration of traditional urban infrastructures, existing knowledge and experiences, by combining aspects of intelligence and sustainability and using Information and Communication Technologies (ICT) to optimize urban services and, therefore, to improve the quality of life of the citizens (AlDairi, 2017; Azevedo Guedes et al., 2018; Santinha et al., 2019). Several authors link the implementation of smart cities to a set of major areas, namely, economy, mobility, environment, governance, social and human capital, and living conditions of the citizens, which includes health conditions, cultural and education facilities, housing quality, and touristic attractiveness, among other issues (see *inter alia* Giffinger & Gudrun, 2010; Lazaroiu & Roscia, 2012; Vanolo, 2014).

As such, the optimization of tourism services is also considered in the scope of the smart cities' paradigm. Indeed, smart cities are portrayed as digital ecosystems where economic, tourist, recreational and logistic aspects should all be considered together (Colace, 2016). Moreover, as cities become progressively complex, ICT bring smartness into organisations and societies, towards, for example, more competitive tourism destinations (Encalada, Boavida-Portugal, Ferreira & Rocha, 2017).

With the expansion of smart cities, the achievement of tourist information and services has become more fitting, promoting the development of intelligent tourism and self-service travel. Enriched information access together with new tourists' profiles, enthusiastic with online content and ready to share information, help to increase knowledge of tourist behaviour regarding their spatial and temporal distribution in the destinations. Consequently, smart tourism exposes individuals as information makers, filtering the existing options for tracking their position.

This context is seen as an opportunity for decision-makers to envisage new ways of planning and managing towards a sustainable and smarter future (Encalada et al., 2017). The current trend of smart tourism is becoming very significant for urban renovation due to integration of ICT in tourism. Under these circumstances, smart tourism is a critical piece and a hands-on venture of the smart cities' strategies (Gautam, Asami, Batajoo & Fujisaki, 2016). Smart tourism destinations are, thus, characterised by a ubiquitous presence of new technologies able to improve the tourist experiences. The word "experience", under the concept of "experience economy" (Pine & Gilmore, 1998), has been widely associated with product names, destination locations and digital media. Many factors contributed to the wide acceptance of this perspective through which the economic scenario is viewed. The logic of the experience provided a new basis for looking for new value creation activities. Moreover, the idea that consumers value experiences more than goods and services, was affirmed by Pine and Gilmore (2013). Therefore, increasing the knowledge of touristic experiences is crucial for supporting decision makers and planners in producing informed decisions seeking to increase the destinations' competitiveness (D'aniello, Gaeta & Reformat, 2017) considering the interests and needs of the tourists (Lijing, Yanrong & Jianhua, 2015).

Smart cities may change the way people experience their surroundings and their ability to provide contextual services is paramount to make cities more accessible, comprehensible and enjoyable. Therefore, it should be emphasized the growing importance of smart cities as tourism destinations through innovation, communication, and interactivity with visitors, not only to enhance tourists' experiences but also to improve the accessibility of the available products and services for impaired people.

Tourism is part of the modern lifestyle, affirming the potential of accessible recreational tourism for improving the quality of life, self-confidence and self-esteem of the population with disabilities, as well as an opportunity for active social inclusion of a population group that remains isolated and faces barriers in daily life, often difficult to overcome. This fact is even more challenging in a tourist context, despite