Smart destinations: A holistic view from researchers and managers to tourists and locals

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ABSTRACT

This paper analyses and expands the concept of smart destination and its characteristics using stakeholder theory and the multiple perspectives of the various agents involved: managers, researchers, tourists, and locals. In adopting a holistic focus to conceptualise smart destinations, its review and analysis fill a current vacuum in the academic literature. The study also provides in-depth analysis of both tourists’ and locals’ perceptions. Two consecutive studies using computer-aided text analysis and grounded theory were performed. Firstly, we obtained a common image of a smart destination that combines the following elements: space, quality of life, agents, infrastructure, and technology. Secondly, the text analysis identified two distinctive characteristics: technology and sustainability. Thirdly, we identified differences in tourists’ and locals’ perceptions of smart destinations. These findings represent an important conceptual advance and have implications for management of smart destinations.

1. Introduction

The rapid development of technologies (Xiang, Magnini, & Fesenmaier, 2015) and the complexity of urban infrastructures (Jiang, Geertman, & Witte, 2021) have created an ongoing need for touristic renewal. The constant advances in information and communication technologies have become a key element in tourism marketing and management (Bencendorff, Xiang, & Sheldon, 2019; Jovicic, 2019; Yuan, Tseng, & Ho, 2019). The importance of these technologies can be seen in the ways they are used to improve destinations (Buhalis, 2003; Bustard, Bolan, Devine, & Hutchinson, 2019). Destinations worldwide are thus promoting and implementing smart tourism measures—information and communication technology-based measures initially implemented in the creation of “smart cities”—to achieve sustainability targets and become more competitive (Gretzel & Scarpino-Johns, 2018; Pyall & Garrod, 2020).

The aim of smart cities is to create urban environments that provide their citizens with innovative services to improve their quality of life (Piro, Gianci, Grieco, Boggia, & Camarda, 2014, p. 169). The initiatives involved in the creation of smart cities have also led to so-called “smart destinations,” places that use information and communication technologies to combine supply and demand to create value, pleasure, and positive experiences while providing wealth and benefits for organisations and the destination (Boes, Buhalis, & Inversini, 2015, p. 394).

The literature shows no agreement on the concept of smart destinations. Definitions are partial and focus on specific viewpoints (tourist, local, or manager) (Buhalis & Amaranggana, 2013; Shafiee, Ghatari, Hasanzadeh, & Jahanyan, 2019). This difference occurs because, despite growing interest in this concept, the scope and approach of studies on smart destinations differ substantially (Boes, Buhalis, & Inversini, 2016; Buhalis & Amaranggana, 2013; Ivars-Baidal, Celdrán-Bernabeu, Mazón, & Perles-Ivars, 2019; Sigalat-Signes, Calvo-Palomares, Roig-Merino, & García-Adán, 2020). The lack of holistic analysis causes confusion and ambiguity in understanding the concept (Borges-Tiago, Verissimo, & Tiago, 2022). This confusion makes it difficult for managers to adopt the most suitable smart approaches in their management of tourist destinations and thus to make the best use of the revenues generated for the local community (Sorokina et al., 2022). Full understanding of what a...
smart destination is would facilitate development of clear operational definitions that are applicable to empirical research and essential for practical implementation of smart destination-based initiatives (Ivars-Baidal, Celdrán-Bernabeu, Femenía-Serra, Perles-Ribes, & Giner-Sánchez, 2021).

Although it is true that a number of authors have begun to make inroads in understanding smart tourism and smart destinations (Johnson & Samakovlis, 2019; Mehraliyev, Chan, Choi, Koseoglu, & Law, 2020; Shafiee, Rajabzadeh Ghatri, Hasanzadeh, & Jahanyan, 2021; Soares, Domareski Ruiz, & Ivars Baidal, 2022; Sorokina et al., 2022; Sustacha, Baños-Pino, & del Valle, 2022), many have done so by dissecting extant knowledge through systematic or bibliometric reviews (Johnson & Samakovlis, 2019; Mehraliyev et al., 2020; Shafiee et al., 2021; Soares et al., 2022; Sorokina et al., 2022; Sustacha et al., 2022). Yet these authors have not succeeded in providing a complete view of the concept that includes the different players involved. Most literature on smart tourism has focused instead on groups of stakeholders with financial interests in the tourism ecosystem, such as local governments or businesses (Zhu, Zhang, & Li, 2014).

Most recent research projects focus on specific objectives, such as developing a framework that establishes Destination Management Organisations (DMOs) as the central players responsible for smart initiatives (Sorokina et al., 2022), analysing the scholarly production associated with the technology (Sustacha et al., 2022), or analysing whether the smart destination constitutes a new approach to planning/management (Soares et al., 2022).

As many of these authors have already noted, smart destinations’ theoretical and practical knowledge is increasing, although it is still limited (Johnson & Samakovlis, 2019; Mehraliyev et al., 2020; Sorokina et al., 2022). We thus recommend that future studies provide a more complete and comprehensive view of smart destinations with useful instructions that enable companies and managers to implement measures based on this increased knowledge (Sustacha et al., 2022). Moreover, the stakeholder theory literature suggests that scholars agree on the value of including a broad range of stakeholders, especially locals, in tourism planning (Khazaei, Elliot, & Joppo, 2015).

Based on these research needs, we performed a first study that sought to analyse the concept of smart destination and its characteristics from the multiple perspectives of the different agents involved in the destination (managers, researchers, tourists, and locals). Our goal was to establish a holistic conceptualisation of smart destinations. We then performed a second study to expand the discussion on tourists’ and locals’ perception of smart destinations to identify the similarities and differences between the two groups, since both groups have great potential to contribute to joint tourism planning, supporting each other in stakeholder theory. The main contribution of this study lies in the need for in-depth understanding of different stakeholders’ perceptions of smart destinations in order to: (1) develop a comprehensive conceptualisation considering the perspective of the set of agents involved (managers, experts, tourists, and residents), (2) analyse the differences and similarities in tourists’ and residents’ perceptions of the smart destination, and (3) offer actions that improve smart destination management based on the differences between tourists and residents.

2. Literature review

2.1. From academics’ conceptualisation of smart cities to smart destinations

The concept of smart city, forerunner of the smart destination, has been defined differently over time (see Table 1). The seminal work of Giffinger, Fertner, Kramar, and Mejers (2007) defines the smart city as “a city that has been developed with a long-term view across all its aspects and that is based on the combination of diverse factors that promote the self-determination, independence and awareness of its citizens by providing them with specific activities and resources.” To these factors of management and service provision, subsequent studies have added new aspects, such as connection factors, which led to the definition of cities as instrumented and interconnected (Harrison et al., 2010). This concept was later expanded as a key strategy for combating poverty, inequality, and unemployment and improving energy management (Winkowska, Szpilko, & Pejic, 2019).

The concept of smart city assumes that a city must be a creative and sustainable area that improves quality of life, creates a friendlier environment, and provides more solid prospects for economic development (Lee, Hancock, & Hu, 2014). Although this developmental process has led many authors to formulate the definition of “smart city” and link it to different terms, authors have never agreed on a single or widely accepted definition (Chong, Habib, Evangelopoulos, & Park, 2018; Schaffers, Ratti, & Komninos, 2012). Among the most common terms linked to smart cities are “digital city” (Tan, 1999), “wired city” (Targovski, 1996), “informational city” (Fietkiewicz, Mainka, & Stock, 2017), “ubiquitous city” (Shin, 2009), and “sensitive city” (Mone, 2015). These different definitions share a common purpose: to improve the use of smart and affordable technologies.

Table 1

<table>
<thead>
<tr>
<th>Smart city</th>
<th>Smart destination (for managers and experts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giffinger et al. (2007) “a city that has been developed with a long-term view of all its aspects and that is based on the combination of diverse factors that promote the self-determination, independence and awareness of its citizens by providing them with specific activities and resources.”</td>
<td>State Mercantile Society for the Management of Innovation and Tourism Technologies - SEGITTUR (2015) “an innovative space, accessible to all, supported by a state-of-the-art technological structure that guarantees the sustainable development of the tourist territory and facilitates the interaction and integration of the visitor with the environment, increasing the quality of their experience at the destination.”</td>
</tr>
<tr>
<td>Harrison et al. (2010) “cities being defined as instrumented and interconnected.”</td>
<td>Boes et al. (2015) “those places that use ICT to improve tourism experiences and the performance of organisations through greater co-creation of value, delivered jointly.”</td>
</tr>
<tr>
<td>Lee et al. (2014) “a city must be a creative and sustainable area that improves quality of life, creates a friendlier environment and provides more solid perspectives of economic development.”</td>
<td>Carballo and Plaza (2021) “a territory made up of the basic structure of a tourist destination, but with technology as its backbone.”</td>
</tr>
<tr>
<td>Guo, Ma, Li, Zhang, &amp; Zhang, 2017 “an urban development based on the integration of many information and communication technology solutions for administrating the city’s resources.”</td>
<td>Sorokina et al. (2022) “The destination is smart where the application of technology is ubiquitous and secured through a myriad of available technologies that are interconnected with the infrastructure in real time. Smart destinations focus on offering highly personalized tourism experiences that are context specific and include casual or random experiences with an exciting element such as discovery, without forgetting the demand to balance the needs of local communities and visitors, facilitating a tourism responsible that is sustainable and creating an authentic brand that is aspirational, being efficient in its operations and ensuring ease of access to attractions through the use of smart and affordable technologies.”</td>
</tr>
<tr>
<td>Manville et al. (2014) “is one where information and communication technologies are used for resolving public problems via the participation of various interested collectives working in collaboration with the city authorities.”</td>
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</tr>
<tr>
<td>Winkowska et al. (2019) “a city that not only enables its residents to better meet their housing, transport, energy and other infrastructural needs, but also one with a key strategy for combating poverty, inequality and unemployment and improving energy management.”</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by the authors.
of resources and quality of services, and to lower the cost of providing them by making them more efficient (Zanella, Bui, Castellani, Vangelista, & Zorzi, 2014).

The most recent definitions of smart city focus on the technological dimension (Guo, Ma, Li, Zhang, & Zhang, 2017; Manville et al., 2014). Today, the core idea of the smart city involves integration of technology into the city and development of mutually connected, synergic solutions to urban challenges (Winkowska et al., 2019).

Significantly, the current concepts of “smart city” are clear precedents of the definition of smart destination. Smart destinations have developed naturally from smart cities, with common elements and objectives, such as improved governance within the territory or better quality of life for residents. To these improvements, we can add an improvement in tourist experience (Luque Gil, Zayas Fernández, & Caro Herrero, 2015). In many cases, smart cities have the produced design of smart destinations. Such destinations use advanced technologies in the physical infrastructure of a geographical area to make the city more competitive as a tourist destination. This development involves “integration of a network of smart organisations and functions that participate in interoperable and interconnected systems to simplify and automate daily activities and add value throughout the entire ecosystem for all of the interested collectives” (Buhalis & Leung, 2018, p. 43; Sorokina et al., 2022).

The specialized literature on smart destinations often mentions a broader context, smart tourism, as closely related. Academics observe that smart tourism must be understood as a progression or advance of the broader concept, smart tourism, as closely related. Academics observe that smart tourism must be understood as a progression or advance of this concept (Gretzel, Reino, Kopera, Chung, & Gretzel, 2020). In this complex ecosystem, the smart management model must promote cooperation among the different tourist and territorial players for smart destination management (Cerezol-Medina, 2016).

The smart tourism research stream began its life cycle in academia when Buhalis and Amaranggana (2013) expanded the concept of smart cities by introducing the “smart destination” (SD). Managers of the State Mercantile Society for the Management of Innovation and Tourism Technologies - SEGITTUR (2015) welcomed this concept of smart destination as “an innovative space, accessible to all, supported by a cutting-edge technological structure that guarantees the sustainable development of the tourist territory and facilitates the interaction and integration of the visitor with the environment, increasing the quality of their experience in the destination.” Academic researchers as well as management units have tried to define this new concept. Bues et al. (2015) introduce the importance of co-creation in smart destinations and demonstrate the importance of new technologies. Along similar lines, Carballoido and Plaza (2021) assign a leading role to technology in smart destinations. More recently, Sorokina et al. (2022) advance recognition of the central role of new technologies in defining a smart destination by demanding ubiquity of technology and a guarantee of interconnection with the destination’s infrastructure in real time. This definition of smart tourism destinations seeks to provide highly personalized, context-specific tourism experiences and include casual or random experiences with an exciting element such as discovery. It also aims to balance the needs of local communities and visitors, facilitating sustainable, responsible tourism and creating an authentic brand that is aspirational and efficient in its operations and ensures ease of access to attractions through smart, affordable technologies.

2.2. Stakeholder theory for the tourism industry

Stakeholder theory is based on any individual (third party) who is impacted by or influences the firm’s policies and actions. Because ethics and business are interwoven, value is created over the medium and long terms (Beck & Storopoli, 2021; Freeman, 1984). In the tourism sector, a stakeholder is anyone who is positively or negatively affected by development. Including even the host community in determining how tourism develops decreases the possibility of conflict between visitors and locals (Aas, Laddock, & Fletcher, 2005; Lane & Bramwell, 1999). First, participatory planning for tourism is a very complicated process (Wilson, Fesenmaier, Fesenmaier, & Van Ees, 2001). It requires thorough understanding of the views and experiences of local residents, as these factors influence how they feel about taking part in decisions about tourism (Khazaei et al., 2015).

Second, stakeholder theory can benefit the urban stakeholder network and urban government by improving relationships, while also helping the municipality accomplish its objectives. Public managers will make better strategic judgments by considering the views of urban stakeholders (Bryson, 2004). Authors such as Ibrahim, El-Zaart, and Adams (2017) have recently published a model of stakeholder participation in smart sustainable cities that includes stakeholders’ expectations, amount of impact, and the significance of any activity for the urban stakeholders. Introducing a “collaborative community-based planning process” that considers tourism success and destination competitiveness can increase tourism’s success (Jamal & Getz, 1995).

Advocating “community support” is even considered one of the three determinants of tourism success for destinations and destination management organisations (Bornhorst, Ritchie, & Sheehan, 2010). Engaging a broader range of community members can thus lead us to successful tourism planning and development (Khazaei et al., 2015). Finally, integrating smart destinations into this panorama of agents involved shows that smart destinations can play a key role in achieving convergence among stakeholders, as technology can enable connection among all interested agents (Femenia-Serra, Neuhof, & Ivars-Baidal, 2019; Gretzel, Werhner, Koo, & Lamsfus, 2015). Furthermore, the literature maintains that healthy smart tourist development cannot be achieved without collaboration and connection among a larger set of stakeholders (Gretzel, Reino, et al., 2015; Stankov & Gretzel, 2021).

3. Study 1

3.1. Methodology

To fully review the concept of smart destination from multiple perspectives that embrace all agents involved (managers, researchers, tourists, and locals), we performed a qualitative focus group-based study. The study was undertaken with the different agents: managers, researchers, tourists, and locals.

3.1.1. First phase: obtaining information

The first study was performed in July 2022. Four focus groups addressed the topic in one-hour sessions composed of the primary agents in the conception of the smart destination. The members of each focus group spoke freely about the concept of smart destination. Each was then asked to complete an online questionnaire that enabled extraction of the first results (mainly qualitative).

Each independently organised group consisted of four managers (managers’ focus group), four researchers (researchers’ focus group), seven locals (locals’ focus group) and four tourists (tourists’ focus group).

The average age of the group of locals and tourists (11 people in
total) was 22 years. We used young people because we wanted to make sure they were familiar with new technologies. They are part of the post-millennial Generation Z (Tapscott, 2009), which includes people who were 13–28 years old in 2023. Significantly, Generation Z consumers are the first “digital natives” (Ameen, Hosany, & Taheri, 2023). Generation Z is also the largest existing generation, representing around a third of the world’s population (Schneider & Lee, 2022). It has an estimated annual purchasing power of 143 billion dollars (Huberman, 2023). Monaco (2018) and Mavragani and Dionysios (2022) also affirm that Generation Z has intense mobility, making its members a new type of traveller, one who plays a leading role in use of transportation. Tourists from this generation are more susceptible to the influence of social media marketing activities when choosing a destination. They are also more likely to visit a desired destination than are other generations (Liu, Wang, Zhang, & Qiao, 2023). For all these reasons, we view this generation as an ideal sample for study of smart destinations, from the point of view of both resident and tourist.

The group of four managers had an average age of 52 years. These participants were officially destination managers who had been certified or were undergoing the SEGITTUR accreditation process to become smart destinations. The group of four experts, with an average age of 44 years, was selected because they were expert researchers in smart destinations.

The group of experts represented diverse nationalities (Chinese, English, Finnish, and Spanish), as they were academic experts in smart destinations. The members of the groups of managers, locals, and tourists were all Spanish. We consider the sample of Spaniards to be suitable because Spain has established a certification for smart destinations (the UNE 178501 standard of AENOR (2018), enabling us to obtain the opinion of both managers from different territories who had worked or were working to achieve this certification, and of tourists and residents in a country where various smart destinations have been certified. The main objective of the first phase was to answer the following questions: What is a smart destination? And what would you say are the distinctive features that lead a tourist destination to be considered “smart”?

### 3.1.2. Second phase: analysis

The focus group narratives were examined using computerised text analysis, an alternative and innovative method of text analysis (Yuan et al., 2019). The narratives were analysed thoroughly to extract conclusions and examine abstract terms and ideas to identify links with theoretical concepts that supported the composition of the smart destinations. The topics analysis demonstrated that participants’ narratives featured the subjects the authors had identified in the literature review for this study. Text clustering was also conducted to identify the most frequent subjects and distribute them into various groups (clusters). This distribution maximised the similarity between the elements of one and the same cluster while maximising the differences between the various clusters (Meaning Cloud, 2023). For these analyses, we used the MeaningCloud application, whose algorithm is based on a hybrid approach that combines use of machine learning and language processes supported by lexical resources (Martínez et al., 2016). Previous studies have highlighted that MeaningCloud has high validity and reliability compared to other sentiment analysis tools, demonstrating that MeaningCloud’s text decomposition operation provides simultaneously valid and consistent sentiment analysis (Bilro, Loureiro, & dos Santos, 2022). This application enabled us to categorise different latent subjects based on the participants’ words.

### 3.2. Results

#### 3.2.1. Smart destination conceptualisation

Topic extraction and text clustering were used to link two groups of participants through the terminology they used most. The first question addressed in the focus group was: What is a smart destination? The participants’ responses revealed similarities and patterns among the groups (see Table 2).

The managers’ group used terminology related to the quality of life, the citizens, the community, and tourists, the strategy and, in spatial terms, to the territory. Two term clusters stand out for this group: sustainable destination and improvements.

Some terms used by the locals’ group coincided with that of the managers, such as citizens, quality of life, and spatial terms like city. Other terms differed, however, such as infrastructure, transport, and technology. We highlight four terminology clusters: citizens, quality (referring to quality of life), technology, and place.

The tourist focus group showed patterns similar to those of the agents of the territory, such as people and tourist, as well as terms related to infrastructures, such as public transport, and to space, such as place. The tourists also used different terms, such as ecological or environment, terms that did not appear in the previous groups and that refer directly to sustainability. This group produced three noteworthy terminology clusters: visit (to the destination), application (use of technologies and development of apps at the destinations to manage their activities), and place (locals’ narratives).

Finally, the researchers’ group also used terms that coincided with terms from one or more of the previous groups, such as terms related to technology (agreeing with locals). The researchers’ group placed far more emphasis on technology, however, including additional terms such as information and communication technology services and connection. The researchers also agreed with the managers and locals in highlighting quality of life. Further, all groups used the term geography (referring to the spatial environment), albeit using different words (e.g., territory, city, place). The terms that set the researchers apart from the other groups were governance, a term directly related to management of the destination, and mobile and technology, related to technology use.

The terms used by the majority of the groups to answer the question “What is a smart destination?” were related to space, quality of life, agents involved in the destination, infrastructures, and technology.

### Table 2

<table>
<thead>
<tr>
<th>Topic extraction</th>
<th>Managers</th>
<th>Locals</th>
<th>Tourists</th>
<th>Researchers</th>
</tr>
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<tbody>
<tr>
<td>Quality of life</td>
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<td>Citizens</td>
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<td>Community</td>
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<td>Tourists</td>
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<tr>
<td>Strategy</td>
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<tr>
<td>Territory</td>
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<td></td>
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<tr>
<td>Sustainable</td>
<td>(2; 5.31)</td>
<td>(2; 2.89)</td>
<td>(2; 3.47)</td>
<td>(2; 3.43)</td>
</tr>
<tr>
<td>Improvements</td>
<td>(2; 1.73)</td>
<td>(2; 3.84)</td>
<td>(2; 3.47)</td>
<td>(2; 3.43)</td>
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<tr>
<td>Place</td>
<td></td>
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<td>Technology</td>
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<td>Environment</td>
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<td>Application</td>
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<td>Tourism</td>
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<td>Public transport</td>
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<td>Information</td>
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<td>Communication</td>
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<tr>
<td>Link</td>
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<tr>
<td>Mobile</td>
<td>(2; 1.09)</td>
<td>(2; 1.09)</td>
<td>(2; 1.09)</td>
<td>(2; 1.09)</td>
</tr>
</tbody>
</table>

Note: The text clustering score that appears in brackets corresponds, in order of appearance, to the cluster size and significance value assigned by MeaningCloud to the cluster; the greater the value, the greater the significance. Source: Compiled by the authors.
common definition of smart destination for all groups (managers, locals, tourists, and researchers) would thus be a space in which all the agents involved in the destination collaborate in efficient management of the infrastructure and use technology to increase the quality of life of both locals and tourists.

3.2.2. Smart destination dimensions

We also found differences between the various groups’ response to the question “What would you say are the distinctive features a tourist destination must have to be considered ‘smart’?” (see Table 3). The managers’ group highlighted terms such as governance, accessibility, and sustainability, all of which are directly linked to the measurement dimensions used by State Mercantile Society for the Management of Innovation and Tourism Technologies - SEGITTUR (2015). Two word clusters stand out: governance and sustainability. Several terms used by the locals’ group were similar to those used by the managers, including sustainability and accessibility. We also found terms like technology (another dimension of smart destinations) and collaboration (importance of collaboration within the tourist activity). The clusters for this group were extremely diverse—including, for example, sustainability, technology, and accessibility (all of which are dimensions of the destinations), transport (referring to importance of infrastructures), tourist (related to destination agents), indicators (referring to the importance of measurement), and environment (related directly to the dimension of sustainability).

The terminology employed by the tourists’ group coincides with that of the managers (governance and accessibility) and the locals (accessibility and technology) but also includes another term—natural resources. A couple of terms also stand out: social media and public transport, which could be considered as belonging to the dimensions of technology and accessibility, respectively. Four word clusters emerged: visitor (as an agent of the destination), improvement (which bears on the indicators’ capacity to measure substantial improvements made to the destination), accessible, and technology (both of which are mainstays of smart destinations). Finally, the researchers’ group coincides with the other groups in several of the words used: technology (coincides with locals and tourists), sustainability (coincides with managers and locals), and cooperation (very similar to the term collaboration used by the locals). The researchers also include another term, innovation, another mainstay of smart destinations. Only one of the clusters obtained for this group focuses on the term technology.

Examination of the clusters of all groups identifies one cluster common to three of the groups (locals, tourists, and researchers)—technology. It thus follows that technology, already highlighted in academic definitions, is a distinctive indicator of a smart destination. Another standout term is sustainability, which appears in three groups (managers, locals, and researchers) and in two word clusters (managers and locals). The tourists’ group also mentions sustainability by referring to the importance of conserving natural resources. These findings suggest that sustainability is as distinctive an indicator as technology for a smart destination. Finally, accessibility is also considered to have a relevant and distinctive role in smart destinations, since it appears in three groups (managers, locals, and tourists) and in two word clusters (locals and tourists).

4. Study 2

4.1. Methodology

To enrich discussion of the perception of smart destinations among tourists and locals and identify the differences between the two groups, we performed a qualitative focus group-based study. The mainly open questions, designed using the Qualtrics platform, enabled participants to provide precise descriptions of their ideas and perceptions about smart destinations. Study 2 was performed with tourists and locals. Study 2 used data triangulation, following the recommendations of Denzin (1978) and Decrop (1999), to analyse a sample of tourists and locals different from the sample of the first study.

4.1.1. First phase: obtaining information

We performed this second study in September 2022. Study 2 focused on two interest groups (tourists and locals) whose perspectives have not been analysed together in the literature (Sorokina et al., 2022). A total of 27 tourists and 26 locals located in Spain participated in the focus group discussions. The average age of the sample was 22 years. We used young people because we wanted to make sure they were familiar with new technologies. The arguments given above for selecting the age range for the sample in Study 1 are also supported in Study 2. The literature affirms that one characteristic of Generation Z as consumers is its interest in new technologies (Ameen et al., 2023). Further, this generation represents a third of the world’s population (Schneider & Lee, 2022), and its tourism activity is characterised by intense mobility and greater susceptibility to social media marketing activities (Liu, Wang, et al., 2023). It thus becomes important to study these individuals’ relation to topics such as smart destinations. For these reasons, we believe that Generation Z is an ideal sample for this study, from the point of view of both resident and tourist.

As in Study 1, we held one-hour focus group sessions (three tourist focus groups with nine participants each and three local focus groups with eight participants each). The participants were asked to answer the question “What is a smart destination?” They were then asked to explain a series of characteristics of a smart destination: technology, digitalisation, and sustainability (the characteristics that Study 1 showed to be the most distinctive of smart destinations). Secondly, we incorporated the characteristics that SEGITTUR and the European Commission considered important. These included accessibility, destination management, cultural heritage, and creativity.

### Table 3

<table>
<thead>
<tr>
<th>Topic extraction</th>
<th>Managers</th>
<th>Locals</th>
<th>Tourists</th>
<th>Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>-</td>
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<tr>
<td>Accessibility</td>
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<td>Sustainability</td>
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<tr>
<td>Technology</td>
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Note: The text clustering scores that appear in brackets correspond, in order of appearance, to the cluster size and significance value assigned by MeaningCloud to the cluster; the greater the value, the greater the significance. Source: Compiled by the authors.
4.1.2. Second phase: analysis

Grounded theory (Strauss & Corbin, 1994)—recommended by several authors such as Shafiee et al. (2021), Aquino (2022), and Liu, Cheng, and Qu (2023)—was used to analyse the definitions of smart destinations provided by the tourists and locals. The analysis, which followed the process developed by Strauss and Corbin (1990), involved three steps: (1) description of the data collected, (2) analysis of the users’ replies, and (3) open, axial, and selective coding (Strauss & Corbin, 1990). We applied the guidelines established by Saldana (2013) and Jimenez-Barreto, Sthapit, Rubio, and Campo (2019) to discuss the coding results for each step using a dialogical intersubjectivity method to reach agreement on these results (Sandelowski & Barroso, 2007a, 2007b). Table 4 presents an example of the procedure followed for the open coding. After analysing the codes, we analysed the narratives from both groups (tourists and locals) to construct a common definition that included the differences between the two groups to explore a more credible, holistic image of the perceptual reality of both sets of agents.

4.2. Results

4.2.1. Smart destination conceptualisation

After reviewing the narratives using grounded theory, we extracted a definition of the concept of “smart destination” for each of the two groups, tourists and locals (see Appendix A).

By distilling all the tourists’ narratives, we define a smart destination for tourists as:

“A place that can use technologies efficiently to facilitate and satisfy the varying needs of tourists (who fundamentally seek touristic offerings and navigation); is accessible to all users, welcoming, safe, innovative, and sustainable; and has good tourism management that guarantees visitors a positive experience.”

In this way, we found that the tourists viewed a smart destination as one that is principally technological and that makes it easy to search for and execute the processes that guarantee a satisfactory experience.

The breakdown of all the locals’ narratives enabled us to propose the following definition of a smart destination from their point of view:

“A place that uses technologies to guarantee its citizens efficient improvement of their quality of life by providing them with the services they need (education, healthcare, security, transport, leisure) in a way that is accessible to all and ensures sustainability of the destination thanks to innovations and the quality with which it is managed.”

As to the similarities and differences between the two groups, we first highlight that both see technology as not only the main tool of the smart destination, but also the mainstay facilitating information, services, and processes. Both groups consider accessibility, security, and management as important in guaranteeing that a smart destination gives tourists and/or locals a good experience. The main differences are that the tourists wished to use technology specifically for touristic services, whereas the locals used it for everyday services, including leisure (which could include tourism). Furthermore, the locals’ narratives were more concerned about the subject area of sustainability as an essential part of a smart destination, while the tourists viewed it as less important.

4.2.2. Smart destination characteristics

4.2.2.1. Technology and digitalisation. The tourists’ narratives on technology and digitalisation (see Appendix B) of a smart destination may be summarised as:

“a technologically state-of-the-art destination that is innovative and adapts itself to tourists while guaranteeing them, through technology use, all the information they might need about the destination (infrastructures, mobility, what to see and do), safety, and wellbeing; that is user-friendly on all devices; and that also allows tourists to digitalise most processes associated with their visit so that they do not have to perform these processes physically.”

We suggest that technology for tourists must speed up their information search processes at the destination and simplify their stay by enabling much more to be done online, thus saving them time as they move around.

The locals’ narrative about the dimension of technology and digitalisation can be summarised as:

“the use of new technologies (apps, public Wi-Fi, 5G, augmented reality (AR), etc.) and innovations to enable and guarantee better quality of life via information searches and the running of automated processes. Technology is seen as a process enabling medium that provides access to all updated and necessary information local residents might need, enabling them to be more effective and efficient in their day-to-day lives.”

The similarities and differences between the two groups showed that both see technology as an enabling tool that enables them not only to gather information, but also to run processes more efficiently at the destination. The groups differ principally in their interests. The aim of the tourists’ stay is to increase their satisfaction, whereas the locals see technology as a medium for improving their quality of life. Each group uses technology for a different purpose.

4.2.2.2. Sustainability. Sustainability is not the most important issue for tourists, probably because they tend not to consider the long term during their short stays.

A breakdown of these narratives (see Appendix B) shows that tourists consider sustainability:

“…as part of a long-term tourism model that is environmentally friendly (as manifested in renewable energies, low pollution levels, green spaces, use of public transport, and clean, efficient, ethical, responsible management of resources and waste):”

For the tourists, sustainability thus focuses on developing a model of tourism whose future is guaranteed by being environmentally friendly. The locals’ narrative shows that the locals consider sustainability as:

“development of a destination that is economically efficient, socially equitable, and environmentally sustainable; that meets current needs without compromising future ones; and that therefore requires implementation of ecological and environmental management and awareness-raising programmes that include source resource and waste management, pollution and air-quality controls, development of green spaces and recycling centres, and promotion of sustainable products.”

Both groups see sustainability as necessary for conserving the destination and guaranteeing its long-term integrity. We stress, however, that the tourists’ group considers sustainability only in environmental terms, not as essential in the short term, whereas the locals view it as something absolutely necessary. The locals thus relate sustainability not only to environmental issues but also to social and economic ones.

4.2.2.3. Accessibility. Examination of the tourists’ narratives (see
Appendix B) confirms that accessibility is an essential factor at the destination. It enables them to get around quickly and simply, and guarantees a positive experience for people with limited mobility (whether due to a disability, age, vulnerability, language, etc.) by installing appropriate infrastructures (ramps, lifts, pavements, adapted pedestrian crossings, etc.) and technological resources for all kinds of tourists (tourist apps, leaflets, etc.).

The foregoing shows that accessibility is an essential issue for tourists, both for the universal transport of persons and to enable tourists with special conditions to access any physical or online tourist infrastructure.

For the locals, the term accessibility can be summed up as:

“ease of access and use by all citizens of the physical and digital public infrastructures, both to interact with general essential services (e.g., healthcare and education) and to access the services provided by all available types of public transport.”

Both groups see accessibility as an important and necessary element at a smart destination, suggesting the importance of universal accessibility for all users. Yet we also discern nuances of difference between the groups. The tourists refer mainly to access to transportation and points of tourist interest around the city, including a host of infrastructures that would provide accessibility to users, such as pedestrian crossings, signage, noticeboards with information about where places are, wheelchair ramps, etc. The locals, in contrast, are principally concerned with the accessibility of essential services. Further, both groups agree on the importance of accessibility to the digital media involved in managing the destination.

4.2.2.4. Destination management. The tourists’ input on management of a smart destination (see Appendix B) can be summarised as:

“innovative governance that looks to the future; makes the most of its resources in an intelligent, coordinated, and efficient manner; and makes everything the tourist might need available via an array of enabling tools (destination website, apps, software) to create and manage positive customised travel experiences.”

This definition suggests that tourists view management as not only about managing the destination’s resources but also about the tourist’s experience. They evaluate efficient management of technologies designed to simplify their stay and meet their needs as of equal importance.

For the locals, in parallel, management of a destination is based on:

“an effective and efficient strategic approach that includes tourism policies so as to preserve locals’ wellbeing and improve their quality of life at the destination by providing citizens with multiple services that are continuously changing and improving.”

Comparison of tourists’ and locals’ priorities for management shows that the differences between these groups outweigh the similarities. While the tourists feel that management should concentrate on resources and tools designed for meeting their needs and improving their travel experience, the locals see the management process as a political tool for ensuring their wellbeing in the face of tourism and improving their quality of life.

4.2.2.5. Cultural heritage and creativity. In the tourists’ opinion, the cultural heritage and creativity of a smart destination (see Appendix B) are:

“[based on the destination] maintaining its history, culture, and traditions while having the ability to renew and reinvent itself with new ideas thanks to use of technologies to make it even more attractive and accessible.”

For the tourists, therefore, cultural heritage and creativity were not exclusively about conservation of heritage, culture, and traditions; they were also about using technologies to reinvent heritage and make it more attractive.

The locals’ narratives on the cultural heritage and creativity of a smart destination can be summarised as:

“advertising the culture and heritage of a place and using technology to make it more accessible and innovative while creating new cultural scenarios that improve the destination both socially and economically.”

We stress that both groups see cultural heritage and creativity as the culture, history, and traditions of a place and envision using technologies to reinvent the destination and give it new value. Of all the issues, this is the one on which the two groups agree most closely.

5. Conclusions

This paper develops transferable frameworks to enable managers, researchers, tourists, and locals to conceptualise smart destinations and their characteristics. It also uses a qualitative approach to provide a consistent definition by various groups. The different perceptions are not only conceptual; they also define the characteristics that make up the smart destination, thus establishing what it is that really generates value in the various issues for these interest groups.

Firstly, the study used computerised text analysis to achieve its first research objective. The text analysis with MeaningCloud extracted the terms most used by each group of agents (managers, researchers, tourists, and locals). This enabled us to obtain a common image of a smart destination that the groups share, combining the following elements: space, quality of life, agents involved in the destination, infrastructures, and technology. Some of these items reinforced the argument by Boes et al. (2015) that smart destinations are places that use technologies to improve tourists’ experiences and organisations’ performance through greater co-creation of value, provided jointly. Furthermore, some of these items coincided with the definition of State Mercantile Society for the Management of Innovation and Tourism Technologies - SEGITTUR (2015), which defines a smart destination as an tourist destination based on innovation, built on a ground-breaking technology infrastructure, that aims to increase the quality of the experience at the destination, while also improving its residents’ quality of life. In addition, the text analysis provided two distinctive characteristics that make a destination smart: technology (distinctive feature for locals, tourists, and researchers) and sustainability (distinctive feature for managers, locals, and researchers).

Secondly, we used grounded theory to achieve the second research objective. We extracted the tourists’ and locals’ definitions of the smart destinations and their characteristics, as well as the similarities and differences between the two groups. The results show that both groups see technology as the main tool of the smart destination and the fundamental enabler of information, services, and processes. The principal differences lie in their reasons for using technology: the tourists see technology as way to increase their satisfaction during their stay, whereas the locals view it as a tool to increase their quality of life.

Regarding sustainability, the locals are more aware of environmental, economic, and social sustainability and consider sustainable consumption as an indivisible part of a smart destination. Both groups consider environmental sustainability as a necessary way to conserve the destination and guarantee it in the long term. Whereas the tourists view environmental sustainability as nonessential in the short term, the locals view it as a constant necessity and relate issues of sustainability directly to environmental, economic, and social ones.

Tourists and locals also consider accessibility and destination management as important to guaranteeing that a smart destination provides a good touristic and residential experience. Both groups see accessibility as an important and necessary element and recognize the significance of universal accessibility, both physical and digital, for all. The groups differ in that the tourists refer mainly to transport and browsing,
whereas the locals specify the importance of accessibility to essential services.

The tourists and locals have dissimilar and conflicting views of destination management. The tourists view this component as management of resources and tools to fulfil and enhance the tourist’s travel experience. The locals, in contrast, perceive it as a political tool ensuring their wellbeing and improving their quality of life. This conflict increases the importance of destination management organisations, which must consider the perceptions of residents and tourists to foster a smart view. These organisations’ goals must thus be to drive implementation and efficient deployment of intelligent initiatives proactively for the ultimate benefit of destination stakeholders. Finally, the issues on which both groups agree most closely are cultural heritage and creativity. Both groups note the culture, history, and traditions of a place and the importance of technologies to reinvent and revalue them.

6. Discussion

Given the growing interest in knowledge of smart destinations, it is important to recognize that this knowledge remains somewhat limited in the field of tourism (Mehraliyev et al., 2020; Shafiee et al., 2019). To overcome this limitation, our study has addressed part of this conceptual gap, (1) providing a comprehensive conceptualisation of those involved (managers, researchers, tourists, and locals), (2) detecting differences and similarities in tourists’ and residents’ perception, (3) and providing actions to reduce the differences between tourists and residents and improve destinations. Our approach is grounded in a horizontal and collaborative effort to develop tourism, including theoretical support from stakeholder theory. The third research goal involves the discussion and managerial implications.

Whereas the definitions we extracted from the literature are partial, our research enables us to provide a holistic vision of all agents. This vision affirms that the smart destination is a space in which all agents involved with the destination collaborate in efficient management of infrastructure and use technology to increase the quality of life of both locals and tourists. This vision shows that tourists’ and residents’ positions are not so far apart and provides a collaborative view of these agents at the destination. The research also shows the predominance of technology, sustainability, and accessibility as key characteristics of concern to stakeholders. We also found that managers were not the only group to consider technology as distinctive, a finding in line with the political perspective (Gretzel, Werthner, et al., 2015). As theorists do not consider sustainability as distinctive of a smart destination, we conclude that their limited view of sustainability does not reflect an immediate concern but is important to them. Furthermore, the literature shows that a large portion of the problems to be solved in planning smart destinations are related to technology and sustainability. These include understanding and preventing problems derived from application of technology and management of excessive tourism, among others (Soares et al., 2022).

Our findings show that tourists and residents can differ in their perceptions. Similarly, authors like Sorokina et al. (2022) identify the need to collect both visitors’ and locals’ perceptions of the attributes of smart destinations. Analysing differences and similarities in tourists’ and residents’ perceptions of smart destinations, our study obtains a view that identifies common concerns, as well as areas of disagreement. Both groups consider technology as the essential tool of the smart destination but differ in the reasons for using this tool. Precisely for this reason, inclusion and interaction between local and visitor must be strengthened to use technology for common and constructive purposes. The managerial implications section includes various proposals for managing these differences, such as creating a comprehensive destination platform coordinated by managers that enables access to, and interaction of locals and tourists with, all platforms for the destination’s offerings.

On the issue of sustainability, tourists and locals differ in that the tourist does not see sustainability as an important issue in the short term but only in the long term. This difference can be managed by relying on actions also included in managerial implications, such as awareness campaigns, or encouraging participation in open platforms. We note that sustainability is not really integrated in the smart destination planning approach, although theorists generally agree that sustainable management of tourist destinations is important and presents a major problem in the 21st century (Aguirre, Zayas, Gómez-Carmona, & Sánchez, 2022). Furthermore, Gretzel and Jamal (2020) identified a gap between sustainable tourism development and smart destination paradigms, and proposed inclusion of ethical principles to ensure good governance of smart destinations. As it is important that sustainability begin to gain prominence in both users’ perceptions and strategic planning, our study includes various managerial proposals on sustainability.

Tourists and residents share common ground on accessibility. Both groups view it as necessary, although tourists link the concept to mobility and residents to access to essential services. The reality is that two of the main problems detected in smart destinations involve accessibility: the importance of guaranteeing mobility in destinations and the importance of promoting inclusive tourism development (Soares et al., 2022). It is thus necessary to implement actions that guarantee any tourist or resident access to the destination’s places of interest (tourist services or essential services).

Tourists and residents hold completely different views of the purpose of management of the destination. For the tourist, management should guarantee a satisfactory experience; for the resident, it should guarantee quality of life. This conflict increases the importance of destination management organisations. Managing this conflict of interest requires administering satisfaction surveys to both tourists and residents to evaluate management of the destination. The results of these surveys must be used to develop tourism planning and promote awareness campaigns that encourage an intelligent vision. The goal is proactively to drive efficient implementation and deployment of smart initiatives for the ultimate benefit of the destination’s stakeholders.

Despite the results on cultural heritage presented, tourists and locals hold more similar views on this issue, due mainly to their common perception of using technology for conservation and renewal of heritage. We must not overlook their differing views of heritage sites, as locals also see tourists as a threat to such sites and their conservation (Frey & Briviba, 2021). Managing this divergence requires taking action to preserve heritage conservation and prevent mass tourism from damaging it. Various measures are included in the managerial implications section.

This research shows us a common image shared by destination agents but also dissects the characteristics of smart destinations to identify the divergence between tourists’ and residents’ views. In the practical implications section, we show paths that could manage the differences between these two interest groups to establish destinations that are truly smart and whose efficient management is not exclusive but satisfies both interest groups.

6.1. Management implications

This study reveals the complexity of developing smart tourism and smart destinations. As management entities recognize the benefits such development brings, however, many destinations are making every effort to ensure effective implementation (Gretzel & Scarpino-Johns, 2018). Politicians are thus becoming increasingly aware of the need to make the most of the economic opportunities that information and communication technologies and tourism provide. Determining all that goes into a smart destination can contribute to development of every aspect of the destinations themselves (Shafiee et al., 2021). As Sustacha et al. (2022) have argued, we need a far more complete view of smart destinations via new studies that contribute new angles to help companies and managers implement actions and measures based on greater
Our research conclusions enable destination managers to increase their knowledge, not only of how interested agents perceive the destination but also of which factors or characteristics must be given more significance and value in managing the destination. Based on the characteristics obtained in our research results, we have developed an extensive proposal of possible improvement actions, for which we also provide academic support (see Table 5). The actions and examples proposed will impact the capacity to develop better tools for planning, promoting, and revaluing the destinations.

### Table 5

**Proposed actions for managers to improve smart destinations.**

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<thead>
<tr>
<th>Proposed actions and examples for managers</th>
<th>Justification</th>
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<tr>
<td>Developing a common website/platform for tourists and residents that contains all the information of interest would enable use of heat maps and web analytics tools to identify which content generates the most interest from tourists and locals at different smart destinations.</td>
<td>Creation of a common image of a smart destination among the groups, which combines the following elements: space, quality of life, agents involved in the destination, infrastructures, and technology.</td>
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<td>Creation of a comprehensive destination platform coordinated by managers that enables access to and interaction with all provides platforms of interest at the destination for both locals and tourists (general essential services platforms such as healthcare and education; and local-tourist services platforms such as transport, accommodation, gastronomy, and leisure activities). This central platform and its infrastructure should be owned by public or mixed agents who collect data from many sources, turn it into useful information, and disseminate it to various stakeholders.</td>
<td>The principal differences between tourists and locals lie in the purposes for which they use technology: tourists for touristic purposes and locals for everyday services.</td>
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**Promoting actions for environmental and social sustainability (Aguirre et al., 2022; Gretzel & Jamal, 2020; Sancino, Stafford, Braga, & Budd, 2022):**

- Promote awareness and educational campaigns, such as learning networks from locals to improve energy and waste performance (i.e., residential apartment sustainability plan in Sydney) (City of Sydney, 2015).
- Strategic engagement and participation in open platforms, such as a digital platform system to track and evaluate the effectiveness of campaigns and activities that promote environmental action (i.e., Project Greenovate in Boston) (City of Boston, 2014).
- Development of local regulations, plans, and guides, such as a guide for experts involved in design, building, and upkeep of green roofs, walls, and/or facades (i.e., Growing Green Guide of Melbourne) (City of Melbourne, 2014); or creation of a high-density tourist destination with cutting-edge environmental infrastructure based on integrated management systems for the primary inputs to accommodate mass tourism (electricity, drinking water, solid waste generation) (i.e., Benidorm); or a proposal to include ethical principles to ensure good governance at the smart destinations. This ethical approach should prioritize the effects of technology and tourism development on social exclusion processes.
- Promote new products/services by creating a new data collection system for consumption inventories to help the city reduce its greenhouse gas emissions. (i.e., City of Portland’s, 2015 Climate Action Program) (City of Portland, 2015) or a new geographical information system (GIS-based model) for the city’s solid waste management (i.e., City of Bengaluru) (Biswa & Parida, 2021).
- Support public programmes that provide financial incentives and technical support: such as a natural disaster response emergency fund, program for emergency savings accounts for low- and moderate-income families, or system of incentives for property owners to invest in risk mitigation (i.e., New Orleans) (City of New Orleans, 2015). Support public programmes that provide financial incentives and technical support: such as a natural disaster response emergency fund, program for emergency savings accounts for low- and moderate-income families, or system of incentives for property owners to invest in risk mitigation (i.e., New Orleans) (City of New Orleans, 2015).
- Promote new public enterprises, such as a public enterprise to direct financial resources to tourism development of business intelligence. A central technological platform could interconnect all stakeholders, integrate data input from different sources, and enable dynamic, real-time information sharing (Femenia-Serra & Ivars-Baidal, 2021).

**Increase in efforts to ensure accessibility.** Although authors such as Rucci, Moreno-Izquierdo, Perles-Ribes, and Porto (2022) demonstrated a negative relationship between accessibility and competitiveness and Ivars-Baidal et al. (2021) observed that accessibility indicators are the dimension with the worst performance (51%), accessibility continues to be a very important factor for tourism planning and users. Accessibility is viewed as a critical and all-encompassing element of smart destinations and should receive high priority in legislative measures. Such actions should ensure both groups see accessibility as an important and necessary element and recognize the significance of universal accessibility for all, both physical and digital.
healthy and smart tourism development cannot be achieved without different actors is necessary to develop smart destinations. Further, Stankov and Gretzel (2021) explored in depth the differences in the two groups—tourists and locals—from each other. Analysis reveals how the tourists and locals explore and evaluate management of cultural heritage, especially when developing policies and promoting actions for preservation and to prevent mass tourism from affecting heritage conservation. One example is the proposal of Frey and Briviba (2021) for “Revived Originals,” cultural sites identically reproduced in a more convenient location. Such “Originals” can attract tourists to the newly established cultural sites, which offer them cultural and historical knowledge using the most advanced digital techniques. This is a good initiative to redistribute tourist flows to less crowded areas.

Moreover, collection of tourists’ and residents’ data and information on heritage management should be encouraged through awareness campaigns and incentives. As Mandic and Kennell (2021) show, although DMOs at heritage tourism destinations have a positive attitude towards technological advancements and are actively engaged in numerous side initiatives, they do not combine these initiatives into clever plans and thus encounter challenges in enlisting partners to participate and supply data.

Source: Compiled by the authors.

6.2. Theoretical implications

This paper provides a holistic view of smart destinations derived from the perceptions of the managers, researchers, tourists, and locals. Its results thus advance the literature on smart destinations to broaden subsequent knowledge and methodological applications. Our in-depth analysis reveals how the tourists and locals—partners who can be isolated from each other—perceive smart destinations differently. We have explored in depth the differences in the two groups’ concepts of smart destinations and the characteristics that define them. The results fulfil a significant academic need to conceptualise smart destinations both fully and correctly (Gretzel, Sigala, Xiang, & Koo, 2015; Gretzel, Zarezadeh, Li, & Xiang, 2020; Koo, Mendes-Filho, & Buhalis, 2019; Sorokina et al., 2022; Sustacha et al., 2022).

Our research outcomes thus represent clear progress in conceptualisation of the smart destination framework, grounded in stakeholder theory. By analysing this phenomenon through the lens of stakeholder theory, a theory acknowledged in the destination collaboration literature, this study makes a valuable contribution to smart tourism research. It shows how including different actors, such as managers and researchers or locals and tourists, can participate in and enrich the tourism planning process. Our study expands the stakeholder models used in destination cooperation research, first in general terms with managers, academics, locals, and tourists; and second in greater depth with groups of locals and visitors. Like other studies—such as Gretzel, Reino, et al. (2015), Johnson, Rickly, and McCabe (2023), and Stankov and Gretzel (2021)—ours shows that the collaboration of different actors is necessary to develop smart destinations. Further, healthy and smart tourism development cannot be achieved without cooperation and connection among a larger group of stakeholders.

6.3. Limitations and future research

This study does have several limitations. Firstly, the study participants come mainly from the Global North; future studies should examine whether cultural differences affect conceptualisation of smart destinations. Secondly, Study 1 used exclusively managers who have smart destination accreditation or who are in the process of obtaining it. We thus believe that destination managers who are not in the process of becoming accredited have not been included but should be in future research. Thirdly, as Studies 1 and 2 use samples of tourists and locals from Generation Z, this generational limitation must be considered when generalizing the results, and future research should compare our results to those of other generations. Future research should also deepen analysis of the differences among all interest groups involved (managers, experts, tourists, and locals). Fourthly, our study did not give the participants any destination as an example to avoid biasing their perception of smart destination. When they were asked about possible destinations at the end of the session, they mentioned mainly major destinations, such as cities (i.e., Madrid, Warsaw, Gijon), islands (e.g., Tenerife), and countries (e.g., Japan). Finally, the results are based on qualitative research methods and thus should not be generalized.

As to future research, our findings should be used to analyse smart destinations empirically, especially to analyse their development of scales and indicators to measure smartness of destinations. Future research should also use several smart destination case studies to explore the differences between different types of destinations to avoid overgeneralization and detect differences.
Funding

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CRedit authorship contribution statement

**Elena Cerdá-Manzilla:** Conceptualization, Methodology, Software, Data curation, Writing – original draft. **Iis Tussyadiah:** Conceptualization, Supervision, Writing – review & editing. **Sara Campo:** Conceptualization, Methodology, Software, Supervision, Writing. **Natalia Rubio:** Conceptualization, Methodology, Software, Writing. **Iván García-Hervas:** Conceptualization, Methodology, Software, Writing.

Appendix A. Grounded theory for the question: what is a smart tourist destination?

<table>
<thead>
<tr>
<th>What is a smart tourist destination? – Open coding (line by line)</th>
<th>Subthemes (axial coding)</th>
<th>Main themes (selective coding)</th>
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<td><strong>TOURISTS</strong></td>
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<td>“A destination which is adapted to my needs, technologically speaking,” “a destination adapted for all types of people, whose resources are easy to manage (…),” “that has public transport that enables you to move around the city without problems (and that is adapted to all types of user),” “a destination within which you can move around (…) safely,” “a place where you can travel, that has technological infrastructures, innovation, sustainability…” and that provides facilities for all types of people, that guarantees access to all types of people,” “a destination that efficiently combines its attractive elements to create a satisfactory touristic experience.”</td>
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<td>Accessibility</td>
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<td>Destination Management</td>
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<td>Cultural heritage and creativity</td>
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<td><strong>LOCALS</strong></td>
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<tr>
<td>“A destination which is adapted to my needs, technologically speaking,” “a place where you can travel, that has technological infrastructures, innovation, sustainability…”</td>
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<tr>
<td>Accessibility</td>
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<td>Technology and Digitalisation</td>
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<td>Sustainability</td>
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<tr>
<td>The accessibility, technology and digitalisation, sustainability, destination management and cultural heritage and creativity dimensions are the central elements of the smart destinations for tourists.</td>
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The authors are grateful to María Jesús Yagüe for their thorough, constructive, and insightful comments on the manuscript. Furthermore, we especially appreciate the participation and contributions of the destination managers and academic experts in this research.

(continued on next page)
What is a smart tourist destination? – Open coding (line by line) | Subthemes (axial coding) | Main themes (selective coding)

“An smart destination for living in is a destination that makes efficient use of its resources and of the technologies available to it,” “a place in which there is a good quality of life for the average citizen,” “where there is a good transport network, good schools/universities, where there is also a quality healthcare system and cultural activities,” “somewhere that enables me to live a more or less carefree life and, above all, that gives me access to well-managed public services; where a person can live knowing their needs are covered and that they have a variety of services available to them,” “a ‘smart’ place to live is a place where technology serves the city, the people, the state and improves society (…) the essential areas in which technological innovations would be useful are: public transport, safety and security, the environment, healthcare, etc.”

“Where there is a good transport network, good schools/universities, where there is also a quality healthcare system and cultural activities.”

Destination Management

Cultural heritage and creativity

Source: compiled by authors.

Appendix B. Grounded theory coding for the smartdestinations dimensions

<table>
<thead>
<tr>
<th>Technology and digitalisation – Open coding (line by line)</th>
<th>Subthemes (axial coding)</th>
<th>Main themes (selective coding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOURISTS</td>
<td>“A developed and technologically state of the art destination,” “that is innovative, adapted and incorporates technological novelties,” “that use of drones for city security and surveillance purposes,” “enable and improve the experience, be it via apps, websites, etc. or by way of the digitalisation of process (reservations).” “That is innovative, adapted and incorporates technological novelties,” “where all the information required by a tourist is accessible online,” “that provides city-centric apps on public transport, where to eat and drink, and about tourist attractions.” “Where all the information required by a tourist is accessible online,” “use digital tools and combine them to assess the key elements of the destination.”</td>
<td>Tourist experience technology</td>
</tr>
<tr>
<td></td>
<td>“Technology has to be an aid for making processes simpler and quicker,” “apps offering useful day-to-day services, such as transport, contact with the public administration,” “that technology enables being up-to-date so as to be able to provide basic services in a technological manner,” “technology is advancement, enables, innovator.” “Technology should optimise things,” “technology is an advancement, enables, innovator.” “Good access to the internet, information in a simple way, digitization of basic day-to-day processes,” “that technology enables “being up-to-date so as to be able to provide basic services in a technological manner.”</td>
<td>Technology and digital accessibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smart tourism systems</td>
</tr>
<tr>
<td>LOCALS</td>
<td>“Technology has to be an aid for making processes simpler and quicker,” “apps offering useful day-to-day services, such as transport, contact with the public administration,” “that technology enables being up-to-date so as to be able to provide basic services in a technological manner,” “technology is advancement, enables, innovator.” “Technology should optimise things,” “technology is an advancement, enables, innovator.” “Good access to the internet, information in a simple way, digitization of basic day-to-day processes,” “that technology enables “being up-to-date so as to be able to provide basic services in a technological manner.”</td>
<td>Local experience technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The local experience technology, technological and digital accessibility, and smart tourism systems are the central elements of technology dimension for locals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability - Open coding (line by line)</th>
<th>Subthemes (axial coding)</th>
<th>Main themes (selective coding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOURISTS</td>
<td>“A sustained model tourism that limits any harmful impacts on a social and environmental level,” “appropriate resource management that is environmentally friendly. Prioritizes the welfare of locals and animals and instrumental in the implementation of an ethical and responsible tourism policy.” “Cares for the environment,” “keeps pollution levels low and makes good use of public transport, green spaces such as parks or ensures that vegetation is plentiful throughout the city in general,” “the use of renewable, non-contaminating energies,” “a destination that is clean and environmentally friendly and at the same time efficient.”</td>
<td>Sustainable tourism planning</td>
</tr>
<tr>
<td></td>
<td>Environmental sustainability</td>
<td>The sustainable tourism planning and environmental sustainability are the central elements of sustainability dimension for tourists.</td>
</tr>
<tr>
<td>LOCALS</td>
<td>“Environmental matters and respecting them are important, and the city must offer ecological alternatives so as to encourage its citizens to be environmentally aware,” “meets the needs of the present generation without compromising the capacity of future ones,” “using resources effectively and efficiently,” “a development that is economically efficient, socially equitable and environmentally sustainable.” “Implementing ecological programmes that help the environment,” “include sound resource management, measures for reducing waste and contamination, special waste collection and recycling centres, green spaces, and good air quality.”</td>
<td>Sustainable planning</td>
</tr>
<tr>
<td></td>
<td>Environmental sustainability</td>
<td>The sustainable planning, environmental sustainability, sustainable consumption and social and economic sustainability are the central elements of sustainability dimension for tourists.</td>
</tr>
</tbody>
</table>

(continued on next page)
Tourists' satisfaction is key to increasing tourism and generating more revenue per tourist. Ensuring that tourism policies are well managed and implemented so that the destination is clean and well looked after and even to consider that. Accessibility means being able to move around the city without difficulty, easy access for the inhabitants, the deployment of the means that enable everybody, disabled or able bodied, to make use of the different public installations, a good transport network that allows access to persons with special needs, an efficient public transport system and easy access to all providers of essential services.

Accessibility - Open coding (line by line) Subthemes (axial coding) Main themes (selective coding)

<table>
<thead>
<tr>
<th>THEME</th>
<th>Subthemes (axial coding)</th>
<th>Main themes (selective coding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical accessibility</td>
<td>The physical accessibility and digital accessibility are the central elements of accessibility for tourists.</td>
<td></td>
</tr>
<tr>
<td>Digital accessibility</td>
<td>The physical accessibility and digital accessibility are the central elements of accessibility for locals.</td>
<td></td>
</tr>
<tr>
<td>Tourist experience management</td>
<td>Tourist experience management, resource management, innovation management and collaboration/co-creation are the central elements of destination management for tourists.</td>
<td></td>
</tr>
<tr>
<td>Innovation management</td>
<td>Innovation management, resource management, and responsible management are the central elements of destination management for locals.</td>
<td></td>
</tr>
<tr>
<td>Responsible management</td>
<td>Heritage sustainability, heritage innovation, and heritage accessibility are the central elements of Cultural heritage and creativity for tourists.</td>
<td></td>
</tr>
</tbody>
</table>

Cultural heritage and creativity - Open coding (line by line) Subthemes (axial coding) Main themes (selective coding)

<table>
<thead>
<tr>
<th>THEME</th>
<th>Subthemes (axial coding)</th>
<th>Main themes (selective coding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heritage sustainability</td>
<td>Heritage sustainability, heritage innovation, and heritage accessibility are the central elements of Cultural heritage and creativity for tourists.</td>
<td></td>
</tr>
</tbody>
</table>

(continued on next page)
“Use of gc. codes in the paintings of the museums and thus you can see the information regarding that work,” “a revaluation of the destination’s heritage to make it more accessible using technology,” “A revaluation of the destination’s heritage to make it more accessible using technology.”

LOCALS  “The common heritage of collective within the cultural environment (including language, monuments, tangible or intangible historical assets, etc.) passed down to the next generations,” “all the principal elements that set their city apart are well managed,” “creation of new cultural scenarios that will improve the residential side of the destination and strengthen the area as a whole both socially and economically,” “creation of new cultural scenarios that will improve the residential side of the destination and strengthen the area as a whole both socially and economically,” “development of apps that help explaining the history behind each museum, monument, etc.”

Source: compiled by authors.

Appendix C. Supplementary data
Supplementary data to this article can be found online at https://doi.org/10.1016/j.tmp.2024.101223.

References

Benckendorff, P. J., Xiang, Z., & Sheldon, P. J. (2019). Tourism information technology. CABI.
Golan, M. (1977). The common heritage of collective within the cultural environment (including language, monuments, tangible or intangible historical assets, etc.) passed down to the next generations,” “all the principal elements that set their city apart are well managed,” “creation of new cultural scenarios that will improve the residential side of the destination and strengthen the area as a whole both socially and economically.”
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