Vol. 1 Issue 1 ISSN: Pending...

ANALYZING TOURIST REVIEWS TO IMPROVE CULTURAL HERITAGE DESTINATION MANAGEMENT: CASE STUDY OF ALHAMBRA AND GENERALIFE IN SPAIN

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Abstract: This study aims to identify the strengths and weaknesses of a cultural heritage destination from the perspective of the visitors. The Alhambra and Generalife complex in Spain was used as a case study, and the opinions of tourists were collected from travel blogs and TripAdvisor. The methodology included content analysis using software like NVivo to identify key aspects of the tourist experience and a semantic network to graphically show strengths and weaknesses. The study was conducted at different time points to highlight the relevance of the state of conservation in the tourist experience and to assess the effectiveness of the proposed methodology in enhancing the cultural tourism experience.

The findings of the study revealed that analyzing social reviews can help managers of heritage destinations in improving their services and increasing tourist satisfaction. The weaknesses of the destination were mainly associated with the associated services (access control, security, parking, reservation and ticket purchase system, queues, signage), the maintenance of the site (some dirt is denoted), and the overcrowding that hinders the pleasant experience of the visit (crowd of people). However, the site itself and the spaces, the palaces, the gardens, and the facilities were the main strengths of the destination. The study also showed that restoration works, new booking and sale systems, and improved access controls positively affected the tourist experience. The research suggests that cultural heritage destinations should prioritize conservation and restoration efforts while simultaneously improving their services to enhance the tourist experience.

Keywords: Cultural Heritage, Tourism, Visitors' opinions, Content Analysis, Semantic Network, Satisfaction, Alhambra and Generalife.

Introduction

Since the incorporation of cultural heritage assets into the domain of consumption under the concept of cultural tourism, these have become an important factor in the development and revitalization of the economy (Camarero & Garrido, 2004). Thus, cultural heritage can now be considered as one of the main factors in the elementary activities carried out for the development of territories, since it contributes to economic growth, employment and consequently to the overall increase in wealth (Bowitz & Ibenholt, 2008; Greffe, 2004; Oppio et al., 2015; Salazar & Marques, 2005; Roders & Oers, 2011).

Cultural heritage management can be described as a general practice in which a series of internationally recognized codes and lists are continuously applied to maintain the value of cultural heritage assets for the benefit of present and future generations (McKercher & Du Cros, 2002; Guttentag, 2010).

Therefore, a key aspect in the management of cultural heritage is to understand the visitor (Poria & Gvili, 2007), and to know what satisfies them (Alaei, Becken, & Stantic, 2019) and thus ensure that they have a María Belén Prados-Peña, Ph.D., associate professor, Department of Marketing and Market Research, Campus de Cartuja, University of Granada, Granada, Spain.

Vol. 1 Issue 1 ISSN: Pending...

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satisfactory experience with the destination (Alegre & Garau, 2010). According to Poria and Gvili (2007), few studies have emphasized aspects that relate to the visitor's experience; this is an issue that, in their view, is important for the management and commercial success of cultural heritage.

Along the same line, according to Alegre and Garau (2010), the visitor must be given a satisfactory experience, so that they are motivated to return and recommend the destination. The availability of user-generated content online and new technologies has provided researchers with new ways of understanding travelers' perceptions (Alaei et al., 2019). Therefore, tourists who have access to different information, e.g., online platforms, can add their own content and share their experiences and insights (Alaei et al., 2019), for example, adding different recommendations to other travelers (Neidhardt, Rümmele, & Werthner, 2017; Ye, Zhang, & Law, 2009) that reflect emotions (O'Leary, 2011).

Considering this, analyzing and seeking social reviews help to know what tourists experience (Jung et al., 2016). Managers of these destinations can improve their services and increase tourist satisfaction (Alaei et al., 2019; Pan, MacLaurin, & Crotts, 2007).

The main objective of this study is to improve knowledge of a Spanish tourist destination based on the importance of its conservation status and on the opinions given by tourists who visit it. Their views were available on travel blogs and on digital platforms, such as TripAdvisor. The study was conducted in an admired and visited location by tourists, which is the Alhambra and Generalife complex (CMAG). Existing qualitative data and content analysis have been gathered in an attempt to detect key aspects of the tourist experience.

Literature Review

Cultural Heritage Tourism

The emergence of cultural tourism, as a social phenomenon and as an object of academic study, dates back to the growth in travel from the Second World War (Richards, 2018). From the second half of the 20th century, globalization and increases in the level of income and leisure time made it possible for more people to travel abroad and to consume different cultures (Herbert, 1995). Cultural tourism has become a popular form of tourism (Chen & Chen, 2010). It has developed from being a product aimed at historical attractions—that emphasize exhibitions and education, to a more visitor-oriented one that stresses the importance of consumer preference and the quality of the personal experience (Apostolakis & Jaffry, 2005). Cultural tourism, like other leisure and tourism activities, is now largely seen as involving experiential consumption. Therefore, the quality perceived by visitors is much more associated with their experience of the services provided during the duration of their visit (Chen & Chen, 2010). For decades, tourism has experienced continuous expansion and wide diversification to the point where it has become one of the fastest growing and most important economic sectors in the world. It also has a close relationship with international development World Tourist Organization (UNWTO, 2015b). Today, more than one billion tourists travel to international destinations every year. The United Nations World Tourism Organization expects this figure to reach 1.8 billion by 2030 (UNWTO, 2015a).

The managers of heritage sites and tourist destinations have the strategic challenge of better understanding the market and developing products that meet the needs of tourists, while at the same time finding a balance

Vol. 1 Issue 1 ISSN: Pending...

between tourism and the effective management of cultural heritage between the consumption of values extrinsic to tourists and the preservation of intrinsic values of cultural heritage (McKercher & Du Cros, 2002).

Internet

The internet has become an important communication channel, providing continuously updated information. In the Web 2.0 environment, users can act in the way they want: either traditionally or passively, simply browsing others' content, or actively, by creating and contributing their own content (Serrano-Cobos, 2016). The technological-social phenomenon that triggered the technologies associated with Web 2.0, which encourage the exchange of information between users, has been extended and expanded to include different platforms. These include blogs, social networks and virtual communities as channels or virtual social media that are gaining an increasing presence and popularity amongst tourists (Hays, Page, & Buhalis, 2012; Pan et al., 2007; Volo, 2010).

According to Alaei et al. (2019), technological changes related to the internet have revolutionized the tourism industry, for example, through the fingerprints left by all users' online activities. Through the technologies associated with the internet, tourists can access large amounts of information to help them decide where to go and what to do while they are there (Qi et al., 2009; Delgado & Davidson, 2002). With this, individual travelers or groups have greater control over the planning and customization of their trips. Not only do they interact with a wide range of online platforms and intermediaries to expand their knowledge in relation to their travels, they also share their experiences with other travelers, by leaving comments and making recommendations (Yang, Mao, & Tang, 2018; Neidhardt et al., 2017; Ye, Zhang, & Law, 2009). The information that is communicated through the internet is not limited by time or distance; it is more efficient, convenient and extensive (Litvin, Goldsmith, & Pan, 2008; Gelb & Sundaram, 2002; Gelb & Johnson, 1995). In travel blogs, the "rich" expressions of visitor travel experiences are expressed uncensored, and these provide a very cost-effective method of collecting visitor comments on tourist destinations. They also act as a quality control mechanism for service provision (Pan et al., 2017).

A virtual community is a virtual space in which users share information and experiences, generating useful content for the entire group (Wang et al., 2002). In virtual communities specific to the tourism sector, such as TripAdvisor, tourists interact with each other, providing information and opinions about their experiences of destinations, hotels, restaurants, attractions, and so on. Information and opinions from millions of tourists around the world are collected. These media constitute a credible source of information for tourists (Burgess et al., 2011).

Scope of Study

In this analysis, CMAG was selected as a heritage tourism goal. It has been shaped over more than 600 years by numerous cultures, and their interventions are still visible. The Muslim, renaissance and romantic periods have all left their mark.

The CMAG is one of the most visited sites in Spain and is very popular around the world. CMAG was designated a world heritage site in 1984. Since then, interest in it has increased. It attracts tourists from around the world. Data available for 2018 confirm the registration of 2,724,566 visitors (Consejería de Cultura y Patrimonio Histórico, Junta de Andalucía, 2018). The heritage site has a remarkable economic impact in Granada and Andalusia. In 2010, a study was carried out that quantified this impact (Suriñach & Murillo, 2013).

Vol. 1 Issue 1 ISSN: Pending...

The complex is currently divided into four zones: the Palaces, the Military Zone (or Alcazaba), the City (or Medina), and the Generalife Farm. They are surrounded by numerous gardens of different sizes. The Alhambra is universally recognized for the Courtyard of the Lions and more specifically for its Fountain, being a key and essential icon when visiting the monumental complex (Yusty Pérez, Fernández Rodríguez, Prados, & Caro Rodríguez, 2017). The restoration of the fountain and Courtyard of the Lions was accompanied by a complex communication process, characterized by its continuity over time (it started in 2002 and ended in 2012). Different broadcast media (mass media, Internet and social media and specialized media) were also used (Yusty Pérez et al., 2017).



Figure 1. General views of the previous and current state after the intervention image before and after the restorative intervention performed in the Patio de los Leones (Source: Images of the authors).

This study, when considering remediation efforts, focuses on determining the frequency of interventions conducted in the Lions Courtyard and their implications for managers and tourists.

The origin of the interventions dates from the year 2004, when a lion was withdrawn for restoration (following on from the previous phases of recognition and characterization). In 2007 a full intervention took place, when the remaining 11 lions were removed. This phase ended in July 2012. In the restoration process, the fountain and the lions were removed, leaving the empty space and no replica was made.

The pre- and post- restoration changes that have occurred over time help us determine whether restoration and heritage preservation are critical to visitors' perceptions of a place and, if so, how this may contribute to the preservation of cultural and architectural heritage.

Methodology and Data Collection

The information was collected at two different times (the first one corresponded to the period during intervention from January 2008 to June 2012 and the second one corresponded to the post-intervention period from July 2012 to May 2014). It has allowed the researchers to determine the effects of a restorative intervention on the agents involved in carrying it out and on its visitors.

Methodology

The methodology applied in this research was qualitative and quantitative. It provides an extensive insight into the opinions, insights, and experiences of tourists regarding their visit to Alhambra. In the context of tourism and its relation to the internet, data analysis, collection and cleaning, the mining process, and the subsequent evaluation and understanding of the results have been the main steps used by most researchers (Schmunk, Höpken, Fuchs, & Lexhagen, 2013; Hippner & Rentzmann, 2006).

Vol. 1 Issue 1 ISSN: Pending...

Text summary and text classification along with natural language processing (NLP) are technologies that have been used by other authors to facilitate information processing and data analysis (Cantallops & Salvi, 2014; Ghose, Ipeirotis, & Li, 2012; Pan et al., 2007; Stringam & Gerdes, 2010). Based on these assumptions, the first step was to conduct a study by collecting and analyzing comments left by tourists on travel blogs and on Trip Advisor. The analysis was conducted using different research methods: frequency analysis, semantic web analysis, and content analysis.

The software package Text Analyst was used to perform the frequency analysis based on the full text of all valid comments. The texts were codified, taking into account characteristics that contained the heritage destination, in line with the features of Cooper, Fletcher, Gilbert, Fyall, and Wanhill's (2005) tourist model. The semantic network analysis or network representation scheme is a way of representing linguistic knowledge, concepts and their interrelations via a graph. Therefore, this analysis offers a useful framework for the construction and analysis of content relating to the chosen destination. The most frequently used keywords and phrases were used to construct the semantic network diagram. The software used to perform the detailed content analysis of the data collected was the CAQDAS Nudist Vivo version 10. This also enabled the creation of a category tree (concept map) to illustrate the relationships between different categories.

The final coding scheme was completed after content analysis along two dimensions: The first was formed by various aspects of Cooper et al.'s (2005) model, and the second was based on the evaluation conducted on each of the positive or negative aspects of CMAG as a destination. To achieve this codification, each of the negative or positive aspects of the travelers' experience was evaluated and categorized to understand the strengths and weaknesses of the destination. Since neutral descriptions were very rare, they were omitted from the analysis. From a quantitative point of view, the evolution of the opinions expressed on TripAdvisor was analyzed based on its typology.

Data Collection

The sources of information in this analysis were selected travel blogs and the TripAdvisor virtual community. The term "travel blog" was entered into Google Search. The first four results were selected. Within each, 200 comments relating to the CMAG were selected. The blogs are listed below:

- (1) VIAJERED.COM (http://viajered.com/todos-los-blogs-de-viajered). This is the network of internet sites dedicated to travel. It combines professional travel magazines with first-person travel blogs. It has more than one million visitors per month. ViajeRed contains more than 200 thematic travel blogs by country and city.
- (2) LOS VIAJEROS.COM (http://www.losviajeros.com/index.php?name=blogs). This is described as a travel forum. It is divided into forums, blogs, newspapers, and photographs. In order to use the platform and write a post, participate in the forums or upload photographs about one's experiences in tourist destinations or anything to do with the tourist industry and its services, it is necessary to be registered.
- OIARIO DEL VIAJERO.COM (http://www.diariodelviajero.com). This is a publication of Weblogs SL, dedicated to the art of travelling. It contains tips, destinations, trends, accommodation recommendations, and any other matters of interest to the traveler. Established in 2005, it reviews everything a traveler would need to know about certain destinations.
- (4) VIAJEROS.COM (http://www.viajeros.com). This is the largest community of travelers in Latin America. It features travel diaries, photos, opinions, and tips.

Vol. 1 Issue 1 ISSN: Pending...

The next stage of data collection involved the selection of TripAdvisor comments. TripAdvisor was chosen because it is one of the main reference websites in sending visits to the official site of the CMAG, www.alhambra-patronato, and because Banerjee and Chua (2016) suggested that collecting data from a popular platform, such as TripAdvisor facilitates this type of research.

Trip Advisor clearly identifies the CMAG as a "world heritage site" and has classified it thus: "Type: Architectural buildings, historic places, castles; Activities: Group/day trips". It notes that the CMAG was the winner of the Travelers' ChoiceTM 2013 award, and that it is ranked number one out of 100 attractions in Granada.

The data collection was carried out at two different points, addressing two specific periods, directly related to the interventions in the Courtyard of the Lions. The first one corresponded to the period from the beginning of the intervention of the Fountain to its end in June 2012 (data were gathered from January 2008 to June 2012) and the second one corresponded to the post-intervention period to May 2014 (data were gathered from July 2012 to May 2014). Table 1 shows the number of comments based on the periods analyzed (excluding TripAdvisor, from which more data are provided later).

Table 1
Summary Data Collected.

	January 2008-June 2012	June 2012-May 2014
Total comments	248	260
Comments analyzed	215	239

For the period until June 2012, a total of 248 posts were analyzed. Of the total post, 215 concerned the experiences of the visitors in the CMAG, while 33 did not, since the bloggers were from that same town or stopped in the middle of the road before arriving at the destination.

In the period from June 2012 to May 2014, 260 blogs were examined. Of them, 21 did not contain relevant information for the same reasons as above. A total of 239 included content relating to the experiences of visitors in the CMAG. Qualitative data analysis was performed on validated blogs and with the data gathered in a file. Each blog retained its title and identification information.

Analysis of Results

Comparative Analysis

Table 2

Opinions on the Alhambra and the Generalife on TripAdvisor by Rating in the Two Study Periods

	Qualification		Total	Excellent	Very	Normal	Bad	Very bad
					good			
June	N°	comments	of 1,759	1,345	297	77	19	21
2012	Alha	ımbra						
	N^{o}	comments	of 374	250	100	22	2	0
	Gene	eralife						
May	N^{o}	comments	of 6,811	5,429	991	252	65	74
2014	Alha	ımbra						
	N^{o}	comments	of 1,665	1,172	390	89	12	2
	Gene	eralife						

Vol. 1 Issue 1 ISSN: Pending...

Source: Own elaboration based on the data provided by TripAdvisor.

If the two periods are analyzed comparatively, a growth of 287% can be observed in the total number of comments related to the Alhambra and 369% those of the Generalife. They highlight the growth in the opinions of tourists who rate the view of the Alhambra as "excellent" as it grew by 304% (16 points more than the total number of opinions in the period). However, in the case of Generalife, the "excellent" opinions with a growth of 351% are 18 points below the growth of the total opinions of Generalife.

Assessment and Classification Analysis

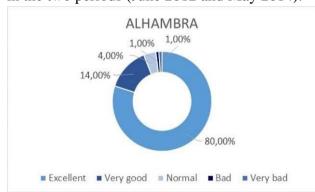
Table 3 shows the total number of opinions made by tourists on TripAdvisor in each period analyzed. It is clearly seen how the opinions that qualify the visit as "excellent" are considerably superior to the others. Table 3

Comparison 2014-2012 of the Comments on TripAdvisor Alhambra by Typology

	Qualification	Total (%)	Excellent	(%) Very	good (%)	Bad (%) Very bad
			Normal (%)		(%)	
June 2012	No comments of A	Alhambra	76	17	4	1	1
	N° comments of Ger	neralife	80	15	4	1	1
Evol.		287	304	234	227	242	252
May 2014	No comments of A	Alhambra	67.7	26.0	5.7	0.5	0.0
	N° comments of Ger	neralife	70.4	23.4	5.3	0.7	0.1
Evol.		369	351	290	305	500	

Source: Own elaboration based on TripAdvisor data.

Figures 2 and 3 show the relative distribution for the Alhambra and the Generalife collected on TripAdvisor in the two periods (June 2012 and May 2014).



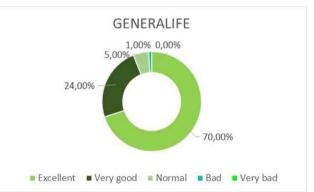


Figure 2. Relative distribution of opinions on the Alhambra and Generalife on TripAdvisor, June 2012 (Source: Own elaboration based on data provided by TripAdvisor).

Vol. 1 Issue 1 ISSN: Pending...



Figure 3. Relative distribution of opinions on the Alhambra and Generalife on TripAdvisor, May 2014 (Source: Own elaboration based on data provided by TripAdvisor).

Frequency Analysis

As mentioned previously, the analysis of blog content frequency was carried out using the software CAQDAS Nudist Vivo version 10. The subsequent analysis resulted in the construction of a table containing the most frequently used words in the blogs and TripAdvisor that is those appearing at least 38 times in the total opinions count (see Table 4).

Table 4

Most Frequently Used Words in the Travel Blogs of the Alhambra (Granada)

Word	Count	Word	Count	Word	Count
Alhambra	341	Nasrid Palace	86	Weather	68
Granada	178	Admision	Admision 83 L		51
		entry			
Gardens	153	To visit	81	Courtyard	50
Place	124	Ticket	76	History	43
Visit	122	Generalife	70	World	40
Palace	119	City	68	Hours	39

As Table 4 shows, the most used words or phrases were Alhambra (341), Granada (178), Gardens (153), Place (124), visit (122), Palace (119), Nasrid Palace (86), Admission entry (83), To visit (81), Ticket (76), Generalife (70), City (68), weather (68), Lions (51), Courtyard (50), History (43), World (40), and Hours (39).

From these data, it can be identified, which are the aspects that are most interesting to tourists. In the first place, the heritage site itself, "The Alhambra and Generalife", since in their comments and opinions they refer to Alhambra, Gardens, Place, and Generalife, mainly.

Secondly, that is Nasrid Palace, where the Courtyard and the Fountain of the Lions are located. Palace, Nasrid Palace, Lions, and Courtyard appear in their comments. Finally, aspects related to the visit. Those comments referring to admission entry, ticket, hours and those related to the capacity restriction that exists in access to the Nasrid Palaces have been considered.

Semantic Network Analysis

Figure 4 shows the semantic representation of Alhambra as a tourist destination. The frequency of words is shown in the diagram by the size and color of the circle surrounding the word. High frequency is shown as a circle with larger size and darker color, while lower frequency is shown as a circle with smaller size and

ISSN: Pending...

lighter color. The thickness of the lines in the diagram drawn between the word circles illustrates the proximity of word occurrence or the intensity of the relationship.

The analysis allows the recognition of several groups of keywords through the comments that relate to the travel experience. Figure 4 shows how the Alhambra is the most outstanding group and therefore it can be considered the main tourist attraction in the city of Granada with which a clear and broad relationship is established.

Regarding its relationship with Granada, as another of the outstanding clusters in relation to the Alhambra, it is worth mentioning the reference that tourists make to hotels, prices, and souvenir shops.

Secondly, the group formed by the set of spaces that can be visited in the Alhambra and the experiences of tourists stands out. It is observed that the most important group associated with places is the palaces, the splendid patios, and the beauty of the Generalife.

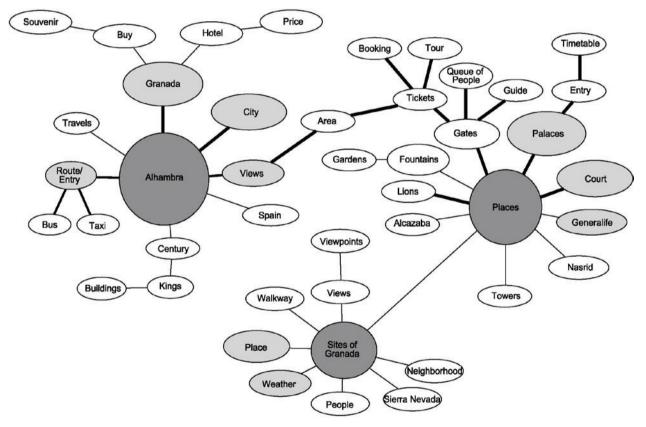


Figure 4. Semantic network of the Alhambra travel experience (Source: Nudist Vivo Version 10 if a figure is being reproduced from another source).

Although, in the comments, references to the sources can be found in their relation to the gardens, the courtyard and the fountain of the Lions, the Alcazaba, and the doors, such as the Wine, Comares and Justice doors, especially.

In relation to the gates, once their beauty has been described, some comments relate to aspects associated with the queues that must be done to enter Palacios as well as to buy tickets if this has not been done previously.

The hiring of guides is recommended in some cases, although the audio guides are also positively valued.

Vol. 1 Issue 1 ISSN: Pending...

As for the Palaces, the tourists, the comments of the tourists leave a clear reflection of the restrictions that exist due to the limited capacity and the importance of respecting the established schedule for entry.

In relation to the Palaces, and especially Palace of the Lions, it stands out the references to the restoration of the Fountain of the Lions, which many tourists considered the most important site of the Alhambra before and after the restoration.

Finally, the third group of words is related to the sites of Granada. As can be seen in Figure 4, what most attracts the attention of tourists and therefore usually recommend are other interesting places during the visit to Granada, as well as comments related to the city's weather. Regarding this last aspect, the opinions are diverse, depending on the time of year in which they made the visit.

Other groups of words, which although less important than the previous ones, but noteworthy are references to views and viewpoints, especially those of neighboring Albaicín, not forgetting Sierra Nevada and the friendliness of the people.

Content Analysis

With regard to content analysis (May 2014), a total of 355 positive and negative sentences were identified. Of these, 273 were positive and 82 were negative. Therefore, positive mentions accounted for 77% of total travel blog content versus 23% negative mentions. Thus, Table 5 shows that the attractions of the Alhambra were the main source of positive opinions held by tourists in relation to the CMAG in general (97% positive sentences), followed by opinions about courtyards, gardens and fountains, not forgetting the good work of audio and human guides.

It is necessary to highlight the positive opinions held by visitors of the process of conservation and restoration of the monument, especially of the Courtyard of the Lions, and of the management of ticket collection and the city of Granada itself (especially neighborhoods, such as Albaicín).

Therefore, the analysis of Table 5 allows us to identify the main strengths and weaknesses of the tourist destination of Monumental Complex of the Alhambra and the Generalife, post-restoration of the Fountain of Lions and the Courtyard of the Lions. As for the fortresses, the following stand out: the heritage site (general features), the gardens and the fountains (especially that of the lions), the audio guides and guides, the surroundings, the accesses, the state of conservation, making special reference to the Courtyard of the Lions and the surroundings.

As for the weaknesses, the maintenance of the spaces, parking, crowding, signage, the night visit and the acquisition of tickets. It is important to note that regarding the acquisition of tickets, even though it is still a problem for tourists, the reason is different. In this period, the problem is the difficulty of finding tickets available, especially for access to Nasrid Palaces, not the system of booking and buying tickets (it was changed by the managers). The Nasrid Palaces have a limited capacity of 300 people every half hour for conservation reasons. This is perceived by tourists as a strong weakness of the destination.

On the other hand, the night visit is still a weakness, due to the poor lighting and in some cases due to the short time to enjoy it.

Table 5
Percentage of Positive and Negative Sentences in the Comments Analyzed (May 2014)

	0			, ,	
Categories	Positive	Negative	Total	Positive	Negative
				sentences	sentences
				(%)	(%)

Vol. 1 Issue 1 ISSN: Pending...

Night visit	0	2	2	0	100
Directions and access	s 9	5	14	64	36
Alhambra					
Gardens/flowers/fountains	42	1	43	98	2
Maintenance/dirt	0	1	1	0	100
Crowd	0	19	19	0	100
Parking	0	2	2	0	100
Staff	1	5	6	17	83
Little information/signage	0	3	3	0	100
Price	0	2	2	0	100
Collection	f 13	2	15	87	13
bonuses/tickets/tours					
Sales system	7	10	17	41	59
box office	0	8	8	0	100
Tickets/schedule	0	5	5	0	100
Shading	0	2	2	0	100
Granada tourist train	0	1	1	0	100
Table 5 to be continued					
Visits	0	3	3	0	100
Audio guides-guides	21	0	21	100	0
Alhambra concert	2	0	2	100	0
Conservation and restoration	5	0	5	100	0
PAG general features	149	4	153	97	3
Water	2	0	2	100	0
Science park	1	0	1	100	0
Generals	11	4	15	73	27
Neighborhoods/zones	7	0	7	100	0
Circulation	0	1	1	0	100
Communication/bus	1	0	1	100	0
Hotels/restaurants/tapas	3	3	6	50	50
Total	273	82	355	77	23

Finally, Table 6 shows the coding of categories and number of positive and negative sentences for each category based on the data selected in the period prior to July 2012.

Vol. 1 Issue 1 ISSN: Pending...

Table 6
Percentage of Positive and Negative Sentences in the Comments Analysed (June 2012)

Categories	Positive	Negative	Total	Positive	Negative
				sentences (%)	sentences (%)
Schedule	5	17	22	23	77
Headphones-guides	9	13	22	41	59
Tickets-queues	7	17	24	29	71
Reservation system	4	13	17	24	76
PAG generals	44	18	62	71	29
Access control	0	9	9	0	100
Security guards	0	3	3	0	100
Travel agency	1	6	7	14	86
Indications-signaling	2	10	12	17	83
Dirt	0	13	13	0	100
Parking	0	7	7	0	100
Staff	2	4	6	33	67
Transport	8	3	11	73	27
Crowd of people	0	16	16	0	100
Plays	0	7	7	0	100
Price	0	7	7	0	100
Gardens	54	16	70	77	23
Seasons of the year	5	6	11	45	55
Night visit	5	13	18	28	72
Alhambra Museum	0	1	1	0	100
Museum of Fine Arts	1	0	1	100	0
Store	3	0	3	100	0
Palaces	4	0	4	100	0
Installations	16	0	16	100	0
Pomegranate	30	7	37	81	19
Total	200	206	406	49	51

As can be seen in Table 6, the weaknesses of the destination, related to the negative aspects, are especially associated with the associated services (access control, security, parking, reservation and ticket purchase system, queues, signage), the maintenance of the site (some dirt is denoted) and the overcrowding that hinders the pleasant experience of the visit (crowd of people). Regarding the fortresses, as shown in Table 6, the site itself and the spaces, the palaces, the gardens and the facilities stand out.

Comparing both periods, it can be seen that some weaknesses identified in the previous period continue to exist although others have disappeared or have changed, such as the acquisition of tickets. The strengths are generally reinforced and others appear, as already mentioned.

During this period, from the tangible point of view, the restoration works of the Patio de los Leones are finished in addition to completing the restoration works on the Courtyard of the Lions; the managers of the Monumental Complex had launched a series of actions that were improving some aspects of the destination.

Vol. 1 Issue 1 ISSN: Pending...

Among others, the implementation of a new system of booking and sale of tickets, a new website, new access controls, that improved the destination's intangible services.

In consideration of the two periods analyzed, the increase in the total number of positive sentences in the time after the restoration with respect to the previous period is highlighted (77% vs. 49%); a considerable decrease is observed in negative comments, falling from 51% in the first period to 23% in the subsequent one.

It is important to highlight the category "works"; in the first period, this was associated with 100% of the negative sentences, while in the second period, it disappeared coincident with the restoration of the Fountain of the Lions; the category "conservation and restoration" received 100% positive sentences.

Conclusions

This study has shown how the content analysis of the comments made by tourists on travel blogs and on TripAdvisor is a good starting point for managers of tourist destinations, particularly heritage destinations, to detect threats and weaknesses. The content analysis allows us to perform a frequency analysis, sentiment analysis and build the semantic network. In the first place, the frequency analysis makes it possible to identify those aspects that have most attracted the attention of visitors, either related to the development of the visitor to the heritage site. Secondly, sentiment analysis shows us as they are valued by tourists (positively or negatively) and finally the analysis of the semantic network shows us the relationship between the most valued aspects, clearly marking their importance by the size of the nodes and by the thickness of the lines that join them.

From the analysis carried out, the researchers can establish and analyse the characteristics of tourist demand, to identify its weaknesses and strengths.

Our results clearly show that visitors value the state of conservation of the heritage destination, so the conservation and preservation of heritage can lead to high levels of satisfaction, as pointed out by Alazaizeh, Hallo, Backman, Norman, and Vogel (2016).

Our findings have identified that certain weaknesses perceived by visitors are due to restrictions caused by conservation reasons, as in our case study, the lighting of the night visit to the Nasrid Palaces. Since they are problems with difficult solutions for conservation reasons, managers must design an appropriate communication strategy that generates awareness and knowledge on the part of the tourist in order to minimize criticism in this regard. It is clear that the beauty of the Nasrid Palaces is a great magnet for tourists, but also other spaces appear as strengths of the destination, such as the gardens and the Generalife. Therefore, those responsible for the destination, must enhance these spaces that decongest the Palaces, through again an adequate communication strategy and an adequate design of the tourist/cultural product. Moreover, since the enclave and the sites of Granada are mentioned and valued positively by tourists, the establishment of routes linking the Monumental Complex with the city can minimize the dissatisfaction of not getting the desired entrance to the Palaces. In the case of Night Visit, the lighting cannot be increased for conservation reasons, avoiding the light pollution that would give particularly fragile spaces, such as the Nasrid Palaces. Again, it is necessary for wealth managers to carry out an appropriate communication strategy, which informs and builds awareness and knowledge of this in current and future visitors.

Cultural heritage has become one of the strongest competitive factors in choosing a travel destination. There has been greater demand for cultural experiences and mobilization of cultural heritage to attract tourists (Bowitz & Ibenholt, 2008). The management and enhancement of cultural heritage has become strategically

Vol. 1 Issue 1 ISSN: Pending...

important. This study shows that tourists pay attention to strengths and weaknesses in their comments, which provide useful information for tourism facility managers.

The information provided by this type of analysis is of great interest to the managers of the tourist destination, since it allows them to know those aspects of the destination that generate satisfaction or dissatisfaction in their visitors; and from there, establish improvement actions and carry out more efficient management. Better management will help make it more competitive, in line with Ye et al. (2009), Choi, Lehto, and Morrison (2007) and sustainable, in line with Roders and Oers (2011).

According to KEA European Affairs (2020), the COVID situation will oblige managers to collaborate and find ways to pool resources and creativity to propose viable and sustainable alternatives. The pause at this moment offers the possibility of sketching a new way forward in the years to come (Ioannides & Gyimóthy, 2020). Post-crisis management is the opportunity to address actions in which knowledge of technology and in particular the growth of digital networks is opportunities that allow managing and overcoming the current situation. This offers the possibility of taking advantage of the distribution network of the transmission platforms, putting users and managers in contact, favoring a more collaborative approach.

A survey conducted by UNESCO (2020) exposes the usefulness of working to promote the exchange of knowledge even when the mobility of academics, researchers, cultural professionals, and artists is restricted. This particular study shows the possibility for citizens to engage in a dialogue about history and tradition, share similar and diverse experiences on the same heritage space, an issue that in the face of the pandemic is recognized as an opportunity to connect with the heritage of vital importance.

Along these lines, this article presents a clear example of the usefulness that user participation, through their opinions, can offer in the field of tourist destination management, allowing to know the suitability of certain actions. From the point of view of the management of tourist destinations, there is undoubtedly a pressing need to make large investments in the future; in particular to remedy the devastating economic impacts of the pandemic, this is not entirely possible without ensuring that they are also incorporated, the concepts, experiences and teachings of the past.

Acknowledgments

This work was supported by the WARMEST Program for Research and Innovation Horizon 2020 Marie Curie Research and Innovation Staff Mobility Project. RISE-2017 was carried out under the auspices of Research Groups ADEMAR, RNM 0179 and HUM 629 of the Junta de Andalucía and UCE-PP2018-01 of University of Granada. WARMEST MSC-RISE-H2020 project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie, grant agreement # 777981

Conflict of Interest The authors declare that they have no conflict of interest.

References

Alaei, A. R., Becken, S., & Stantic, B. (2019). Sentiment analysis in tourism: Capitalizing on big data. *Journal of Travel Research*, 58(2), 175-191.

- Alazaizeh, M. M., Hallo, J. C., Backman, S., Norman, W., & Vogel, M. (2016). Value orientations and heritage tourism management at Petra Archaeological Park, Jordan. *Tourism Management*, *57*, 149-158. Retrieved from https://doi.org/10.1016/j.tourman.2016.05.008
- Alegre, J., & Garau, J. (2010). Tourist satisfaction and dissatisfaction. *Annals of Tourism Research*, 37(1), 52-73.
- Apostolakis, A., & Jaffry, S. (2005). A choice modeling application for Greek heritage attractions. *Journal of Travel Research*, 43(3), 309-318.
- Banerjee, S., & Chua, A. Y. (2016). In search of patterns among travelers hotel ratings in TripAdvisor. *Tourism Management*, 53, 125-131.
- Bowitz, E., & Ibenholt, K. (2008). Economic impacts of cultural heritage: Research and perspectives. *Journal of Cultural Heritage*, 10(1), 1-8.
- Burgess, L., Parish, B., & Alcock, C. (2011). To what extent are regional tourism organisations (RTOs) in Australia leveraging the benefits of web technology for destination marketing and eCommerce? *Electronic Commerce Research*, 11(3), 341-355.
- Camarero, C., & Garrido, M. J. (2004). *Marketing del patrimonio cultural*. Madrid: Pirámide.
- Cantallops, A. S., & Salvi, F. (2014). New consumer behavior: A review of research on eWOM and hotels. *International Journal of Hospitality Management, 36*, 41-51.
- Chen, C. F., & Chen, P. C. (2010). Resident attitudes toward heritage tourism development. *Tourism Geographies*, 12(4), 525-545.
- Choi, S. X., Lehto, Y., & Morrison, M. A. (2007). Destination image representation on the web: Content analysis of Macao travel related websites. *Tourism Management*, 28(1), 118-129.
- Consejería de Cultura y Patrimonio Histórico, Junta de Andalucía. (2018). Porcentaje de personas usuarias de la Red por centro y tipo de visita. Retrieved September 16, 2019, from https://www.juntadeandalucia.es/cultura/estadisticas_cultura/operaciones/consulta/anual/14966?Cod Oper=b3_893&codCons ulta=14966
- Cooper, C., Fletcher, J., Gilbert, D., Fyall, A., & Wanhill, S. (2005). *Tourism: Principles and practice*. London: Pearson Education.
- Delgado, J. A., & Davidson, R. (2002). Knowledge bases and user profiling in travel and hospitality recommender systems. In K. W. Wöber, A. J. Frew, and M. Hitz (Eds.), *Proceedings of the 9th International Conference on Information Technologies in Tourism (ENTER 2002)* (pp. 1-16). Heidelberg: Springer.

- Folinas, S., & Metaxas, T. (2020). Tourism: The great patient of coronavirus COVID-2019. *MPRA Paper No.* 99666. Retrieved from https://mpra.ub.uni-muenchen.de/99666/1/MPRA_paper_99666.pdf
- Gelb, B. D., & Sundaram, S. (2002). Adapting to "word of mouse". Business Horizons, 45(4), 21-25.
- Gelb, B., & Johnson, M. (1995). Word-of-mouth communication: Causes and consequences. *Journal of Health Care Marketing*, 15(3), 54-84.
- Ghose, A., Ipeirotis, P. G., & Li, B. (2012). Examining the impact of ranking on consumer behavior and search engine revenue. *Management Science*, 60(7), 1632-1654.
- Greffe, X. (2004). Is heritage an asset or a liability? *Journal of Cultural Heritage*, 5(3), 301-309.
- Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management*, 31(5), 637-651. Retrieved from https://doi.org/10.1016/j.tourman.2016.05.008
- Hays, S., Page, S., & Buhalis, D. (2012). Social media as a destination marketing tool: Its use by national tourism organisations. *Current Issues in Tourism*, 16(3), 211-239.
- Herbert, D. T. (1995). Heritage, tourism and society. London: Mansell.
- Hippner, H., & Rentzmann, R. (2006). Text mining. Informatik-Spektrum, 29(4), 287-290.
- Ioannides, D., & Gyimóthy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, 22(3), 624-632, doi:10.1080/14616688.2020.1763445
- Jung, T. H., Dieck, M. C., Lee, H., & Chung, N. (2016). Effects of virtual reality and augmented reality on visitor experiences in museum. In A. Inversini and R. Schegg (Eds.), *Information and communication technologies in tourism* (pp. 621-635). Cham, Switzerland: Springer.
- KEA European Affairs. (2020). The impact of the COVID-19 pandemic on the cultural and creative sector. Retrieved from https://keanet.eu/wp-content/uploads/Impact-of-COVID-19-pandemic-on-CCS_COE-KEA_26062020.pdf.pdf
- Khazami, N., Lakner, Z., & Nefzi, A. (2020). Pandemic and tourism: Re-preparation of tourism post COVID-19. *Journal of Hotel and Business Management*, 9(2), 198-203.
- Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism management*, 29(3), 458-468.
- Lloréns, J. A. (2020). Rethinking the study of intangible cultural heritage during COVID-19. Retrieved from https://www.researchgate.net/publication/342547024

- McKercher, B., & Du Cros, H. (2002). Cultural tourism: The partnership between tourism and cultural heritage management. New York: Haworth Hospitality Press.
- Neidhardt, J., Rümmele, N., & Werthner, H. (2017). Predicting happiness: User interactions and sentiment analysis in an online travel forum. *Information Technology & Tourism*, 17(1), 101-119.
- O'Leary, D. (2011). The use of social media in the supply chain: Survey and extensions. *Intelligent Systems in Accounting, Finance and Management, 18*(2-3), 121-144.
- Oppio, A., Bottero, M., Ferretti, V., Fratesi, U., Ponzini, D., & Pracchi, V. (2015). Giving space to multicriteria analysis for complex cultural heritage systems: The case of the castles in Valle D'Aosta Region, Italy. *Journal of Cultural Heritage*, 16(6), 779-789.
- Pan, B., MacLaurin T., & Crotts, J. C. (2007). Travel blogs and the implications for destination marketing. *Journal of Travel Research*, 46(1), 35-45.
- Poria, Y., & Gvili, Y. (2007). Heritage site websites content: The need for versatility. *Journal of Hospitality* & *Leisure Marketing*, 15(2), 73-93.
- Qi, C. X., Gibson, H. J., & Zhang, J. J. (2009). Perceptions of risk and travel intentions: The case of China and the Beijing Olympic Games. *Journal of Sport & Tourism*, 14(1), 43-67.
- Qiu, R. T. R., Park, J., Li, S., & Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, 84(C), 102994. Retrieved from https://doi.org/10.1016/j.annals.2020.102994
- Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36(September), 1-24. doi:10.1016/j.jhtm.2018.03.005
- Roders, A. P., & Oers, R. (2011). World heritage cities management. *Facilities*, 29(7/8), 276-285. doi:10.1108/02632771111130898
- Salazar, S. D. S., & Marques, J. M. (2005). Valuing cultural heritage: The social benefits of restoring and old Arab tower. *Journal of Cultural Heritage*, 6(1), 69-77.
- Schmunk, S., Höpken, W., Fuchs, M., & Lexhagen, M. (2013). Sentiment analysis: Extracting decision-relevant knowledge from UGC. In L. Cantoni and Z. Xiang (Eds.), *Information and communication technologies in tourism* (pp. 253-265). Heidelberg, Berlin: Springer.
- Serrano-Cobos, J. (2016). SEO: Introducción a la disciplina del posicionamiento en buscadores. Barcelona, Spain: Editorial UOC.
- Stringam, B. B., & Gerdes, J. (2010). An analysis of word-of-mouse ratings and guest comments of online hotel distribution sites. *Journal of Hospitality Marketing and Management*, 19(7), 773-796.

- Suriñach, J., & Murillo, J. (2013). Estudio del impacto económico del Conjunto Monumental de la Alhambra y Generalife (CMAG) sobre la ciudad de Granada. Retrieved from http://www.ub.edu/aqrlab/estudio-del-impacto-economico-del-conjunto -monumental-de-la-alhambra-generalife-cmag-sobre-la-ciudad-de-granada-p-49-es
- UNESCO. (2020). Culture & COVID-19. Impact & Response Tracker (2020). Issue 3. Retrieved from https://en.unesco.org/news/culture-covid-19-impact-and-response-tracker (accessed on 1 October 2020)
- UNWTO. (2015a). UNWTO tourism highlights, edition 2015. Retrieved September 16, 2019, from https://www.e-unwto.org/doi/pdf/10.18111/9789284416899
- UNWTO. (2015b). Panorama OMT del turismo internacional. Retrieved from https://www.e-unwto.org/doi/pdf/10.18111/9789284416875
- Volo, S. (2010). Bloggers' reported tourist experiences: Their utility as a tourism data source and their effect on prospective tourists. *Journal of Vacation Marketing*, 16(4), 297-311. Retrieved from https://doi.org/10.1177/1356766710380884
- Wang, Y., Yu, Q., & Fesenmaier, D. R. (2002). Defining the virtual tourist community: Implications for tourism marketing. *Tourism Management*, 23(4), 407-417.
- Ye, Q., Zhang, Z., & Law, R. (2009). Sentiment classification of online reviews to travel destinations by supervised machine learning approaches. *Expert systems With Applications*, 36(3), 6527-6535.
- Yang, Y., Mao, Z., & Tang, J. (2018). Understanding guest satisfaction with urban hotel location. *Journal of Travel Research*, 57(2), 243-259.
- Yusty Pérez, C., Fernández Rodríguez, A., Prados, B., & Caro Rodríguez, E. (2017). La difusión como estrategia de valoración de la intervención en el Patio y Fuente de los Leones: Un mensaje, varios canales. *Cuadernos de La Alhambra*, (46), 244-259.