

# Metadata of the chapter that will be visualized in SpringerLink

Book Title	Trends and Applications in Information Systems and Technologies	
Series Title		
Chapter Title	The Role of Higher Education Institutions in the Accessible Tourism Ecosystem: Requirements for the Conceptualization of an Information System	
Copyright Year	2021	
Copyright HolderName	The Author(s), under exclusive license to Springer Nature Switzerland AG	
Corresponding Author	Family Name	<b>Teixeira</b>
	Particle	
	Given Name	<b>Pedro</b>
	Prefix	
	Suffix	
	Role	
	Division	Department of Economics, Management, Industrial Engineering and Tourism
	Organization	University of Aveiro
	Address	3010-193, Aveiro, Portugal
	Email	pmiguel@ua.pt
Author	Family Name	<b>Alves</b>
	Particle	
	Given Name	<b>Joana</b>
	Prefix	
	Suffix	
	Role	
	Division	Department of Economics, Management, Industrial Engineering and Tourism
	Organization	University of Aveiro
	Address	3010-193, Aveiro, Portugal
	Email	joanapimentelalves@ua.pt
Author	Family Name	<b>Eusébio</b>
	Particle	
	Given Name	<b>Celeste</b>
	Prefix	
	Suffix	
	Role	
	Division	Governance, Competitiveness and Public Policies, Department of Economics, Management, Industrial Engineering and Tourism
	Organization	University of Aveiro
	Address	3010-193, Aveiro, Portugal
	Email	celeste.eusebio@ua.pt
Author	Family Name	<b>Teixeira</b>
	Particle	

Given Name	<b>Leonor</b>
Prefix	
Suffix	
Role	
Division	Institute of Electronics and Informatics Engineering of Aveiro, Department of Economics, Management, Industrial Engineering and Tourism
Organization	University of Aveiro
Address	3010-193, Aveiro, Portugal
Email	lteixeira@ua.pt

---

Abstract	<p>For information systems to be successful, it is important to involve and consider the perspective of all stakeholders. In the accessible tourism market, higher education institutions (HEI) are a very important stakeholder, playing a major role in training and research. This work intends to explore the information requirements that are most valued by higher education institutions in order to conceptualize a Web-based information system which is capable of promoting more accessible tourism conditions for visitors with disabilities (VwD). To achieving this goal, questionnaires were applied to a sample of students and directors of tourism in HEI. Generally speaking, both groups understood the need for a Web platform and also revealed interest in using it. Regarding information to retrieve from the platform, accessible market characteristics and training opportunities were highlighted, while inputs connected to research sharing were the best regarded. Overall, this work allows a general view of information technologies in education, for the specific case of accessible tourism.</p>
----------	---

---

Keywords (separated by '-')	Accessible tourism - Higher education institutions - Information systems
--------------------------------	--

---



# The Role of Higher Education Institutions in the Accessible Tourism Ecosystem: Requirements for the Conceptualization of an Information System

Pedro Teixeira<sup>1</sup>(✉), Joana Alves<sup>1</sup>, Celeste Eusébio<sup>2</sup>, and Leonor Teixeira<sup>3</sup>

<sup>1</sup> Department  
of Economics, Management, Industrial Engineering and Tourism, University of Aveiro,  
3010-193 Aveiro, Portugal

{pmiguel, joanapimentelalves}@ua.pt

<sup>2</sup> Governance, Competitiveness and Public Policies, Department of Economics, Management,  
Industrial Engineering and Tourism, University of Aveiro, 3010-193 Aveiro, Portugal  
celeste.eusebio@ua.pt

<sup>3</sup> Institute of Electronics and Informatics Engineering of Aveiro, Department of Economics,  
Management, Industrial Engineering and Tourism, University of Aveiro,  
3010-193 Aveiro, Portugal  
lteixeira@ua.pt

**Abstract.** For information systems to be successful, it is important to involve and consider the perspective of all stakeholders. In the accessible tourism market, higher education institutions (HEI) are a very important stakeholder, playing a major role in training and research. This work intends to explore the information requirements that are most valued by higher education institutions in order to conceptualize a Web-based information system which is capable of promoting more accessible tourism conditions for visitors with disabilities (VwD). To achieving this goal, questionnaires were applied to a sample of students and directors of tourism in HEI. Generally speaking, both groups understood the need for a Web platform and also revealed interest in using it. Regarding information to retrieve from the platform, accessible market characteristics and training opportunities were highlighted, while inputs connected to research sharing were the best regarded. Overall, this work allows a general view of information technologies in education, for the specific case of accessible tourism.

**Keywords:** Accessible tourism · Higher education institutions · Information systems

## 1 Introduction

One of the main challenges in accessible tourism is to deliver accessible information to visitors with disabilities (VwD). Information systems can be excellent tools for information sharing between VwD and tourism organizations, which helps to promote accessible

tourism. Despite this, research shows that technology solutions to promote accessible tourism based on the Web are currently very scarce. With the growth of the accessible tourism market and all the potential associated with it, Web platforms can be an excellent way to capitalize on it. The success of Web systems depends on how well they fits the users' needs [1]. Therefore, it is imperative to understand how information exchange should be processed. This interaction is mainly defined by the inputs and outputs traded between the users and the information platform [2]. In addition to this, it is important to assure that the system in this area can work as a technological solution to overcome accessibility constraints in tourism.

Another very important aspect for the development of accessible tourism and overcoming barriers and constraints is training [3]. The accessible tourism market has specific needs, which require more attention in terms of their information requirements for support and the offer of adapted tourism products implies tourism industry staff having the knowledge and skills needed to work with the accessible tourism market [4]. For this reason, organizations responsible for training human resources in tourism, like higher education institutions (HEI), are important actors in the creation of a more inclusive accessible tourism market.

The scarce literature in this area suggests that the people working in the tourism industry have little information on the needs and travel constraints of people with disabilities (PwD) [5] and that the information delivered by traditional information sources to this market is frequently inadequate, inaccurate or incomplete [6]. Moreover, few studies use an integrative perspective of all the stakeholders that should be involved in the creation of tourism experiences for the accessible market (demand, supply agents and HEI). Therefore, this study is part of a research project that intends to overcome this gap, by conceptualizing a platform for improving accessible tourism conditions for people with special needs (PwSN), by integrating the three essential stakeholders: accessible tourism market, tourism supply agents and organizations responsible for training human resources in tourism.

The present paper aims to analyse how universities and other HEI in the tourism field can contribute to the development of an accessible tourism information platform. To achieve this goal, the paper is divided into five parts. After the introduction, theoretical background about the discussed topic is presented, namely the importance of information systems and the role of higher education study programmes in accessible tourism. The third part presents a description of the applied methodology. In section four, the results obtained indicate the information that HEI intend retrieve and insert into a potential platform. In the last section, the main conclusions, limitations and some suggestions for future research are pointed out.

## 2 Literature Review

### 2.1 Information Systems in Accessible Tourism

In tourism, PwD have greater accessibility requirements, as well as the need for more detailed and specific information, especially while searching for tourism activities [7] and planning travel. However, as stated by Waschke [8], the supply of specific information is scarcer for those with higher accessibility requirements. As a consequence, the tourism

industry fails to appeal to PwD and thus ignores possible business opportunities and wastes this considerable potential market [9].

In tourism, the use of information systems can be primarily responsible for facilitating access conditions for people with any disability. This type of system allows easy access for PwD to a range of tourism activities [10], contributing to better tourism experiences. This type of systems can be a crucial aspect for the integration of the digital world, accessibility and tourism [11]. As new digital activities increase, the amount of data also increases exponentially, making the effective processing of data a significant activity. These systems can provide data processing and improve information management by helping to distinguish which information is essential and which is not relevant [12], which can be particularly important for VwD with specific information requirements. A lot of data exists on various types of platforms like Web-systems and social media. This type of platform is now the preferred means of communication in tourism [13], so its capacity cannot be underestimated. Information, therefore, is the foundation for accessible tourism, and because of that, the role of information systems is crucial. However, the process of building an accessible tourism platform is a somewhat complex task, and therefore should combine the cooperation of many entities, not only PwD, but also the different stakeholders involved in the accessible tourism market environment [14].

## 2.2 Importance of Higher Education Study Programmes for Accessible Tourism

According to the World Health Organization, 15% of the world's population has some kind of disability and/or impairment [15]. More recently, a report published by the European Commission on the economic impact of accessible tourism in Europe revealed that about 138.6 million people in the European Union had some kind of specific need for mobility [16], and by 2020 this number is expected to be in the order of 154.6 million. The world's population is also ageing [17]. Accessible tourism is a growing market, including not only PwD and seniors, but also people with other special needs (e.g. pregnant women, people with respiratory diseases and diabetics) [18], which should not be ignored by the tourism industry.

Accessible tourism is a very heterogeneous market and requires the offer of adapted tourism products and hospitality staff with specific skills to respond adequately to their specific needs. However, in most cases, those special needs are either unknown or ignored by the agents of the tourism industry [19]. In addition, negative attitudes and insensitivity of staff are common behaviours towards visitors with special needs [20]. This results in numerous constraints, which have a negative impact when people with special needs purchase tourism products or services. Given this, some authors have highlighted the importance of training to overcome these constraints [21]. Tourism staff should receive training to recognize and understand the particular needs of PwD and attending customers appropriately without any prejudice [22]. The importance of training is known, but the literature in this area is limited and highlights that in the majority of countries, tourism schools have not initiated any specialized programmes for the requirements of the accessible tourism market. Moreover, in Portugal, the literature in this field is very scarce [4].

## 3 Methodology

### 3.1 Objectives and Contextualization

The results presented in this article are part of a research project that aims to develop an innovative tool, a Web application named Access@Tour. This application will work similar to a Web based information system to support information management in the context of accessible tourism. Access@Tour will promote communication, information sharing, accordingly to suggestions based on users' profiles and knowledge transfer among three types of users, specifically (i) consumers (PwD, the elderly and other people with functional limitations); (ii) supply agents (producers, accommodation units, food & beverage units, transport and tourism animation enterprises, intermediaries – travel agents and tour operators, and public organizations with responsibility in the sector); and (iii) institutions responsible for training in tourism (HEI). The intention is also that the platform work as a repository of knowledge, where accessible tourism-related research can be shared and training elements can be obtained.

The challenge of this work is to examine the role of HEI in the conceptualization of a Web platform for accessible tourism, by understanding information considered relevant to insert into and retrieve from a potential platform (Access@Tour). This platform will stimulate communication among all actors involved in the creation of tourism experiences and simultaneously create knowledge that could be used to improve research and training in the accessible tourism.

### 3.2 Data Collection and Analysis

As the literature review showed, studies about this theme are still limited and questionnaires are an efficient method of collecting primary information about the topic under analysis [4]. To evaluate the perspectives of HEI and so capture some information requirements that should be included in the platform, two self-administered questionnaires were applied to a sample of students and all directors of Portuguese higher education tourism study programmes (PHETSP). Table 1 illustrates the process used to collect the data.

The questionnaires administered were developed based on the literature regarding accessible tourism and education [e.g. 4, 21, 22]. Five-point Likert-type scales were used to examine the relevance attributed to the creation of a digital platform (ranging from 1 = “not relevant” to 5 = “highly relevant”), the probability of using it (ranging from 1 = “not at all likely” to 5 = “very likely”), the type of information that should be retrieved (ranging from 1 = “not important” to 5 = “very important”), and inputs that users would like to insert on the platform (ranging from 1 = “not at all likely” to 5 = “very likely”). The questionnaires also included a number of socio-demographic questions, important for understanding the profile of the respondents. To test the readability, feasibility, layout, style and clarity of questions, a pilot test was conducted with a sample of 10 directors and 42 students. Based on the results of these pre-tests, additional modifications to the questionnaires were made.

The analysis of the results obtained was carried out using the SPSS software. A descriptive analysis was adopted to calculate frequencies, means and standard deviations.

**Table 1.** Data collection procedure

Directors of PHETSP	Students of PHETSP
<b>Population:</b> all directors of PHETSP (undergraduate and master's degree) – 76 <b>Instrument used to collect the data:</b> questionnaire <b>Sources used to design the questionnaire:</b> literature review, HEI websites and National Agency of Degree Accreditation (A3ES)	<b>Population:</b> all students of PHETSP (undergraduates and master's students) <b>Instrument used to collect the data:</b> questionnaire <b>Sources used to design the questionnaire:</b> literature review, HEI websites and A3ES
<b>Administration:</b> Online (October 2019 – June 2020)	<b>Administration:</b> Online and face-to-face questionnaires (October 2019 – June 2020)
<b>Language:</b> Portuguese	<b>Language:</b> Portuguese/English
	<b>Sampling approach:</b> Non-probabilistic
<b>Sample size:</b> 42 valid questionnaires	<b>Sample size:</b> 508 valid questionnaires

## 4 Findings

### 4.1 Sample Profile

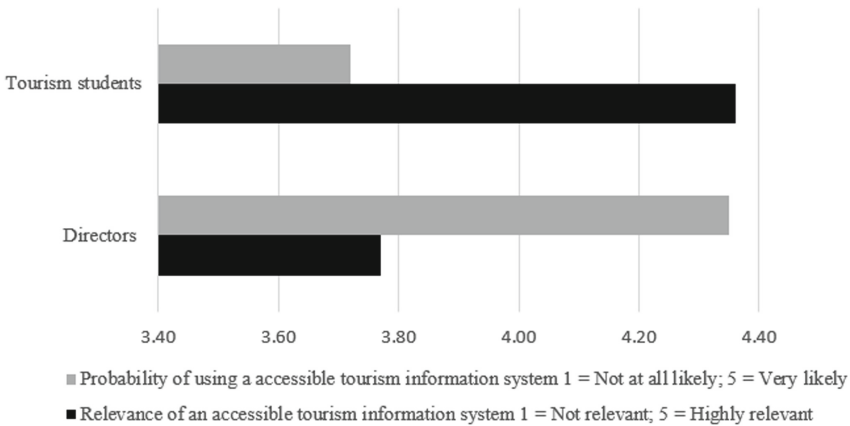
Table 2 summarizes the demographic profile of the sample (students and directors of Portuguese higher education tourism study programmes (PHETSP)). In relation to students, the majority seem to be taking a bachelor degree (89.4%), have Portuguese nationality (93.9%), are female (75.2%), declare no disability (97%) and be around 22 years old. Regarding the directors, the biggest share are responsible for a first study cycle (65.9%), have Portuguese nationality (97.6%), are female (64.3%), almost none declare a disability (95.2%) and are around 46 years old.

**Table 2.** Sample profile

Sample profile	Students				Directors			
	N	%	Mean	Std. deviation	N	%	Mean	Std. deviation
<b>Tourism study cycle</b>								
Undergraduate	454	89.40			29	65.90		
Master's	54	10.60			13	29.50		
<b>Nationality</b>								
Portuguese	477	93.90			41	97.60		
Other	31	6.10			1	2.40		
<b>Gender</b>								
Male	126	24.80			15	35.70		
Female	382	75.20			27	64.30		
<b>Has a disability</b>								
No	493	97.00			40	95.20		
Yes	15	3.00			2	4.80		
<b>Age</b>	508		22.56	6.91	42		46.00	6.56

## 4.2 Attributed Relevance and Probability of Use

As can be observed in Fig. 1, directors and students consider the Access@Tour platform to be relevant. Moreover, both reveal a great likelihood of using it. However, some differences were observed between these two groups in terms of relevance and interest in this platform. Students give higher importance to the creation of the platform Access@Tour, when compared with the directors; however, they expressed less probability of using it.



**Fig. 1.** Relevance and probability of using

On the other hand, the directors point out an opposite direction; they considering the creation of this platform less important, but they state a higher intention to use it when compared with the students. These different perspectives may be related to the different profiles of these two groups in terms of knowledge and of access to information related to the accessible tourism market. Based on these results, it is important to highlight the relevance that students attach to a platform with these characteristics, showing a high sensibility to the characteristics and relevance of the accessible tourism market.

## 4.3 Relevant Information to Insert on the Platform

The inputs that users related to HEI would like to insert on the platform are represented in Table 3. Regarding students, four main characteristics should be inserted into the platform. Testimonials about training and work experience related to accessible tourism market are the most highlighted. The students' intention of inserting this type of information suggests that they recognize the importance of sharing their own experiences so that others can obtain more knowledge of the main information requirements to satisfy the needs of this growing market. This can point out the lack of accessible tourism training (theoretical and practical) in PHETSP, as indicated in literature [4]. Conversely, they showed less interest in sharing their curriculums.



Regarding the information that directors are more interested in inserting on the platform, education and research are the areas where they are most available to share information (research networks, academic works and research projects on accessible tourism).

**Table 3.** Information to insert on the platform

	Information to insert on the platform	N	Mean	Std. deviation
Students	Testimonials about training experiences targeted for the accessible tourism market	508	3.64	1.12
	Testimonials about work experiences related to the accessible tourism market (curricular internships, part-time jobs)	508	3.64	1.13
	Dissemination of personal projects (cultural and business) for the accessible tourism market	508	3.59	1.15
	Curriculum vitae	508	3.24	1.22
Directors	Research networks in accessible tourism	42	4.60	0.62
	Academic work in accessible tourism	42	4.60	0.66
	Research projects in accessible tourism	42	4.51	0.70
	Complementary offers in accessible tourism	42	4.49	0.67
	Curricular offers in accessible tourism	42	2.88	1.76
	Other information	42	2.51	1.76

Note: scale from 1 – Not at all likely to 5 – Very likely

#### 4.4 Information to Retrieve from the Platform

Table 4 presents the information that students and directors are interested in obtaining from this platform. Although both directors and students attach a high importance to the different types of information described in Table 4, the directors, as expected, assign greater importance to different types of information when compared to students.

**Table 4.** Information to retrieve from the platform

Information to retrieve from the platform		Students (N = 508)		Directors (N = 42)	
		Mean	Std. D	Mean	Std. D
Market characteristics	Needs of the accessible tourism market	4.28	0.88	4.49	0.70

(continued)

**Table 4.** (continued)

Information to retrieve from the platform		Students (N = 508)		Directors (N = 42)	
		Mean	Std. D	Mean	Std. D
	Types of experiences sought by the accessible tourism market	4.26	0.84	4.63	0.58
	Specific equipment related to the accessible tourism market	4.22	0.85	4.70	0.56
	Constraints of the accessible tourism market (infrastructures, communication, interaction and information)	4.21	0.84	4.77	0.53
	Types of tourism destinations sought by the accessible tourism market	4.21	0.88	4.58	0.70
	Motivations to travel of the accessible tourism market	4.15	0.89	4.72	0.59
	Employer needs	Information about employers' needs related to the accessible tourism market	4.07	0.86	4.65
Training opportunities	Training related to the treatment, communication and interaction with the accessible tourism market	4.27	0.85	4.72	0.59
	Training related to the safety in the accessible tourism market	4.24	0.83	4.63	0.62
	Training in tourism animation for the accessible tourism market (e.g. sport, cultural, and environmental)	4.20	0.88	4.44	0.80

(continued)

**Table 4.** (continued)

Information to retrieve from the platform		Students (N = 508)		Directors (N = 42)	
		Mean	Std. D	Mean	Std. D
	Training courses in accessible tourism	4.15	0.89	4.65	0.61
	Training areas most valued by the employers related to the accessible tourism market	4.06	0.87	4.49	0.67
	Training in handling specific equipment related to the accessible tourism market	4.05	0.91	4.44	0.85
Job opportunities	Job offers in accessible tourism	4.22	0.89	4.65	0.61
	Internship offers in accessible tourism	4.15	0.99	4.60	0.66
Education/ research	Funding programmes in accessible tourism	4.09	0.91	4.65	0.53
	Higher education tourism study programmes in Portugal with curricular units in accessible tourism	4.07	0.93	4.35	0.81
	Bibliography in accessible tourism	3.64	1.06	4.51	0.63
	Projects and networks in accessible tourism	Na	Na	4.56	0.63
Complementary information	Legislation and practical guides in accessible tourism	3.92	0.96	4.53	0.67
	Other types of information	1.77	1.36	4.19	1.22

Note: scale from 1 – Not important to 5 – Very important; Na – Not applicable

Concerning the different types of information, both directors and students attach greater importance to the characteristics of the accessible tourism market, followed by information on employment and training opportunities in this area. Regarding the characteristics of the accessible tourism market, while students reveal more interest in information about the needs of this market, directors reveal more interest in obtaining

information on travel constraints of this market. In terms of employment opportunities, both the students and directors consider it relevant to obtain information on jobs and internship opportunities from this platform. Concerning training opportunities to increase competences of tourism human resources in accessible tourism, both students and directors reveal great interest in all training opportunities mentioned in Table 4. However, the greatest interest is on training opportunities on the treatment, communication and interaction with the accessible tourism market. These results demonstrate the awareness of interaction with accessible tourism groups, which is aligned with the recommendation for research in this area to focus on training in these matters [3, 21]. While training in interaction is valued, technical knowledge like how to handle equipment is considered less relevant for the corresponding groups. Regarding relevant information for education/research tasks, directors once again assign more importance to obtaining relevant information from the Access@Tour to these tasks. In that sense, information about funding programmes, projects and networks in accessible tourism are of especial interest for them. This interest also indicates sensibility to accessible tourism issues and a predisposition to develop research in this area. Concerning complementary information, both groups recognized the importance of obtaining information about legislation and practical guides related to accessible tourism from this platform, which may indicate concerns about assured the rights of tourists with disabilities.

## 5 Conclusion

Information is a crucial element for developing accessible tourism, which justifies the importance of building specialized information-sharing platforms. For a successful conceptualization of these systems, diverse stakeholders (e.g. visitors with disabilities, tourism supply organizations and institutions responsible for training in tourism) need to be involved. This study provides relevant insights for conceptualizing a specialized information-sharing platform on accessible tourism, taking different views into account. Thus, this study presented a view on how HEI tourism study programmes could be part of the creation of an information system for accessible tourism, as its success is dependent on the integration of different stakeholders. In addition, the absence of accessible tourism platforms that include the perspective of HEI make this study original and of great relevance in developing accessible tourism. Questionnaires were applied to directors and students of PHETSP. The results of the questionnaires allowed their interest on a potential accessible tourism platform to be evaluated and a depiction of what type of information these users sought and what kind of information would they insert on the platform. Despite some differences between students and directors of PHETSP, both groups consider the building of the Access@Tour platform important and also show interest in its use.

Generally speaking way, directors showed more availability to use the Access@Tour platform than the students. Regarding the data inserted on the platform, this was divided into five groups: market characteristics, employer needs, training opportunities, job opportunities, education/research and complementary information. Information related to market characteristics is the most relevant for both students and directors, which demonstrated the need for a better understanding of the needs and requirements of the

accessible tourism market. Students showed a moderate availability to be active participants and share their information (as the means indicated), which is coherent with the responses concerning attributed relevance and probability of use. Regardless, students consider inserting inputs related to testimonials about training and labour experience as feasible, recognizing the importance of sharing experiences to expand knowledge about the accessible tourism market. In relation to directors, they are willing to share all types of information; however, academic and research networks in accessible tourism are the areas where they view information sharing as most feasible.

Despite the originality and relevant contributions of this study, some limitations may be identified. Only the information requirements needed were approached, and thus the way to deliver this information also needs to be addressed. Future research should collect information requirements, taking into account whether the students or directors had disabilities or not. Access@Tour platform will be a major help for PwD and all stakeholders of the accessible tourism market, highlighting the fact that HEI that have a very important role in managing the accessible tourism ecosystem.

**Acknowledgments.** This work was developed in the scope of the research project ACTION - POCI-01-0145-FEDER-030376 - funded by FEDER, through COMPETE2020 - Programa Operacional Competitividade e Internacionalização (POCI), and by national funds (OE), through FCT/MCTES.

## References

1. Irestig, M., Timpka, T.: Politics and technology in health information systems development: a discourse analysis of conflicts addressed in a systems design group. *J. Biomed. Inform.* **41**, 82–94 (2008). <https://doi.org/10.1016/j.jbi.2007.05.009>
2. Levy, Y., Ellis, T.J.: A systems approach to conduct an effective literature review in support of information systems research. *Informing Sci.* **9**, 181–212 (2006). <https://doi.org/10.28945/479>
3. Bizjak, B., Knežević, M., Cvetrežnik, S.: Attitude change towards guests with disabilities: reflections from tourism students. *Ann. Tour. Res.* **38**, 842–857 (2011). <https://doi.org/10.1016/j.annals.2010.11.017>
4. Liasidou, S., Umbelino, J., Amorim, É.: Revisiting tourism studies curriculum to highlight accessible and inclusive tourism. *J. Teach. Travel Tour.* **19**, 112–125 (2019). <https://doi.org/10.1080/15313220.2018.1522289>
5. Card, J.A., Cole, S.T., Humphrey, A.H.: A comparison of the accessibility and attitudinal barriers model: travel providers and travelers with physical disabilities. *Asia Pac. J. Tour. Res.* (2006). <https://doi.org/10.1080/10941660600727566>
6. Michopoulou, E., Buhalis, D.: Information provision for challenging markets: the case of the accessibility requiring market in the context of tourism. *Inf. Manag.* **50**, 229–239 (2013). <https://doi.org/10.1016/j.im.2013.04.001>
7. Devile, E., Kastenholz, E.: Accessible tourism experiences: the voice of people with visual disabilities. *J. Policy Res. Tour. Leis. Events* **10**, 265–285 (2018). <https://doi.org/10.1080/19407963.2018.1470183>
8. Waschke, S.: Labeling im Barrierefreien Tourismus in Deutschland – Vergleichende Analyse auf Basis Europäischer Beispiele. Thesis. Universität Lüneburg (2004)

9. Domínguez Vila, T., Alén González, E., Darcy, S.: Accessible tourism online resources: a Northern European perspective. *Scand. J. Hosp. Tour.* **19**, 140–156 (2018). <https://doi.org/10.1080/15022250.2018.1478325>
10. Silveiro, A., Eusébio, C., Teixeira, L.: Heterogeneity in accessibility of travel agency websites: a study in the central Portugal region. *RISTI - Revista Iberica de Sistemas e Tecnologias de Informação* **35**, 18–34 (2019). <https://doi.org/10.17013/risti.35.18-34>
11. Mohammad Arif, A.S., Du, J.T.: Understanding collaborative tourism information searching to support online travel planning. *Online Inf. Rev.* **43**, 369–386 (2019). <https://doi.org/10.1108/OIR-05-2017-0141>
12. Schryen, G., Benlian, A., Rowe, F., Gregor, S., Larsen, K., Petter, S., Paré, G., Wagner, G., Haag, S., Yasasin, E.: Literature reviews in IS research: what can be learnt from the past and other fields? *Commun. Assoc. Inf. Syst.* **41**, 759–774 (2017). <https://doi.org/10.17705/ICAIS.04130>
13. Jiang, J., Shi, P., An, B., Yu, J., Wang, C.: Measuring the social influences of scientist groups based on multiple types of collaboration relations. *Inf. Process. Manag.* **53**, 1–20 (2017). <https://doi.org/10.1016/j.ipm.2016.06.003>
14. Buhalis, D., Amaranggana, A.: Information and communication technologies in tourism 2012, pp. 553–564 (2012). <https://doi.org/10.1007/978-3-7091-1142-0>
15. World Health Organization: World report on disability - summary. *World Rep. Disabil.* **2011**, 1–23 (2011)
16. European Commission: Economic impact and travel patterns of accessible tourism in Europe (2014)
17. United Nations: World population ageing 2015 (2015)
18. Darcy, S., Dickson, T.: A whole-of-life approach to tourism: the case for accessible tourism experiences. *J. Hosp. Tour. Manag.* **16**, 32–44 (2009). <https://doi.org/10.1375/jhtm.16.1.32>
19. Kastenholz, E., Eusébio, C., Figueiredo, E.: Contributions of tourism to social inclusion of persons with disability. *Disabil. Soc.* **30**, 1259–1281 (2015). <https://doi.org/10.1080/09687599.2015.1075868>
20. Bauer, I.: When travel is a challenge: travel medicine and the ‘dis-abled’ traveller. *Travel Med. Infect. Dis.* **22**, 66–72 (2018). <https://doi.org/10.1016/j.tmaid.2018.02.001>
21. Michopoulou, E., Darcy, S., Ambrose, I., Buhalis, D.: Accessible tourism futures: the world we dream to live in and the opportunities we hope to have. *J. Tour. Futur.* **1**, 179–188 (2015). <https://doi.org/10.1108/JTF-08-2015-0043>
22. Boxall, K., Nyanjom, J., Slaven, J.: Disability, hospitality and the new sharing economy. *Int. J. Contemp. Hosp. Manag.* **30**, 539–556 (2018). <https://doi.org/10.1108/IJCHM-09-2016-0491>

# Author Queries

## Chapter 15

Query Refs.	Details Required	Author's response
AQ1	Please confirm if the corresponding author is correctly identified. Amend if necessary.	
AQ2	Please check and confirm if the edit made in the email address "celeste.eusebio@ua" is correct.	
AQ3	Please confirm if the section headings identified are correct.	
AQ4	As references [21] and [23] are the same, we have deleted the duplicate reference and renumbered accordingly. Please check and confirm.	

# MARKED PROOF

## Please correct and return this set

Please use the proof correction marks shown below for all alterations and corrections. If you wish to return your proof by fax you should ensure that all amendments are written clearly in dark ink and are made well within the page margins.

<i>Instruction to printer</i>	<i>Textual mark</i>	<i>Marginal mark</i>
Leave unchanged	... under matter to remain	Ⓟ
Insert in text the matter indicated in the margin	∧	New matter followed by ∧ or ∧ <sup>Ⓢ</sup>
Delete	/ through single character, rule or underline or ┌───┐ through all characters to be deleted	Ⓞ or Ⓞ <sup>Ⓢ</sup>
Substitute character or substitute part of one or more word(s)	/ through letter or ┌───┐ through characters	new character / or new characters /
Change to italics	— under matter to be changed	↵
Change to capitals	≡ under matter to be changed	≡
Change to small capitals	≡ under matter to be changed	≡
Change to bold type	~ under matter to be changed	~
Change to bold italic	⌘ under matter to be changed	⌘
Change to lower case	Encircle matter to be changed	≡
Change italic to upright type	(As above)	↕
Change bold to non-bold type	(As above)	↗
Insert 'superior' character	/ through character or ∧ where required	Υ or Υ under character e.g. Υ or Υ
Insert 'inferior' character	(As above)	∧ over character e.g. ∧
Insert full stop	(As above)	⊙
Insert comma	(As above)	,
Insert single quotation marks	(As above)	Ƴ or ƴ and/or ƶ or Ʒ
Insert double quotation marks	(As above)	ƶ or Ʒ and/or Ƶ or ƴ
Insert hyphen	(As above)	⊥
Start new paragraph	┌	┌
No new paragraph	┐	┐
Transpose	└┐	└┐
Close up	linking ○ characters	⸸
Insert or substitute space between characters or words	/ through character or ∧ where required	Υ
Reduce space between characters or words		↑