

Smart Tourism Destinations: a study based on the view of the stakeholders¹

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Abstract

This research analyzes the stakeholders' views on smart tourism destinations, based on the methodology of the State Society for the Management of Innovation and Tourist Technologies, S.A. (SEGITTUR), having as case study Marbella, a city belonging to the province of Malaga (Spain). In order to reach the proposed objectives, the qualitative methodology was used through the techniques of direct observation and semi-structured interviews with direct and indirect tourism agents of the city. The opinions of the interviewees have been categorized in an inductive way from the systemic networks of ideas and thoughts through a content analysis. The results show that Marbella presents characteristics of a smart tourism destination, however, it needs to fulfill in a broader way, all the dimensions or methodological axes of SEGITTUR: technology, innovation, accessibility and sustainability. It is concluded that Marbella is considered a Smart Tourism Destination, in an initial phase that mainly adopts technological and sustainable strategies. In addition, it is stressed that tourism governance and the construction of indicators are key factors for the success of smart destinations.

Keywords: Smart tourism destinations; ICT; Stakeholders; Marbella, Spain; SEGITTUR.

Resumo

Smart tourism destinations: um estudo baseado na visão dos stakeholders

Esta investigação analisa a visão dos *stakeholders* sobre os destinos turísticos inteligentes, fundamentado na metodologia da Sociedad Estatal para la Gestión de la Innovación y las Tecnologías Turísticas, S.A. (SEGITTUR), tendo como estudo de caso Marbella, município pertencente à província de Málaga (Espanha). Para atingir os

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objetivos planejados, foi utilizada a metodologia qualitativa, através das técnicas de observação direta e realização de entrevistas semiestruturadas com agentes do turismo – diretos e indiretos da cidade. As opiniões dos entrevistados foram categorizadas de forma indutiva a partir das redes sistêmicas de ideias e pensamentos, por meio de uma análise de conteúdo. Os resultados demonstram que Marbella possui características de um destino turístico inteligente, no entanto, precisa cumprir amplamente com todas as dimensões ou eixos metodológicos de SEGITTUR: tecnologia, inovação, acessibilidade e sustentabilidade. Conclui-se que Marbella é considerada um *Smart Tourism Destination*, em fase inicial, que adota principalmente estratégias tecnológicas e sustentáveis. Além disso, salienta-se que a governança turística e a construção de indicadores são fatores essenciais para o sucesso dos destinos inteligentes.

Palavras-chave: Destinos turísticos inteligentes; TIC; *Stakeholders*; Marbella, Espanha; SEGITTUR.

Resumen

Smart Tourism Destinations: un estudio basado en la visión de los stakeholders

Esta investigación analiza la visión de los *stakeholders* sobre los destinos turísticos inteligentes, fundado en la metodología de Sociedad Estatal para la Gestión de la Innovación y las Tecnologías Turísticas, S.A. (SEGITTUR), teniendo como estudio de caso Marbella, municipio perteneciente a la provincia de Málaga (España). A fin de alcanzar los objetivos planteados, fue utilizada la metodología cualitativa, a través de las técnicas de observación directa y realización de entrevistas semiestruturadas con agentes del turismo – directos e indirectos- de la ciudad. Las opiniones de los entrevistados se han categorizado de forma inductiva a partir de las redes sistémicas de ideas y pensamientos, por medio de un análisis de contenido. Los resultados demuestran que Marbella presenta características de un destino turístico inteligente, sin embargo, le hace falta cumplir, de manera más amplia, con todas las dimensiones o ejes metodológicos de SEGITTUR: la tecnología, la innovación, la accesibilidad y la sostenibilidad. Se concluye que Marbella es considerada un *Smart Tourism Destination*, en fase inicial, que adopta principalmente estrategias tecnológicas y sostenibles. Además, se destaca que la gobernanza turística y la construcción de indicadores son factores claves para el éxito de los destinos inteligentes.

Palabras clave: Destinos turísticos inteligentes; TIC; *Stakeholders*; Marbella, España; SEGITTUR.

INTRODUCTION

According to the data of the UNWTO (2014), the tourism sector has experienced considerable growth in recent years, undergoing constant differentiations and diversifications and becoming one of the economic sectors with greater expansion in the world. Annual growth of 3.3% is expected between 2010 and 2030, reaching 1,800 million arrivals of international tourists.

The growth and expansion of tourism in recent decades is a very complex phenomenon whose study must be conducted through the use of many disciplines (GORMSEN, 1997; RITCHIE & CROUCH, 2004; SCHLÜTER, 2005; NAVARRO-JURADO et al., 2011). Regarding the basis of the multidisciplinary view of tourism, Lickorish and Jenkins (2000) state that tourism permeates conventional sectors of the economy to cover data of the economic, social, cultural, and environmental life.

In an increasingly globalized and competitive scenario, agencies for management and promotion of tourism destinations, known as DMO (Destination Management Organization) are responsible for developing sustainable, creative, and innovative strategies in order to create unforgettable experiences for tourists, improve the quality of life of the population, and facilitate the process of obtaining competitive advantages over time.

The complexity and systemic functioning of the tourism sector leads to the participation of different actors or agents (stakeholders), public and private, involved in the management and promotion of tourism products or destinations. The coordination and commitment of these actors, the strategic vision, and the implementation of innovative initiatives considering the changes of the market are essential to the integrated development of the destinations.

Innovation in the tourism sector is closely related to the use of information and communication technologies (ICT), which have revolutionized the operation of the sector through changes in processes, products, and organization of companies dedicated to the provision of services, as well as in the new demands of visitors.

Many studies address the importance of the use of ICTs in tourism and of technological innovation in tourism companies (BUHALIS, 2003; WERTHNER y RICCI, 2004; LAW et al., 2014; KOO et al., 2015; BENCKENDORFF et al., 2014; GRETZEL et al., 2015; etc.). Therefore, from the technological point of view, it is understood that tourism destinations, through public and private sectors, should invest in ICTs as a way to facilitate the management and improve the levels of competitiveness.

ICTs are generating many new tools for the tourism industry and contributing to the creation of experiences for tourists, in addition to promoting improved efficiency in process automation for related organizations (BUHALIS y AMARANGGANA, 2014; GRETZEL, 2011).

The rapid adoption of mobile technologies by visitors, mainly smartphones and their applications, is changing the perspective of the tourism industry. For example, mobile technologies enable travelers to obtain highly personalized information at any time and place (LAMSFUS, et al., 2015a).

Based on this context, the adoption of new ideas and models for tourism development is essential, so tourism destinations become smart spaces, from the perspective of sustainability and innovation, thus ensuring the satisfaction of visitors and improving the quality of life of the residents. As a result, in recent years, it is observed the emergence of new concepts, such as: Smart Cities and Smart Tourism Destinations.

López-Ávila (2015, apud GRETZEL et al., 2015) defines smart tourism destination as an innovative destination, which consists in a cutting-edge technology that enables the sustainable development of tourism areas, facilitating the interaction and integration of visitors with the environment, enhancing the experience of quality at the destination and improving the quality of life of the citizens.

Based on the above, this study's general objective is to analyze the view of the stakeholders regarding the municipality of Marbella as a smart tourism destination in Spain. In order to achieve the proposed objective, the following specific objectives should be addressed: conduct a literature and documentary

research on the subject; evaluate the methodology applied by the State Society for the Management of Innovation and Tourism Technologies, S.A. (SEGITTUR), which certifies the smart tourism destinations in Spain; and determine the key points for the development of the smart destination of Marbella through the opinion of the tourism agents.

INNOVATION, ICT, AND COMPETITIVENESS OF TOURISM DESTINATIONS

With all the effects of globalization, Kester (2009) says that the new model of global tourism must be developed in a sustainable manner, in which the assessment of the signs of local cultures and identities, the economic and social benefits, the preservation of the environment, and the use of ICTs and renewable technologies become priority in tourism planning of the destinations.

Regarding the concept of tourism destination, it is understood as any territorial unit, of a nation, region, or state, a city, or a square, having the unique characteristics of climate, culture, politics, economy, attractions, infrastructure, and services. However, it is essential that the destinations have good administrative and operational capacity, so they can meet the needs of tourists and enable the improvement of quality of life of residents (BENI, 2001; VALLS, 2004; EJARQUE, 2005).

Planning and management of destinations is of fundamental importance for the sustainable development of tourism, increase of tourism competitiveness, and satisfaction of tourists (RUSCHMANN, 1997; BAIDAL, 2001; DENCKER, 2004; LÓPEZ-BONILLA; LÓPEZ-BONILLA, 2007; AVILA; WILKE, 2008; CURIEL, 2008). According to the UNWTO cited in the European Commission (2003, p. 7):

Sustainable tourism development meets the current needs of tourists and of hosting regions, protecting and improving the future prospects. It projects an image of understanding of the management of all resources, so the economic, social, and aesthetic needs are covered, at the same time maintaining cultural integrity, essential ecological processes, biological diversity, and living systems.

Nevertheless, from the point of view of competitiveness, it is essential that sustainable tourism destinations adopt smart or innovative strategies. According to Tidd and Bessant (2015, p. (15) “innovation depends, mostly, on our capacity of finding new ways of doing things, as well as on gaining strategic advantage – thus, there will be new opportunities to gain and maintain the advantage.”

Following this line of thought, innovation can be understood as the specific tool of entrepreneurs, the means through which they exploit changes as opportunities for differentiated business or service, being considered as a discipline that can be learned and practiced (DRUCKER, 1985). According to the Oslo Manual (2005, p. (56),

published by the OECD² and EUROSTAT³, “an innovation is the introduction of a new—or significantly improved—product (good or service), of a process, of a new method of marketing, or of a new organizational method, in the company’s internal practices, workplace organization, or external relations.”

Innovation in the tourism sector is deeply associated with the use of information and communication technologies (ICTs), which have revolutionized the operation of the sector through changes in processes, products, and organization of companies dedicated to the provision of the service, as well as in the way consumer demand is presented, either directly or through the distinct participants of the tourism chain.

According to Figueroa (2008, p. 4) “[...] ICTs have become the key innovation to enable the tourism sector to achieve sustainable competitive advantages in the world market, mainly due to their capacity to manage information and knowledge [...]” According to Buhalis (2003), ICTs include a wide range of electronic tools that facilitate the operational and strategic management of organizations for the management of information, operations, and processes and for interactive communication with groups of interest (stakeholders).

Several studies point to the importance of ICTs in tourism and in the technological innovation of tourism companies (BUHALIS, 2003; WERTHNER; RICCI, 2004; LAW et al., 2014; KOO et al., 2015; BENCKENDORFF et al., 2014; GRETZEL et al., 2015). Therefore, from the technological point of view, it is understood that tourism destinations, through the public and private sector, should invest in ICTs as a way to facilitate the management and improve the levels of competitiveness.

However, as highlighted by Valls (2004), in order for a destination to be deemed competitive it is necessary to evaluate the superior benefits generated above the average of the competitors in the economic, social, and environmental spheres. It is also observed that the competitiveness of tourism is mainly related to the significant contribution of tourism to the prosperity of the location and the increased quality of life of residents (CROUCH; RITCHIE, 1999; DWYER; KIM, 2003).

The literature features many studies focused mainly on the relevant use of ICTs as a resource for innovation or smart tourism, but there is shortage of other researches explaining the phenomenon in a systemic and integrated manner. Researches have focused to date mainly on the importance of ICTs in the destinations (GUO et al., 2014; WANG et al., 2013). In addition, it is observed a variety of important researches that contribute theoretically and empirically to the construction and validation of the proposals or models for sustainable management of tourism destinations (SILVA, 2008; FERRERAS, 2009; CANADELL & BADAL, 2012; CARNEIRO, 2014).

2. Organization for Economic Co-operation and Development.

3. The European communities’ Statistical Office.

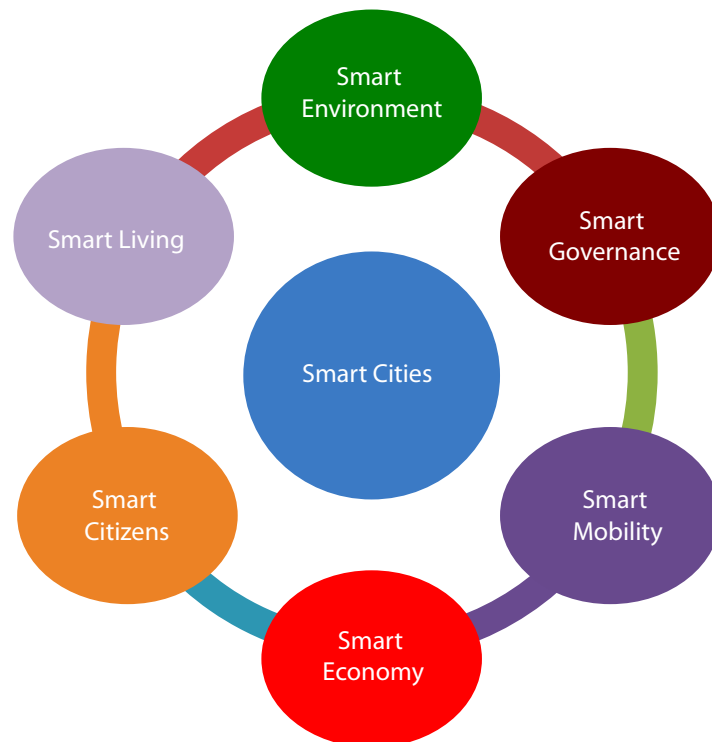
SMART TOURISM DESTINATIONS, STAKEHOLDERS, AND GOVERNANCE

From this context, the concept of Smart Tourism Destinations came from the expansion of the concept of Smart Cities (ZHU et al., 2014; BOES et al., 2015). Based on the document “Informe Destinos Turísticos Inteligentes: Construyendo el Futuro” [Smart Tourism Destinations Report: Constructing the Future], of SEGITTUR (2013, p. (24), the concept of smart cities was introduced in 1998 with the Project Cities study called “Smart Territories,” of the University of Pennsylvania, which aimed to research the “[...] innovative cities capable of finding a balance between the aspects of economic competitiveness, social cohesion and development, and environmental and cultural sustainability.”

According to the *Mapping Smart Cities in the EU* report of the European Parliament’s Directorate-General for Internal Policies, of January 2014, it is pointed out that the concept of Smart Cities is founded on the creation and connection of human capital, social capital, and ICTs in order to generate greater and more sustainable economic development and better quality of life.

Smart cities have been defined through six axes or dimensions, as shown in Figure 1. According to this study, a Smart City is enabled by excellence for the use of technologies, especially ICTs, aimed at improving competitiveness and ensuring a more sustainable future through a symbiotic union of networks of individuals, the companies, the technologies, the infrastructures, the consumption, the energy, and the spaces.

Figure 1 – Dimensions of Smart Cities



Source – Adapted from *Mapping Smart Cities in the EU* (2014)

The concept of 'smart' is based on the intensive use of ICT infrastructures, and on the proliferation of mobile technology and its applications (LAMSFUS, et al., 2015b). Guo, Liu, and Chai (2014) claim that the smart city is a new model of management and development of the urban social systems that has integrated technology, the convergence of industries, and smart services. Guo, Liu, and Chai (2014) also argue that Smart Tourism Destinations are important part of the construction of the system of smart cities, since they depend on the technological infrastructure of the city, on the use of information resources, and on the development of data intelligence.

In Spain, the National Plan for Smart Cities, published in March 2015, follows the definition proposed by the Technical Group of Normalization 178 of AENOR (AEN/CTN 178/SC2/GT1 N 003):

Smart City is the holistic view of a city that applies ICTs to improve its inhabitants' quality of life and accessibility and ensures economic, social, and environmental sustainable development in continuous improvement. A smart city enables citizens to interact with it in a multidisciplinary way and adapts in real time to their needs, efficiently in quality and cost, providing open data, solutions, and services oriented to citizens as individuals, to resolve the effects of the growth of cities, in public and private spheres, through the innovative integration of infrastructures with smart management systems.

Therefore, ICTs are a key factor for change in the tourism industry, whose importance is highlighted in smart technologies that assist in the management of the city and of the destination, approaching the idea of a smart city (INVAT.TUR, 2015). On the other hand, the concept of Smart Tourism Destinations is closely related with the concept of Smart City, but with greater focus on the development of tourism. SEGITTUR (2015, p. 32) defines a Smart Tourism Destination as:

[...] an innovative tourism space accessible to all, consolidated on a cutting-edge technological infrastructure that guarantees the sustainable development of the territory, facilitates the interaction and integration of the visitor with the environment, and enhances the quality of the experience in the destination and the quality of life of the residents.

According to Lamsfus et al. (2015a), a tourism destination is smart when it makes intensive use of the technological infrastructure provided by the smart city in order to: (1) improve the tourism experience of the visitors, personalize and make them aware of the tourism products and services available in the destination, and (2) professionalize management institutions of destinations, local institutions, and business companies of tourism to make decisions and take action based on data produced, directed, and processed through the technological infrastructure in the setting of the destination. This large accumulation of data

on tourism can provide numerous opportunities for smart systems of tourism information in the Smart Tourism Destinations (INVAT.TUR, 2015).

According to López-Ávila and García (2013), a smart tourism destination is considered as an innovative space based on the territory and a cutting-edge technological infrastructure, committed to sustainability and provision of an information system to analyze and understand events in real time, facilitating the interaction between the visitor and the environment, significantly improving the tourism experience. A Smart Tourism Destination can be understood as a system linked to visitors and citizens to connect all local organizations, which allows obtaining services in real time (BUHALIS; AMARANGGANA, 2014).

Complementing this idea, in order for a destination to become a Smart Tourism Destination, it is necessary the integration of four essential concepts: human capital, leadership, social capital, and innovation. Advanced ICT infrastructures, such as the cloud and other technological innovations, provide the essential infrastructure for the development of a Smart Tourism Destination; however, it is not enough (BOES; BUHALIS; INVERSINI, 2015).

Through an active smart system, it is possible to improve the tourism experience and the effectiveness of resource management to maximize both the competitiveness of the destination and the consumer satisfaction, as shown by its sustainability in the long term (BUHALIS; AMARANGGANA, 2014).

The literature features many studies focused mainly on the relevant use of ICTs as a resource for innovation or smart tourism, but there is shortage of other researches explaining the phenomenon in a systemic and integrated manner. Researches have focused to date mainly on the importance of ICTs in the destinations (GUO et al., 2014; WANG et al., 2013).

Tourism is an open, organic system composed of a transdisciplinary interdisciplinary content; thus, it cannot be studied in isolated or fragmented manner (BENI; MOESCH, 2017). Therefore, smart tourism destinations should be understood in their complexity, as a holistic and interdependent system, constituted of distinct sectors and actors or agents (stakeholders), which are related directly or indirectly.

From a broader view of the conceptualization of stakeholder, Freeman and Reed (1983, p. 91) say that:

Any identifiable group or individual that may affect the achievement of the objectives of an organization or who is affected by the achievement of the objectives of an organization (groups of public interest, protest groups, government agencies, trade associations, competitors, trade unions, as well as segments of customers, shareholders, and others).

As approached above, technological resources are essential in the structure of smart destinations. However, social capital and governance constitute key factors for success in tourism regions. As for social capital, it is understood as a power capable of guaranteeing the rights of the population as well as the establishment of mutual obligations and expectations between the different

agents, the enhancement of reliability in social relationships, and increase in the flow of information (SOUZA; GIL, 2015).

In the context of the development of tourism and the formulation of public policies, studies in recent decades show that the traditional model of public administration has become a corporate model, decentralized, which shows a special interest in governance, the relationship between the different actors and administrative levels (HEALEY, 1997; BRAMWELL, 2011; HALL, 2011; SCHENKEL; ALMEIDA-GARCÍA, 2015; FAZITO; SCOTT; RUSSELL, 2016). The new tourism policy in the era of globalization seeks mainly the positioning of the tourism destinations, the quality and efficiency in tourism (FAYOS-SOLÀ, 2004; SCHENKEL; ALMEIDA-GARCÍA, 2015).

According to Buhalis and Amaranggana (2014), one of the crucial aspects for the implementation and operation of smart destinations would be the establishment of a tourism governance (public-private partnerships and the local community), with the support of the governments.

Finally, Flores (2009) describes tourism governance as a process of managing tourism destinations through coordinated and synergistic efforts of governments at the various levels and functions of the civil society that lives in the hosting communities and the private enterprises related with the operation of the tourism system.

METHODOLOGY

Characterization of the study

This research was conducted in the city of Marbella, in the province of Málaga (Spain). It is a consolidated tourism region, being the first smart tourism destination of Andalucía certified by the institution SEGITTUR.

As for the objectives, this study is an exploratory and descriptive research. Through it, we seek to integrate theoretical and practical knowledge. Thus, as reflected in its structure, the research is approached from a dual perspective: theoretical-conceptual and applied.

In order to achieve the proposed objectives, the research begins with a search and review of the literature on the theme "Smart Tourism Destinations," through recognized international journals and articles, official documents, manuals and methodologies developed in Europe and Spain. This bibliographic analysis focuses both on conceptual aspects and practical experiences. After this analysis, there is a deeper approach to the characteristics of the methodology developed by SEGITTUR for Smart Tourism Destinations, which consists in the model of interview applied to tourism agents (stakeholders). After this first conceptual-methodological part, there is a case study. To that end we start with a brief description of the area of study by resorting to documentary sources. This was supplemented by direct observation of the area of study and semi-structured interviews with the actors of tourism.

In order to advance in the construction of the concept of Smart Tourism Destinations, first of all, we consulted experts from three R&D&I institutions, on February 10 and 11, 2016, during the event Transfiere: 5th European Forum for Science, Technology, and Innovation, in the city of Málaga. Once the idea of Smart Tourism Destinations was obtained through the experts, we interviewed agents of tourism related with the city of Marbella, through a non-probability sampling by accessibility, in order know their opinions about that destination, on February 15, 16, 17, 18, 19, and 24, 2016.

A total of fourteen stakeholders were interviewed, six of which from the public sector, two agents from professional associations, three professors from the University of Málaga, and three agents of R&D&I institutions (see Table 1).

Table 1 – Interviewed Institutions

TYPE OF INSTITUTION	NAME
Public sector	1 representative of SEGITTUR
Public sector	2 officials of the Delegation of Tourism of Marbella
Public sector	2 representatives of the Delegation of Innovation and Technology of Marbella
Public sector	1 representative of the Delegation of Sustainability of Marbella
Private sector	1 representative of the Instituto Tecnológico Hotelero (ITH)
Private sector	1 representative of the Corporación Tecnológica de Andalucía (c+t=a ⁿ)
Private sector	1 representative of the company SDOS - R&D&I institution
Private sector	1 representative of the Asociación de Empresarios y Profesionales CIT Marbella
Private sector	1 representative of the Asociación de Empresarios Hoteleros de la Costa del Sol (AEHCOS)
University	2 professors of the Facultad de Turismo de la Universidad de Málaga
University	1 professor of the E.T.S.I. Informática of the Universidad de Málaga

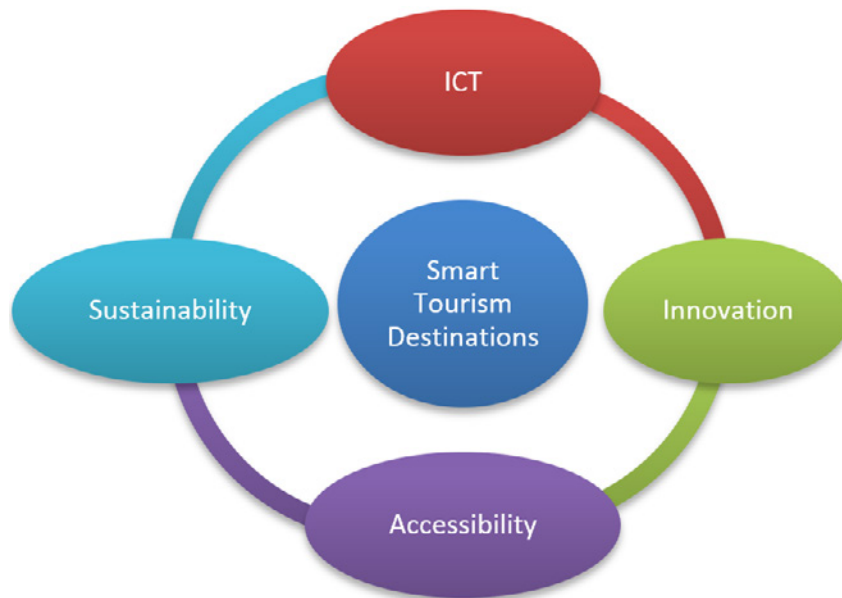
Source – Prepared by the author

The semi-structured interviews with the actors or agents of tourism were based on the axes or dimensions of Smart Tourism Destinations of SEGITTUR, as shown in Figure 2.

These axes, shown in Figure 2, are measured through the proposed variables: technology, which includes technology-based tourism information offices, free Wifi connection, applications for smartphones (Apps), Big Data, QR codes, techniques of videomapping and holography, Open data etc.; innovation, constituting new models of business management, new forms of communication, improvement of promotion and distribution, new services, improvement of marketing etc.; accessibility, through proposals for special services for people with any type of disability, children, pregnant women, sick and elderly persons, among others;

and sustainability, through efficient energy management and use of clean energy, sustainable concepts and works, and incentive of conscious tourism.

Figure 2 – Dimensions of the Smart Tourism Destinations



Source – Adapted from SEGITTUR (2013)

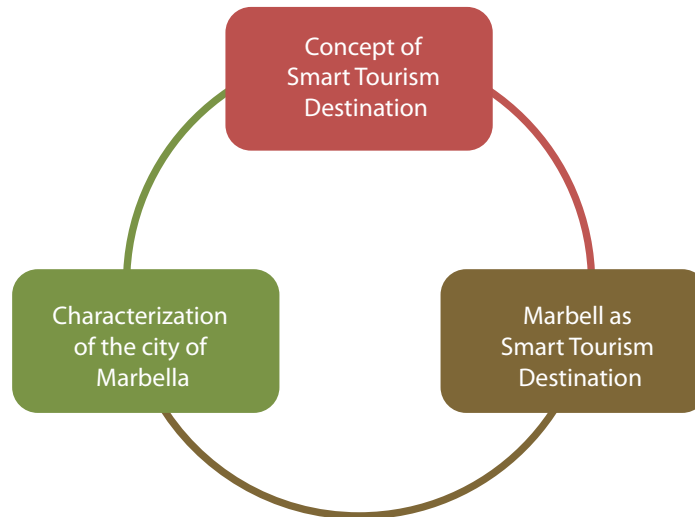
It is important to highlight that all interviews were recorded with the permission of the participants using the Olympus VN 731PC voice recorder. The audio recordings were transcribed and analyzed in their entirety, using the Express Scribe software. The ideas of the interviewees were categorized in an inductive way by means of systemic networks of ideas and thoughts, through content analysis.

According to Sampieri et al. (1998), content analysis refers to a very proper technique to analyze communication processes in different contexts, and that can be virtually applied to any form of communication. According to Bardin (1996, p. (29), content analysis concerns: “A set of techniques for analysis of communications using systematic and objective procedures of description of the content of the messages.” The purpose of this method or technique would be to make inferences of knowledge related to the conditions of production or reception, through the use of quantitative indicators or not (BARDIN, 1996).

Based on this technique, first of all, the responses of the tourism agents were transcribed and analyzed thoroughly, being segmented and encoded, allowing the construction of a table made up of four groups: Categories, Subcategories, Registry Unit, and Context Unit. The Categories column aggregates the three major themes of the interview, as shown in Figure 3. The Registry Unit column presents the text fragments that are taken as indicators of a characteristic: Subcategories. The Context Unit column collects the text parts that comprise the Registry Unit and which is thus contextualized through the responses of the stakeholders.

Sampieri et al. (1998) propose that the analysis units indicate the segments of the content of the communications that are characterized and individualized for subsequent categorization, establishment of relations, and inferences from them. “The researcher begins to encode and evaluates if the unit is appropriate for the analysis.” (SAMPIERI et al., 1998, p. 449).

Figure 3 – Categorization of interviews



Source – Prepared by the author

With respect to data reliability, emphasizing the conduct of qualitative research, the encoding:

Implies, in addition to determining experiences or concepts in segments of the data (units), making decisions as to which parts “fit together” to be categorized, encoded, classified, and grouped to form the patterns that will be employed with the purpose of interpreting the data (SAMPIERI et al., 1998, p. 449).

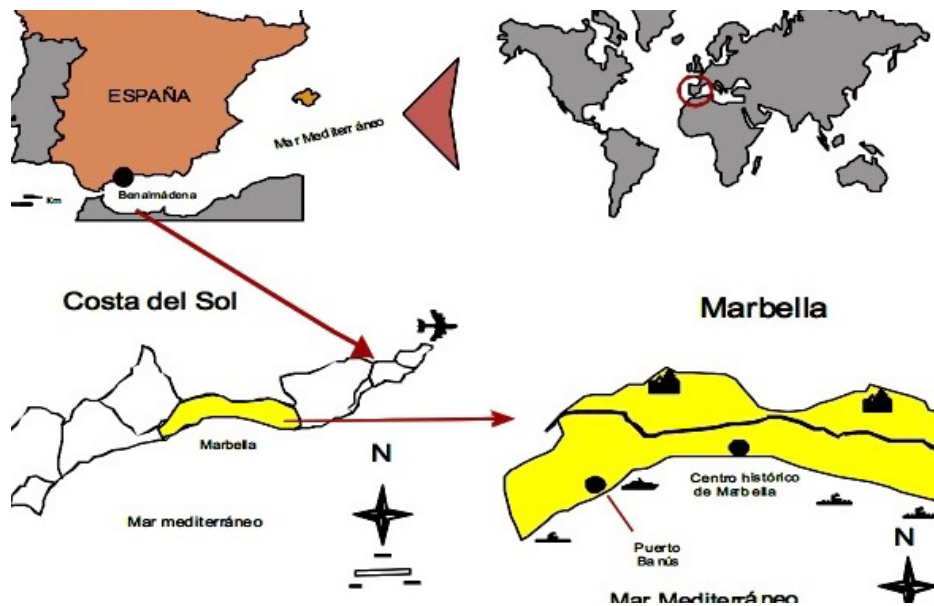
Characterization of the city of Marbella

Marbella is a city and municipality in the South of Spain, belonging to the province of Málaga, in the autonomous community of Andalucía. It is integrated in the region of the West Costa del Sol. Marbella is located on the shores of the Mediterranean, about 60 kilometers from Málaga and near the Strait of Gibraltar (Figure 4). Its municipal area occupies 117 km², and it is crossed by the highway and turnpike called Mediterráneo, main entrances to the municipality. It has West and East borders to the following municipalities: Estepona, Benahavís, Istán, Ojén, and Mijas.

With average altitude of 22 meters over the sea level, and about 27 km of beach, Marbella has a very suitable climate for tourism, due to being protected from the cold winds of the North, by the mountains of Sierra Blanca, Sierra Bermeja of Estepona, Bermeja de Ojén, Alpujata, and Mijas, forming part of the derivations of the Sierra de las Nieves.

With 139,537 inhabitants in 2015 according to the National Institute of Statistics (INE), it is the second most populous municipality of the province and the eighth of Andalucía. In addition, it is one of the most important tourism cities of the Costa del Sol and of all Spain. During most of the year, it is center of attraction for international tourism thanks mainly to its climate and tourism infrastructure. The mean hotel provision was in 2014 13,374 vacancies (INE) and 79 establishments, with four and five-star hotels.

Figure 4 - Map of Marbella



Source - Prepared by the author

RESULTS

As seen in the methodology, after the first reading of the interviews to make the analysis, we encoded parts of the transcribed responses, and three tables were prepared that encompass the Categories drawn from the interviews - 1) Concept of Smart Tourism Destination, 2) Characterization of the City of Marbella, and 3) Marbella as Smart Tourism Destination -; the Subcategories; the Registry Unit; and the Context Unit (selection of some representative answers).

Concept of Smart Tourism Destination

Regarding what is meant by the concept of Smart Tourism Destinations, most respondents highlighted four main characteristics (see Table 2): (1.1) using cutting-edge technology; (1.2) being based on good governance; (1.3) providing better quality of life to residents and meaningful experiences to visitors; and 1.4) providing a view of sustainability - economic, social, and environmental. Such responses are very close to the concepts mentioned in the theoretical framework (SEGITTUR, 2015; LÓPEZ-ÁVILA; GARCÍA, 2013).

Table 2 – Concept of Smart Tourism Destination

Categories	Subcategories	Registration unit	Context unit
1. Concept of Smart Tourism Destination	1.1 Cutting-edge technology	Use of mobile applications (App); Information management; Internet.	<i>"[...] making reservations even through smartphone and everything related to support provided by technology to access that city's tourism services."</i>
	1.2 Governance	Public-private partnerships; Participation of citizens; Transparency.	<i>"[...] We can speak of governance, focusing on technology as a tool to support smart decision-making, for sustainability."</i>
	1.3. Quality of life	Experiences to tourists; Experiences to the citizens.	<i>"[...] that these smart features are not applied only to technology and tourists, but also applied to the destination and for better quality of life."</i>
	1.4 Sustainability	Generation of work; Segmentation of tourism; Preservation of nature; Urban growth.	<i>"[...] become more sustainable from an economic point of view, from the social point of view, and from an environmental point of view, in other words that, in the end, it is technology or innovation that we apply to the destination, so this destination is more sustainable."</i>

Source – Prepared by the author

Characterization of the city of Marbella

Among the characteristics observed directly and mentioned by tourism agents, elements of Marbella's tourism system were evidenced, highlighting innovation and competitiveness, such as: consolidated and high quality tourism destination; good tourism promotion, through websites and printed materials; tourist segmentation based on luxury tourism, golf tourism, shopping tourism, and tourism of sun and beach; existence of luxury and high-luxury hotel chains; safety; existence of four well-structured ports – Puerto Deportivo Marina la Baidilla, Puerto Deportivo Cabopino, Puerto Banús, and Puerto Deportivo de Marbella. Table 3 shows the categories in detail, with the respective subcategories and contextualization of the interviews.

Table 3 – Characterization of the city of Marbella

Categories	Subcategories	Registration unit	Context unit
2. Characteristics of the city of Marbella	2.1 Luxury tourism	Shopping tourism; Golf tourism; Nautical tourism.	<i>"[...] first they have quality beaches, nautical tourism, and then above all shopping and leisure tourism." "[...] it is a destination intended, of course, for sun and beach, also having nautical tourism with its ports, and above all a shopping tourism, and, in fact, many celebrities and persons, including some from Málaga and people from surrounding areas go shopping in Marbella."</i>
	2.2 Tourism excellence	Quality tourism; Diversity of products.	<i>"[...] there are few destinations--I believe you will find none in Europe--that have everything that Marbella offers tourists and as to the level of experience, service, quality, concentration of the best golf courses in continental Europe, gastronomy, cultural aspects..."</i>
	2.3 Hotel segment	Hotel chains; Great variety of hotel establishments.	<i>"[...] tourism of Marbella is where there are more 5-star hotels, in all Andalucía."</i>
	2.4 Nature	Beaches; Climate.	<i>"[...] as we have 27 km of beaches. As for beaches, we are speaking of the province of Málaga, it is the city having more kms of beach. Much work is generated, because the beach is very active."</i>

Source – Prepared by the author

Marbella as Smart Tourism Destination

Based on the Marbella as Smart Tourism Destination category, as seen in Table 4, according to the stakeholders, it can be considered that the city is developing projects/initiatives related to the subcategories or dimensions of the SEGITTUR methodology: 3.1) technology; 3.2) innovation; 3.3) sustainability; and 3.4) accessibility. In the contextualization of the answers, they emphasized mainly technology and sustainability initiatives. In addition to these categories, some of the respondents perceive the relevance of governance for the development of the destination (BUHALIS; AMARANGGANA, 2014; FLORES, 2009).

In the field of technology, among the most important factors the implementation of ICTs in the public and corporate sectors can be highlighted. Respondents reported the existence of a communication infrastructure based on optical fiber and 4G communication, use of augmented reality, existence of Apps for mobile devices, information system, installation of beacons at tourism spots (Marbella Street iBeacon) etc.

Regarding innovation, the Marbella brand can be considered as an innovation, because it possesses a consolidated tourism image with high quality services. In addition, the municipal government has a manager group, named “Marbella Smart City,” represented by experts from three areas – legal administrative organization and management, strategic planning, and ICTs – and by municipal technicians from various sectors. However, it has been observed and detected in the reports that there is little investment in R&D&I projects – partnerships with universities and research centers –, as well as little investment in infrastructure of tourist service centers – more technology and physical space.

Table 4 – Marbella as Smart Tourism Destination

Categories	Subcategories	Registration unit	Context unit
3. Marbella as Smart Tourism Destination	3.1 Technology	Fiber optic; Marbella Street iBeacon; Information system.	<p><i>“[...] it was fostered by new communication infrastructure, based on fiber optics, deployment of 4G, coverage of virtually 99% of the municipal territory...”</i></p> <p><i>“[...] one of the things that the municipality implements, in addition to having the information presentation interface, having a system that we call Marbella Territorial Information System – SITMA, which really is a geospatial database where all aspects of the city are georeferenced, including areas of shopping, leisure, catering, hotels, etc.”</i></p> <p><i>“[...] the entrepreneurs here are aware that everyone has their product, their website, facilitated for tourists, for any country in the world...”</i></p>
	3.2 Innovation	Branding; High quality services; Manager group.	<p><i>“[...] Marbella has, I think that it is a very consolidated destination, it is also a well-known destination, above all it has a very important brand, its name, people know it worldwide, Marbella.”</i></p> <p><i>“[...] An innovation in terms of internal organization was the creation of the working group, the Marbella Smart City manager group.”</i></p>

(continues...)

Table 4 – Continuation

Categories	Subcategories	Registration unit	Context unit
3. Marbella as Smart Tourism Destination	3.3 Sustainability	Bike project;	<i>"[...] the theme of bicycles, protecting certain spaces. The Artola dunes. "In addition, we have a very interesting cultural heritage, although unknown there are archaeological sites."</i>
		Promenade: Coastal path;	<i>"[...] There are a lot of streams that ultimately end up on the beach, for example. "It happens that the infrastructure for the separation of rain water and fecal sewage, as it is a city that is 200 years old there are many areas where there is no such separation."</i>
		Energy efficiency of hotels;	
		Preservation of the beaches;	
		Land-use planning.	<i>"[...] A very good practice we have here, the most important part, the area of Málaga is still preserved the beaches with dunes. And then they are doing the conservation of all the dunes, and conservation with the eradication of invasive plants."</i>
	3.4 Accessibility	Hotel establishments;	<i>"[...] all hotels are required by the Andalusian regulations to have certain things of accessibility for users. For example, ramp for access to establishments, or rooms prepared especially for people with reduced mobility, larger shower."</i>
		Beaches.	<i>"[...] The issue of accessibility, as they are projects that are getting underway, that is access, for example, to the beaches, Marbella has them, not in all of them, but they are working on it."</i>
	3.5 SEGITTUR	Methodology;	<i>"[...] good in principle is positive. It should be gradually improved as studies advance to see what we really want. In principle it is a positive first step."</i>
		Good step.	

Source – Prepared by the author

According to the answers of the respondents and direct observation, it is observed that the city has an excellent climate, geographical location, and diversified nature – beaches and mountains. Regarding the sustainability dimension, the city develops many interesting projects, specially with respect to preservation of dunes of beaches and energy efficiency of the hotel sector. The sociocultural aspect is emphasized through the presence of a precious historic

heritage – architecture and Moorish Castle. From the point of view of human capital, it is highlighted the lack of training of customer service professionals, mainly those related with catering, markets, and other services not directly of the tourism sector. Regarding accessibility, the respondents reported the existence of accessible beaches and hotels with adequate infrastructure for guests with special needs.

The methodology of SEGITTUR, which has certified Marbella as Smart Tourism Destination, is seen by all stakeholders as a motivating factor for the promotion and development of the destination. In addition, they consider that it is a first step toward smart tourism in the city, but the adoption of indicators and effective monitoring of the initiatives implemented are essential.

Finally, regarding governance, some respondents highlighted the existence of two strategic documents of tourism, which foster innovation and sustainable development, built with the participation of the public and private sectors, and community – Plan Estratégico 2022 and Agenda Digital de Marbella. However, we observed the lack of a council of tourism in the city, and that there is no effective continuation of programs, projects, and plans of tourism.

CONCLUSIONS

This research aims to understand the view of stakeholders about the city of Marbella as smart tourism destination. Through direct observation and by conducting interviews with tourism agents, the results show that Marbella has characteristics of a smart tourism destination, because there are diversified initiatives implemented. However, in order to be configured as a Smart Tourism Destination, it would need to meet in a more comprehensive way all dimensions or axes presented by the SEGITTUR methodology.

The majority of the interviewees considered Marbella as a smart tourism destination, in initial phase, which adopts mainly technological and sustainable strategies. However, according to the literature and to the significant contribution of three professors interviewed, tourism governance is a key factor for the success of the smart destinations. As pointed out by Gretzel et al. (2015), the development of smart tourism is already underway, evolving naturally from the extensive absorption of technology in tourism. However, the systematic and widespread coordination and exchange as well as the exploitation of tourism data for the creation of value are still at an early stage.

It was observed that the SERGITTUR certification is very important for the configuration of tourism destinations as smart, but the construction of more detailed indicators or measuring instruments is needed.

It was possible to determine that, in the sphere of public policies for tourism, Marbella should carry out the implementation of the *Plan Estratégico 2022* and the execution of the *Agenda Digital*, documents of fundamental importance for the future of the city. Finally, it is suggested a participatory, comprehensive, and critical dialogue between the agents (stakeholders) with respect to the urban

growth of the city and to the sanitation of the Costa del Sol, elements of great importance for the maintenance of this destination's tourism excellence.

In conclusion, one of the main challenges for a destination to become smart is enabling the training of tourism agents with an up-to-date ICT infrastructure, and the implementation of mobile tourism services that customize the information provided in accordance with the needs of visitors (LAMSFUS et al., 2015a). On the other hand, the systemic and integrated view of the destination is essential in smart tourism – improving the quality of life of residents, innovation of tourism products, tourism governance, accessibility and sustainability, and development of information systems.

Regarding the limitations of the research, first of all, it must be considered that the interviews approached only representatives of tourism business associations, therefore not including managers of tourism companies and other types of companies.

As proposals for future lines of research, it would be interesting to carry out a quantitative study on the perception of the residents (social capital) in relation to the “smartness” of the destination. Other studies that could be developed would address concepts related with Smart Living (quality of life) and Smart Governance (participation of agents) in Marbella.

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