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Research Paper

A methodology for a comparative analysis of the lodging offer of tourism destinations based on online customer reviews

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ABSTRACT

The objective of this paper is to develop a practical methodology to analyze competitor tourism destinations on the basis of their lodging offer and the perceived value concept. To implement this methodology, an empirical study of five competitor destinations was carried out using customer evaluations of lodging companies available on the Booking.com website. Today, online customer opinions and the development of practical methodologies to analyze tourism destinations are essential elements in designing a competitive strategy. The results show that the methodology proposed can contribute to managing tourism destinations and to analyzing the level of competitiveness of the lodging offer. Likewise, three hypotheses are formulated to determine the factors related to perceived value. The results reveal that the application of the methodology is practical and directly related to customers' real feelings because it is based on their online evaluations.

1. Introduction

The competitiveness of tourism destinations provides the basis for consolidating and achieving the economic, environmental, and social objectives of the communities involved (Hassan, 2000). The objectives must focus on the combined sustainability of companies' resources, capabilities, infrastructures, and performance (Beritelli, Bieger, & Laesser, 2007; Choi & Sirakaya, 2006; Farrell & Twining-Ward, 2004; Rodríguez-Díaz & Espino-Rodríguez, 2008), and effective governance of a tourism destination is necessary in order to obtain sustainable competitiveness with other destinations focused on similar market segments (Dwyer & Kim, 2003; Gomezelj & Mihalic, 2008; Pike & Page, 2014; Sheehan & Ritchie, 2005). To achieve the objectives formulated, Bornhorst, Ritchie, and Sheehan (2010) establish that a destination Management organization (DMO) is developed to facilitate the management and leadership of tourism destinations. Normally, tourism governance has been decentralized, but today, coordination between the DMO and the stakeholders involved in managing the destinations' resources is the key to achieving the destination's objectives and competitiveness (Blain, Stuart, & Ritchie, 2005). In this context, the role of the DMO is to design the destination's strategy by identifying the market segments, image, communication, branding, positioning, and promotion activities. To carry out these functions, it is necessary to analyze strategic information and develop methodologies that can determine the best competitive decisions (Pike & Page, 2014), taking into account the rapid surge in the use of the Internet, which increases the consumer's empowerment and implies a new challenge for destination and

hospitality managers (Ayeh, Au, & Law, 2016; Torres, Singh, & Robertson-Ring, 2015).

Competitiveness is also based on the capacity to obtain a high perceived value of the destination as a whole, and for each resource individually, such as the lodging offer, by integrating and planning the activities of the stakeholders involved (Fornica & Kothari, 2008). The concept of value has been extensively studied in the research on services marketing and quality management as a source of competitive advantage (Barney, 1991; Grant, 1991; Grönroos, 2007; Holbrook, 1994; Naumann, 1995; Parasuraman, Zeithaml, & Berry, 1988; Payne & Frow, 2005; Porter, 1980; Rust & Oliver, 1994). In destinations, perceived value has been studied from different perspectives, such as the environment (Esparon, Stoeckl, Farr, & Larson, 2015), image (Jin, Lee, & Lee, 2013; Tang & Jang, 2014), motivation and involvement (Prebensen, Woo, Chen, & Uysal, 2012), and the lodging offer (Rodríguez-Díaz, Espino-Rodríguez, & Rodríguez-Díaz, 2015). The lodging industry is a core resource for destinations' competitiveness (Rodríguez-Díaz & Espino-Rodríguez, 2008) because it has a direct influence on customers' decisions about destinations. Value in lodging has been studied in relation to websites (Jeong, 2002), co-production versus co-creation (Chathoth, Altinay, Harrington, Okumus, & Chan, 2013), the relationship between consumer reviews and the booking transaction value (Torres et al., 2015), and competitive positioning in a destination (Rodríguez-Díaz et al., 2015). However, the lodging offer has not yet been studied from the perspective of perceived value and competitiveness between destinations, even considering the databases

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available on websites dedicated to gathering online customer evaluations, such as Booking.com, Tripadvisor, Holidaycheck, Expedia, etc (Hu, Liu, & Zhang, 2008; Yacouel & Fleischer, 2012; Ye, Li, Wang, & Law, 2014).

A tourism destination is an open system with a competitive offer to attract customers based on its resources, infrastructures, supply chain, lodging, and complementary offer, such as restaurants, shopping centers, thematic parks, culture, history, and so on (Rodríguez-Díaz & Espino-Rodríguez, 2008). The aim of this study is to develop a methodology to specifically analyze the competitiveness of the lodging offer of tourism destinations, based on the perceived value concept. The main problem is obtaining reliable and valid data from customers. Currently, some websites allow clients to express their opinions and evaluate the lodging offer, such as TripAdvisor, HolidayCheck, Booking.com, and Expedia, among others. These sources provide important information because they show the most recent, direct, and realistic evaluations. Once the data are collected, the next step is to analyze the reliability and validity of the scales used in the websites. This new academic and research challenge is the first task of this paper. Thus, three hypotheses are tested to determine the relationship between the quality, price, and category of the lodging, and the value perceived by customers. According to Bagozzy (1996), validating these hypotheses makes it possible to determine the predictive validity of the scale used in the statistical analysis. The information is obtained from the Booking.com because it is one of the most important websites with reviews of actual customers. The destinations studied are competitors all year round, and they especially focus on sun and beach tourism. Three are in the Canary Islands (Gran Canaria, Tenerife, and Fuerteventura) in Spain, one is in Morocco (Agadir), and the other is in Egypt (Sharm El-Sheikh). In sum, the objectives of the paper are: (1) to develop a methodology to analyze the competitiveness of tourism destinations based on the lodging offer and the information extracted from the website of Booking.com; (2) to test the reliability and validity of the information available on Booking.com to determine whether the data are useful for the methodology proposed; and (3) to validate three hypotheses, in order to establish the relationships between the value perceived by the customer and the quality, price, and category of the lodgings in the destination analyzed. The study begins with a literature review and the formulation of the hypotheses. Then, the research methodology is presented. In the following section, the results obtained are shown in three parts. First, a means analysis is carried out in order to determine the discrimination capacity of the variables used in the study. Second, a comparative analysis between destinations is conducted through the Scheffé test; and third, a structural analysis PLS is applied to test the hypotheses formulated. Finally, the main conclusions and future lines of research are described.

2. Literature review and hypotheses

A tourism destination is a complex, open system composed of interconnected resources and capabilities and focused on achieving sustainable competitiveness (Buhalis, 2000; Farrell & Twining-Ward, 2004; Haugland, Ness, Gronseth, & Aarstad, 2011; McKercher, 1999; Murphy, Pritchard, & Smith, 2000; Rodríguez-Díaz & Espino-Rodríguez, 2008). Different individual actors are involved in such a way that their combined successes and strategies determine the competitiveness of the destination (Beritelli et al., 2007; Hassan, 2000). The stakeholders play a critical role in obtaining the individual and collective objectives (Aas, Ladkin, & Fletcher, 2005; Bornhorst et al., 2010; Byrd, Cárdenes, & Greenwood, 2008; Enright & Newton, 2004; Gomezelj & Mihalic, 2008; Rodríguez-Díaz & Espino-Rodríguez, 2008; Sheehan & Ritchie, 2005), and the DMO integrates and coordinates all the decisions affecting the destination's overall competitiveness (Bornhorst et al., 2010; Pike & Page, 2014). Therefore, the competitiveness of all the elements in the system and their interrelationships will establish the general competitiveness of the destination. According to

Fornica and Kothari (2008), the competitiveness of a destination must be based on the ability to create a high perceived value through effective management of the resources and capabilities and the integration of the individual interests of stakeholders. Moreover, the interrelations among resources must focus on developing relational capabilities in order to generate synergies that enhance the performance of companies and organizations in the destination (Dyer & Singh, 1998; Rodríguez-Díaz & Espino-Rodríguez, 2006, 2008).

The American Marketing Association (AMA) (2013) introduces the value concepts in the definition of marketing, establishing that the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings have value for customers, clients, partners, and society at large. Woodruff (1997) states that value should not be understood only from the perspective of customers because this view is too narrow to create value in firms. Ngo and O'Cass (2009) differentiate between the value-in-offering, from the perspective of the firm, and value-in-use, associated with the value perceived by customers. Therefore, the aim should be to create higher value from both perspectives. Nevertheless, customer evaluation provides basic feedback with which to analyze the firm's decisions and evaluate the performance obtained. Recently, online customer reviews have created a new source of information for tourism researchers and practitioners (Mudambi & Schuff, 2010; Ye et al., 2014). In the services industry, third-party websites are a powerful way to evaluate customers' perceptions of service quality and perceived value (Hu et al., 2008; Pantelidis, 2010; Ryu & Han, 2010; Vermeulen & Seegers, 2009; Zhang, Ye, Law, & Li, 2010). They are also a useful way to improve competitiveness and determine the price strategy of hotels (Ye et al., 2014). To the extent that the analysis of online customer reviews about perceived value and service quality focuses on the collective offer of lodgings in a destination, it is possible to develop a market tool for the management of destinations (Rodríguez-Díaz et al., 2015).

The academic literature establishes that the concept of value is subject to the perceptions and attitudes of customers, and it is fundamental in determining the competitive strategy in the service industry (Anderson & Narus, 1998). Value has been studied by different authors. Holbrook (1994, p.27) defines value as 'a relativistic (comparative, personal, situational) preference characterizing a subject's experience of interacting with some object'. Zeithaml (1988) determines four perspectives of the value concept: low price, what a customer wants in a product; the quality obtained by a customer for the price paid; and, finally, what a customer gets for what he gives. According to Rust and Oliver (1994, p.10), 'value is formed from perceived quality in combination with price'. Therefore, the value concept is related to the utility produced by the quality of the service (Oliver, 1997; Parasuraman et al., 1988) and the disutility generated by the price (Naumann, 1995). In this study, we use the concept of value perceived by the customer once the variable has been measured by Booking.com. From the tourism perspective, Prebensen et al. (2012, p.254) establish that the perceived value is 'the process by which a tourist receives, selects, organizes, and interprets information based on the various experiences at the destination, to create a meaningful picture of the value of destination experience'. Therefore, the perceived value (PV) by customers for each individual lodging or the joint offer of destinations can be measured in relation to the service quality (Q) and the price (P) through the following utility function:

$$Utility\ PV = Utility(Q/P)$$

Different methods have been proposed to measure perceived value (Lambert & Burdugoglu, 2000; Rust & Oliver, 1994; Sweeney & Soutar, 2001). One critical aspect was the identification of the relationships among service quality (Parasuraman et al., 1988), satisfaction (Oliver, 1997), and service value constructs (Cronin, Brady, & Hult, 2000; Sweeney & Soutar, 2001; Ulaga & Eggert, 2006). In academic tourism literature, most studies have focused on determining customer satisfaction (Baker & Crompton, 2000; Chadee & Mattsson, 1996;

Fuller, Matzler, & Faullant, 2006; Nam, Ekinci, & Whyatt, 2011) and the co-creation of services (Cabiddu, Lui, & Piccoli, 2013; Prahalad & Ramaswamy, 2004), whereas few studies have examined value creation in lodgings and destinations (Tajzadeh-Namin, 2012; Williams & Soutar, 2009) and added value (Jeong, 2002; Rodríguez-Díaz et al., 2015). The academic literature contains considerable debate about the difference between service quality and customer satisfaction. For Torres (2014), service quality is not only a process, but also the performance obtained. Likewise, this author establishes that 'service quality is typically analyzed in terms of very specific items, whereas satisfaction is viewed more as an overall evaluation', proposing that service quality is focused on evaluating performance, whereas satisfaction evaluates the customers' experience of the service. Booking.com has information about both concepts. It employs a numerical scale of variables to measure the basic service quality factors that hotel managers utilized to assess the performance of the lodgings' service quality delivery (staff, service/facilities, cleanliness, comfort, and location). In addition, Booking.com provides customers with a space to write about their experiences and their overall evaluation of the lodging, as a way to determine customer satisfaction. In this study, we only used Booking.com's numerical scale as a measurement of the service quality performance delivered by lodgings or a rating of service quality based on Ye et al. (2014). Moreover, customer satisfaction must be determined by means of a content analysis of the reviews written by customers, as in the study carried out by Li, Ye, and Law (2013) or O'Connor (2010). The present study focuses exclusively on service quality analyzed through the scale of variables used by Booking.com, whereas the study of satisfaction requires other methodologies based on content analysis.

Prebensen et al. (2012) establish that perceived value has been measured on a single-item scale as 'value for money', although some authors argue that this scale does not address the whole concept (Gallarza & Saura, 2006; Sweeney, Soutar, & Johnson, 1999). However, in order to obtain more surveys of online customer reviews, tourism opinion webs normally use scales focused on the most important variables. Therefore, the measurement of perceived value is usually based on a single-item scale closely related to the quality, the utility received, and the price paid by customers. Moreover, the lodging category is associated with the perceived value concept because the higher the category, the higher the price (Israeli, 2002; Tanford, Baloglu, & Erdem, 2012) and quality of service (Núñez-Serrano, Turrión, & Velázquez, 2014) perceived by customers (Abrate, Capriello, & Fraquelli, 2011) should be. However, López-Fernández and Serrano-Bedia (2004, p. 771) 'confirm that even though significant quality differences are seen between the different categories, the ranking by quality does not correspond to the one by categories'. According to Rodríguez-Díaz et al. (2015) and O'Connor (2010), the increase in lodgings' stars causes customers to demand better service for the price paid, reducing their evaluation of the perceived value and the added value in relation to other lower-category lodgings. The tourism industry is affected by the seasonality of the demand (Butler, 2001), with the prices normally changing in high and low seasons. Consequently, the study must take seasonality into account to test hypotheses related to prices. Therefore, the category should be related negatively to perceived value by hotels because the price has an inverse influence. Based on the above, the following hypotheses are formulated:

Hypothesis 1. There is a direct relationship between service quality and value perceived in the lodgings.

Hypothesis 2. There is an inverse relationship between price and value perceived in the lodgings.

Hypothesis 3. There is an inverse relationship between the category and value perceived in the lodgings.

To test these hypotheses and carry out the analysis of the destinations, information was collected from Booking.com about the lodging

offer of five competitor tourism destinations. The information is based on real online reviews by customers, and the scale used is the same for all destinations and lodgings. Moreover, the information is updated constantly and has a direct influence on the decisions of customers and managers of lodgings. Therefore, the results will be based on a reliable database and current competition mechanisms in the lodging industry.

3. Research methodology

To study customer perceived value evaluations in tourism accommodations, information is obtained from 890 lodging complexes in five competitive destinations focused on the sun and beach market. Three are from the Canary Islands (Spain) (southern Gran Canaria, southern Tenerife and Fuerteventura), one from Morocco (Agadir), and one from Egypt (Sharm El-Shaikh), and they are being sold on the Booking.com website. The total number of real customer opinions analyzed about the tourism companies in these destinations is 116,547. All the destinations are competitors because they focus basically on sun and beach tourism. Another important characteristic is that the high season is mainly winter, a season when other destinations on the Mediterranean are closed due to bad weather. All the destinations studied are located below the 30th parallel north, with a similar distance from central Europe (the main market of customers), achieving a level of occupancy of over 70% in winter in normal circumstances. The Canary Islands receive 12 million tourists (ISTAC, 2015) per year, whereas Agadir and the region of Souss Massa Drâa is visited by 4 million tourists (ICCEX, 2011), and Sharm El-Sheikh is integrated in the destination in Egypt that receives 10 million tourists per year, approximately (Hosteltur, 2014). Thus, we chose these five destinations because they really compete with each other, especially in winter, due to the location and distance from the tourism markets with the greatest demand.

Booking.com carries out an evaluation of customers' perceptions through a six-question survey. Although the scale has 10 points, where 1 is a very poor evaluation and 10 is the best score, Mellinas, Martínez María-Dolores, and Bernal García (2015) point out that this scale is biased because the questions posed to customers are based on a previous four-point scale, which is automatically transformed into the 10-point scale shown on the web of each lodging company. These authors establish that the minimum score possible is 2.5, and all the favorable opinions are evaluated at a maximum of 10 points, without discriminating more precisely. This characteristic has no direct effect on this study because the analysis uses the same scale for the five tourism destinations. Based on the study by Ye et al. (2014), the variables introduced in the study were the variables measured by Booking.com: hotel staff (St), service/facilities (Sv), cleanliness of rooms (Cl), comfort (Co), location (L), and value for money (V). The variables 'category' (number of stars) and 'price' obtained from the Booking.com website were also used. Because prices change depending on the season, price information was collected in high and low seasons. However, the variable 'wifi' (W) was not analyzed individually because it is a new variable conditioned by the technological development of countries and zones. Another variable taken into account is the 'hotel's average score' (HAS), calculated by Booking.com as the means of all the variables on the scale used to measure customers' opinions (Rodríguez Díaz et al., 2015), using the following formula:

$$HAS = (St + Sv + Cl + Co + L + V + W) / 7$$

According to Ye et al. (2014) and Rodríguez-Díaz et al. (2015), among others, the scales used by tourism opinion webs should be divided into two parts. One is composed of the variables used to measure the quality of service, such as 'staff', 'facilities', 'cleanliness', 'comfort' and 'location', whereas the variable 'value for money' has to be treated as a measure of perceived value (Prebensen et al., 2012). The new variable, called 'quality of service', was calculated by averaging the five variables on Booking.com that measured the perceived value of the lodgings' level of quality. Based on Rodríguez-Díaz et al. (2015), a new

variable was calculated to determine the 'added value' of the lodging offer. This variable is determined by subtracting the variable 'quality of service' from the 'value for money' or 'perceived value'. The 'added value' can obtain scores above zero, zero, or less than zero. The results depend on the balance between the quality of service and the price of the lodging offer, and scores less than zero determine that the price has more weight than the quality of service in the customers' opinions. According to López Fernández and Serrano Bedia (2004), Rodríguez-Díaz et al. (2015), and O'Connor (2010), the increase in the lodgings' stars can reduce the evaluation of the perceived value of lodgings because the customers have to pay a higher price. This circumstance explains the negative scores on the 'added value' variable in the four or five star lodgings because the service quality delivered obtains a higher evaluation than the value variable ('value for money'), which depends on the price variable. To carry out a comparative analysis of the lodging offer, the first step is to determine the reliability and validity of the scale of variables used. This aspect must be evaluated because, if the variables used in the database do not meet this condition, the analysis cannot be performed. At the same time, the methodology proposed in this study provides a way to determine the capacity of web databases to correctly advise customers. In other words, it is a method for evaluating databases of online tourism reviews in order to establish whether they actually have the minimum requirements to give valid information to customers. The steps to validate the variables and the information collected in the web databases of customers' online tourism reviews are the following:

1. Determine the validity of similarities or differences between goods or services. This is a necessary but not sufficient condition to validate the database because if the scale used meets the conventional requirements to determine reliability and validity, but does not determine the similarity or differentiation between tourism goods or services, the information displayed is not relevant. For example, it is possible to analyze the statistic reliability and validity of the scales used to measure the opinions of customers about the lodging offer. However, when studying specific hotels that are different or similar, if the information gathered on the website does not have the capacity to determine these peculiarities, the conclusion must be drawn that the database and the scales used are not valid because they do not add value for customers or practitioners. This condition is different from the traditional discriminant validity of scales because the objective is not to establish the discrimination between constructs or factors studied. Instead, the objective is to determine the capacity of differentiation or similarity between specific goods or services that are the final aim of the research. In this study, this condition was tested by means of an ANOVA analysis and the Scheffé Test, applied to the lodging offer of five tourism destinations in order to determine not only the differences in means of the variables used, but also the differentiation or similarity between the tourism destinations studied. The similarities or differences between goods or services were tested through five tourism destinations considered as specific tourism products. Booking.com facilitates the means of each variable based on all the evaluations carried out by the customers for each lodging establishment. The ANOVA analysis introduces these means of the lodgings analyzed as independent variables and the destination is the dependent variable. The statistical software provides the global means of the variables on the scale for each destination, and it compares the means to obtain the results.
2. Determine the internal consistency reliability. Reliability can be determined by Cronbach's alpha and composite reliability (CR), which is considered a more trustworthy index (Fornell & Larcker, 1981).
3. Determine the validity. Convergent validity is determined by the average variance extracted (AVE) index. Discriminant validity was determined by the correlation matrix, whereas the diagonal scores

were calculated as the square root of the AVE values. The discriminant validity is contrasted if the scores of the main diagonal are higher than the correlations between the other constructs included in the model (Fornell & Larcker, 1981; O'Cass & Ngo, 2007; Roldán & Sánchez-Franco, 2012). Finally, based on Bagozzy (1996), predictive validity was tested through the three hypotheses formulated, in order to determine the relationships between constructs that are theoretically related. A PLS analysis was carried out to test the hypotheses and the predictive validity.

4. Analysis of results

The analysis of the results has been divided into three perspectives: (1) the ANOVA analysis determines the discrimination of the variables depending on the destination; (2) the Scheffé test establishes the differences and similarities of the destinations on each variable used in the analysis; and (3) a PLS analysis determines the relationships between the variables of quality, price and category, and perceived value, in order to test the hypotheses formulated.

4.1. Means analysis

To determine whether there are significant differences or similarities among the tourism destinations studied, a One-Way ANOVA was carried out. Table 1 shows the results obtained, demonstrating that all the variables used in the study display significant differences between the destinations analyzed. F tests show that all the variables are significant at 0.000. The highest perceived value was enriched by the variable 'category' (number of stars) ($F=63.380$), followed by the variables 'staff' ($F=41.635$), 'value for money' ($F=30.173$), 'average score' ($F=26.014$) and 'cleanliness' ($F=24.128$). These results demonstrate that the variables used in the study are useful to determine the main differences among the five destinations analyzed in the study. After demonstrating the variables' validity to discriminate between destinations, in the next section we present these differences for each tourism destination.

4.2. Comparative analysis

To compare the tourism destinations, a Scheffé Test was carried out for each variable. This test classified the destinations by groups based on the similarities and differences of the means obtained on the variables. In the methodology proposed, this test is useful to determine the validity of similarities or differences between goods or services. The following tables show how each variable establishes the differences, grouping the destinations in two or three clusters. In some cases, a specific destination is classified in two groups at the same time, which means that the destination is not clearly defined on this specific variable. Otherwise, we can conclude that the variables correctly classify each destination in relation to the other competitors analyzed.

Table 2 shows the 'category variable', which classifies the destinations in three clusters. The first cluster contains Gran Canaria, with a mean of 2.667, because it has a large offer of non-hotel lodgings with a low number of stars. Sharm El-Sheikh is in the opposite situation because most of its lodging offers are four- and five-star hotels (means of 4.2986). There are three destinations in Cluster 2 (Fuerteventura, Tenerife, and Agadir), where the mean category is between three stars.

The price averages are shown in Table 3 (low season) and Table 4 (high season). In general, only one destination (Tenerife) shows a differentiated strategy because it has the highest prices of all the destinations in both seasons. In the low season, there are two clusters, positioning Sharm El-Sheikh in the middle. Moreover, in the high season, three clusters are obtained, with Agadir and Fuerteventura offering the lowest price, whereas Tenerife and Gran Canaria have the highest prices.

Analyzing the results obtained for the variables used to measure

Table 1
ANOVA analysis of tourism destinations.

		Sum of Squares	df	Mean Square	F	Sig.
CATEGORY (number of stars)	Between Groups	224.147	4	56.037	63.380	0.000
	Within Groups	491.578	556	0.884		
	Total	715.725	560			
PRICE LOW SEASON	Between Groups	122,035.523	4	30,508.881	7.364	0.000
	Within Groups	3,563,108.249	860	4143.149		
	Total	3,685,143.772	864			
PRICE HIGH SEASON	Between Groups	241,005.901	4	60,251.475	7.464	0.000
	Within Groups	6,094,619.382	755	8072.344		
	Total	6,335,625.283	759			
CLEANLINESS	Between Groups	101.081	4	25.270	24.128	0.000
	Within Groups	772.936	738	1.047		
	Total	874.017	742			
COMFORT	Between Groups	38.464	4	9.616	9.416	0.000
	Within Groups	753.640	738	1.021		
	Total	792.104	742			
LOCATION	Between Groups	49.014	4	12.254	18.089	0.000
	Within Groups	499.931	738	0.677		
	Total	548.945	742			
FACILITIES	Between Groups	81.106	4	20.276	20.212	0.000
	Within Groups	740.339	738	1.003		
	Total	821.444	742			
STAFF	Between Groups	125.036	4	31.259	41.635	0.000
	Within Groups	554.087	738	0.751		
	Total	679.123	742			
QUALITY (Q)	Between Groups	57.796	4	14.449	20.264	0.000
	Within Groups	526.233	738	0.713		
	Total	584.029	742			
PERCEIVED VALUE (PV)	Between Groups	68.129	4	17.032	30.173	0.000
	Within Groups	416.588	738	0.564		
	Total	484.717	742			
AVERAGE SCORE	Between Groups	66.489	4	16.622	26.014	0.000
	Within Groups	471.567	738	0.639		
	Total	538.056	742			
ADDED VALUE (PV-Q)	Between Groups	6.916	4	1.729	6.518	0.000
	Within Groups	232.380	876	0.265		
	Total	239.296	880			

Table 2
Test of Scheffé CATEGORY.

DESTINATIONS	N	Subset for alpha = 0.05		
		1	2	3
GRAN CANARIA SUR (Canary Island, Spain)	189	2.6667		
FUERTEVENTURA (Canary Island, Spain)	119		3.2773	
TENERIFE SUR (Canary Island, Spain)	66		3.5000	
AGADIR (Morocco)	43		3.6977	
SHARM EL-SHEIKH (Egypt)	144			4.2986
Sig.		1.000	0.078	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 84,680.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

quality (see Tables A1, A2, A3, A4 and A5 in the [Appendix](#)) (cleanness, comfort, location, facilities and staff), we can conclude that the most common clustering yields two clusters. One includes the Sharm El-Sheikh and Agadir destinations, with the lowest means, in contrast to the destinations of Tenerife, Gran Canaria and Fuerteventura, which have the highest means on the quality variables. One exception is comfort, where Gran Canaria is positioned, along with Agadir, at the

Table 3
Scheffé Test PRICE IN LOW SEASON.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
GRAN CANARIA SUR (Canary Islands, Spain)	250	73.8072	
AGADIR (Morocco)	49	77.8276	
FUERTEVENTURA (Canary Islands, Spain)	292	86.4561	
SHARM EL-SHEIKH (Egypt)	194	94.1804	94.1804
TENERIFE SUR (Canary Islands, Spain)	80		115.3683
Sig.		0.240	0.204

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample size = 109,920.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

lowest quality level, whereas Sharm El-Sheikh is classified with Tenerife and Fuerteventura. Another exception is the variable 'facilities', where three clusters are identified, placing Gran Canaria and Sharm El-Sheikh in the middle with an average of 6.975 and 7.382, respectively. These results are also supported by the 'quality' variable, which is the result of the average of the five variables that measure the service quality of the lodging companies. Table A6 in the [Appendix](#) shows that the customer considers the strategies of the destinations of Agadir (7.2416) and Sharm El-Sheikh (7.3409) to be different from those of Gran Canaria (7.8468), Tenerife (7.9034) and Fuerteventura

Table 4
Scheffe Test PRICE IN HIGH SEASON.

Scheffe				
DESTINATIONS	N	Subset for alpha = 0.05		
		1	2	3
AGADIR (Morocco)	41	81.2112		
FUERTEVENTURA (Canary Islands, Spain)	292	88.9787	88.9787	
SHARM EL-SHEIKH (Egypt)	194	100.5825	100.5825	100.5825
GRAN CANARIA SUR (Canary Islands, Spain)	171		125.8661	125.8661
TENERIFE SUR (Canary Islands, Spain)	62			137.5618
Sig.		0.715	0.106	0.104

Means for groups in homogeneous subsets are displayed.

(a) Uses harmonic mean sample Size = 90,998.

(b) The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

(8.0364) because the evaluation of their perceived quality is lower. As expected, the same results were obtained for the variable 'average score' because it is calculated as the mean of all the variables measured on Booking.com (five variables of quality and one variable of perceived value) (see Table A8 in the [Appendix](#)). The 'perceived value' (value for money) variable results are presented in Table A7 of the [Appendix](#), where three clusters were identified. First, the group composed of Agadir and Sharm El-Sheikh has the lowest evaluation, with scores of 7.057 and 7.279, respectively. A group with intermediate perceived values is formed by Gran Canaria (7.693) and Tenerife (7.644), whereas Fuerteventura is the destination with the highest means, at 8.047. Finally, Table A9 of the [Appendix](#) shows the results of the 'added value' variable. In reality, the means obtained are very similar for Agadir (−0.1845) and Gran Canaria (−0.1541). The lowest added value is obtained by Tenerife (−0.2595) because it has the highest prices, whereas Sharm El-Sheikh (−0.0491) and, especially, Fuerteventura (0.0068) earn the best scores.

4.3. PLS analysis

To validate the hypotheses formulated and determine the perceived value factors, Partial Least Squares (PLS) was applied, specifically the software SmartPLS 2.0 M3, developed by [Ringle, Wende, and Will \(2005\)](#). The objective of this statistical analysis is the prediction of the latent variables from the variance, using the estimation of ordinary least squares and principal component analysis. This analysis was run first for all the destinations, and then for each destination individually. The PLS analysis must be carried out in two steps: (1) evaluating the reliability and validity of the measurement model ([Chin, 1998](#), [Roldán, Leal-Rodríguez & Leal, 2012](#)); and (2) evaluating the structural model, where the hypothesis and the predictive capacity of the model must be tested ([Barclay, Higgings, & Thompson, 1995](#); [Falk & Miller, 1992](#)).

4.3.1. Measurement model

In this step, the reliability of each item, the internal consistency, and the convergent and discriminant validity were determined ([Chin, 1998](#)). The individual reliability is determined by the factorial scores for each variable. [Table 5](#) shows that the majority of the variables' factor loadings exceed the commonly accepted level of 0.707 proposed by [Carmines and Zeller \(1979\)](#). Only the values of the location were lower in all the analyses conducted because this variable is not always directly related to the quality concept. In many destinations, the best locations are occupied by the oldest hotels with outdated designs, and newer installations that better meet the new needs of customers are built in worse locations. Other authors, such as [Hasan and Ali \(2007\)](#) and [Falk and Miller \(1992\)](#), reduce the threshold to 0.50 because

Table 5
Evaluation of the measurement model.

Models, factors and variables	Factor Loadings	t	Composite Reliability	AVE	Cronbach's Alpha
ALL DESTINATIONS					
Quality			0.954	0.809	0.938
Comfort	0.921	62.700			
Facilities	0.965	119.298			
Cleanliness	0.955	103.868			
Staff	0.929	75.258			
Location	0.697	10.398			
Price			0.922	0.857	0.834
Price in high season	0.913	4.513			
Price in low season	0.938	6.523			
Category			1	1	1
Category	1				
GRAN CANARIA					
Quality			0.956	0.816	0.941
Comfort	0.921	62.700			
Facilities	0.965	119.298			
Cleanliness	0.955	103.868			
Staff	0.929	75.258			
Location	0.697	10.398			
Price			0.991	0.982	0.981
Price in high season	0.913	4.513			
Price in low season	0.938	6.523			
Category			1	1	1
Category	1				
TENERIFE					
Quality			0.950	0.799	0.927
Comfort	0.972	166.250			
Facilities	0.985	407.107			
Cleanliness	0.972	153.324			
Staff	0.952	129.982			
Location	0.478	5.105			
Price			0.991	0.982	0.982
Price in high season	0.993	128.646			
Price in low season	0.988	26.090			
Category			1	1	1
Category	1				
FUERTEVENTURA					
Quality			0.924	0.722	0.893
Comfort	0.934	81.092			
Facilities	0.955	120.326			
Cleanliness	0.934	67.865			
Staff	0.868	24.176			
Location	0.441	5.028			
Price			0.881	0.788	0.758
Price in high season	0.812	3.652			
Price in low season	0.957	3.794			
Category			1	1	1
Category	1				
AGADIR					
Quality			0.937	0.767	0.911
Comfort	0.959	93.941			
Facilities	0.969	124.914			
Cleanliness	0.979	300.591			
Staff	0.962	154.055			
Location	0.302	2.683			
Price			0.980	0.961	0.960
Price in high season	0.984	207.558			
Price in low season	0.975	77.396			
Category			1	1	1
Category	1				
SHARM EL-SHEIKH					
Quality			0.968	0.859	0.957
Comfort	0.960	130.901			
Facilities	0.973	204.238			
Cleanliness	0.959	126.673			
Staff	0.951	119.418			
Location	0.776	19.144			

(continued on next page)

Table 5 (continued)

Models, factors and variables	Factor Loadings	t	Composite Reliability	AVE	Cronbach's Alpha
ALL DESTINATIONS					
Price			0.946	0.898	0.887
Price in high season	0.940	15.766			
Price in low season	0.955	42.554			
Category			1	1	1
Category	1				

including indexes with low scores in the PLS analysis makes it possible to obtain useful information without losing the predictive capacity of the models. In this context, the location scores surpass this level, except the destinations of Tenerife (0.478), Fuerteventura (0.441), and Agadir (0.302).

Reliability can be determined by Cronbach's Alpha and composite reliability (CR), which is considered a more trustworthy index (Fornell & Larcker, 1981). Table 5 shows that all the latent variables obtained scores above the reference value of 0.7. Moreover, Cronbach's alpha for the quality and price factors also exceeded the recommended value of 0.7 (Nunnally, 1978). Because the category of lodgings was measured by only one variable, scores of 1 were obtained on both indexes. The convergent validity is determined by the average value extracted (AVE) index, which must obtain a score equal to or greater than 0.5. Table 5 shows that all the AVE obtained in the six models are greater than 0.5. For the quality factor, the AVE were 0.809 for all the destinations analyzed, 0.816 for Gran Canaria, 0.799 for Tenerife, 0.722 for Fuerteventura, 0.767 for Agadir, and 0.859 for Sharm El-Sheikh, whereas the AVE obtained for the price factor were 0.857, 0.982, 0.982, 0.788, 0.961 and 0.898, respectively. Therefore, these results validate the convergent validity of the factors used in the models.

Discriminant validity was determined by the correlation matrix, whereas the diagonal scores were calculated as the square root of the AVE values. Discriminant validity is shown if the scores on the main diagonal are higher than the correlations between the other constructs included in the model (Fornell & Larcker, 1981; O'Cass & Ngo, 2007; Roldán & Sánchez-Franco, 2012). Table 6 shows that all the values on the diagonal are higher than the correlation index of the other constructs, thus showing discriminant validity. However, there are some constructs with a high correlation index, which means that they are closely related. This is the case of 'quality' with 'perceived value' and 'category' with 'price' because they are concepts that are methodologically related to the evaluation of the service received by customers (Abrate, Fraquelli, & Viglia, 2012; Israeli, 2002; López Fernández & Serrano Bedia, 2004; Núñez-Serrano et al., 2014; Rust & Oliver, 1994; Zeithaml, 1988). Based on the results obtained, the constructs used in the proposed model support convergent and discriminant validity.

4.3.2. Structural model

The results of the structural model tested by the PLS analysis are displayed in Fig. 1 and Table 7. The structural model is evaluated by the R squared (R^2), whereas the standardized path coefficients (β) and t values determine the level of significance of the relations predicted, contrasting the validation of the hypotheses formulated. Table 7 shows the R^2 obtained in the six models carried out, which were very high. These results demonstrate that online customer evaluations and the price and category of lodgings can predict the perceived value of the offer of tourism destinations. All the destinations achieved an R^2 of 0.719, whereas the R^2 for the destinations studied were 0.644 for Gran Canaria, 0.796 for Tenerife, 0.548 for Fuerteventura, 0.891 for Agadir, and 0.796 for Sharm El-Sheikh.

Table 6

Latent variable correlations (AVE square root in diagonal^a).

	QUALITY	PRICE	CATEGORY	PERCEIVED VALUE
ALL DESTINATIONS				
Quality	0.899			
Price	0.470	0.925		
Category	0.196	0.478	1	
Perceived value	0.780	0.128	-0.133	1
GRAN CANARIA				
Quality	0.903			
Price	0.285	0.990		
Category	0.532	0.551	1	
Perceived value	0.733	-0.015	0.126	1
TENERIFE				
Quality	0.893			
Price	0.660	0.990		
Category	0.637	0.721	1	
Perceived value	0.750	0.263	0.110	1
FUERTEVENTURA				
Quality	0.849			
Price	0.484	0.887		
Category	0.409	0.705	1	
Perceived value	0.602	-0.019	-0.099	1
AGADIR				
Quality	0.875			
Price	0.267	0.980		
Category	0.284	0.606	1	
Perceived value	0.812	-0.194	-0.179	1
SHARM EL-SHEIKH				
Quality	0.926			
Price	0.545	0.947		
Category	0.446	0.557	1	
Perceived value	0.832	0.263	0.101	1

^a The scores on the diagonal are the square root of the AVE, and the other values are the correlation coefficients between latent variables.

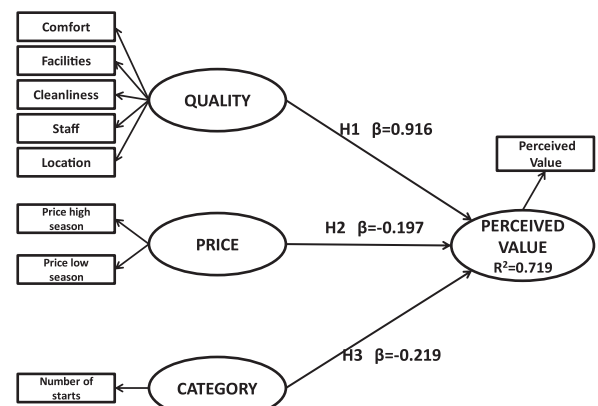


Fig. 1. Structural model of all destinations.

The hypotheses formulated and the results obtained appear in Table 7. Hypothesis 1 is validated because all the t values for the six models were significant, demonstrating close relationships between the quality and perceived value of the destinations' lodgings (17.617 for all destinations, 16.498 for Gran Canaria, 20.146 for Tenerife, 12.534 for

Table 7
Results of the structural models.

RELATIONS ALL DESTINATIONS	COEFFICIENT	T-VALUE	R SQUARE	Q SQUARE	GoF
Quality - > Perceived Value	0.916	17.617	0.719	0.657	0.799
Price - > Perceived Value	−0.197	2.433			
Category - > Perceived Value	−0.219	3.603			
GRAN CANARIA					
Quality - > Perceived Value	0.928	16.498	0.644	0.588	0.775
Price - > Perceived Value	−0.111	1.353			
Category - > Perceived Value	−0.306	4.436			
TENERIFE					
Quality - > Perceived Value	1.183	20.146	0.796	0.777	0.859
Price - > Perceived Value	−0.112	1.497			
Category - > Perceived Value	−0.561	9.153			
FUERTEVENTURA					
Quality - > Perceived Value	0.824	12.534	0.528	0.525	0.665
Price - > Perceived Value	−0.221	1.551			
Category - > Perceived Value	−0.280	2.697			
AGADIR					
Quality - > Perceived Value	0.967	21.037	0.891	0.000	0.900
Price - > Perceived Value	−0.279	5.243			
Category - > Perceived Value	−0.285	4.103			
SHARM EL-SHEIKH					
Quality - > Perceived Value	1.037	23.493	0.796	0.739	0.855
Price - > Perceived Value	−0.145	2.193			
Category - > Perceived Value	−0.280	4.817			

Fuerteventura, 21.037 for Agadir, and 23.493 for Sharm El-Sheikh) (see Table 8). Hypothesis 2 is only partially supported because the price of the lodging is related significantly and inversely to the perceived value in the model for the destinations of Fuerteventura, Agadir and Sharm El-Sheikh (β of -0.197 , -0.221 , -0.279 and -0.149 , respectively; t of 2.433, 1.551, 5.243, and 2.193, respectively), whereas in Gran Canaria and Tenerife the price is related to the perceived value inversely, but not significantly (β of -0.111 and -0.112 , respectively; t of 1.353 and 1.497, respectively). Finally, Hypothesis 3, regarding the inverse relationship between the category of lodgings and the value perceived by customers, was validated in all the models because the β coefficients were -0.219 for all destinations ($t=3.603$), -0.306 for Gran Canaria ($t=4.436$), -0.561 for Tenerife ($t=9.153$), -0.280 for Fuerteventura ($t=2.697$), -0.285 for Agadir ($t=4.103$), and -0.280 for Sharm El-Sheikh ($t=4.817$).

To measure the validity of the model proposed, the goodness-of-fit (GoF) test was calculated to determine the predictive capacity of the dependent constructs (quality, price and category) (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). The minimum score accepted to validate the model through the GoF index is 0.36 (Chin, 1998). Table 7 shows the GoF for the six models, which are much higher than the reference value, showing the predictive capacity of the models proposed.

4.4. Discussion of results

The results obtained support the model proposed to measure the quality, price and category in relation to the perceived value of the lodgings in the tourism destinations analyzed. Likewise, they show that the variables used are useful for detecting destinations' similarities and differences in order to determine the strategic positioning of the lodging offers. The variables used by Booking.com to evaluate the lodging offer are useful in determining the main differences between tourism destinations, making them a key tool for analyzing the competitive

strategy of destinations based on real customer opinions surveyed online. The ANOVA analysis demonstrated that all the study variables show significant differences between destinations. The Booking.com variables reveal that the destinations are not similar, even though they are direct competitors. In addition, the three new variables (quality Q, perceived value PV and added value AV), created based on the methodology proposed by Rodríguez-Díaz et al. (2015), obtained a significance level of 0.000.

The Scheffé tests make it possible to establish where the differences lie between tourism destinations, based on the comparison of means of each variable. The variables that show a greater discrimination capacity are 'category', 'staff' and 'perceived value'. The main explanation for the 'category' of the lodging is that the destinations analyzed have different combinations of offers. Thus, Gran Canaria has a greater offer of apartments, whereas Agadir and Sharm El-Sheikh have a lodging offer based on four- and five-star hotels. The variable 'staff' is related to the level of training in each country or area. In this case, the three Canary Island destinations obtained averages significantly higher than those of Morocco and Egypt. An important strategy discovered is to demonstrate the ability of the perceived value to differentiate between the destinations, as three clusters are identified. Fuerteventura is the destination with the highest perceived value. Gran Canaria and Tenerife form another group with a medium mean, whereas Agadir and Sharm El-Sheikh are the destinations with the lowest evaluation of perceived value by customers. Likewise, the 'added value' variable only discriminates between Tenerife (the lowest score) and Fuerteventura (the highest score), whereas the other destinations are assigned to both clusters at the same time. The results obtained on the Scheffé tests basically show significant differentiations between two groups of destinations. One is composed of the Canary Island destinations of Gran Canaria, Tenerife and Fuerteventura, which achieve a high level of quality and perceived value compared to the other group containing Agadir and Sharm El-Sheikh. Another important finding is that the

Table 8
Contrast of hypotheses.

Hypothesis	Independent variable	Dependent variable	Contrasted
ALL DESTINATIONS			
Hypothesis 1	Quality	Perceived value	Yes
Hypothesis 2	Price	Perceived value	Yes
Hypothesis 3	Category	Perceived value	Yes
GRAN CANARIA			
Hypothesis 1	Quality	Perceived value	Yes
Hypothesis 2	Price	Perceived value	No
Hypothesis 3	Category	Perceived value	Yes
TENERIFE			
Hypothesis 1	Quality	Perceived value	Yes
Hypothesis 2	Price	Perceived value	No
Hypothesis 3	Category	Perceived value	Yes
FUERTEVENTURA			
Hypothesis 1	Quality	Perceived value	Yes
Hypothesis 2	Price	Perceived value	No
Hypothesis 3	Category	Perceived value	Yes
AGADIR			
Hypothesis 1	Quality	Perceived value	Yes
Hypothesis 2	Price	Perceived value	Yes
Hypothesis 3	Category	Perceived value	Yes
SHARM EL-SHEIKH			
Hypothesis 1	Quality	Perceived value	Yes
Hypothesis 2	Price	Perceived value	Yes
Hypothesis 3	Category	Perceived value	Yes

variables used by Booking.com to measure the online customer evaluations make it possible to differentiate the lodging offer between destinations, demonstrating that it is a useful tool to obtain significant information for customers in making their decisions about holidays. These findings are decisive in determining which tourism opinion website best orients customers. If a website cannot discriminate between destinations and between lodging offers, it does not provide critical information to customers that can help them decide to purchase a tourism product. The results obtained allow us to conclude that the Booking.com database accomplish the validity of similarities or differences between goods or services. As noted above, this is a necessary condition to validate the scale used and the information collected in the database studied, but it is not sufficient.

The PLS analysis also contributed to demonstrating the reliability and validity of the information provided by Booking.com. The structural model contrasted the direct relationship between quality service and perceived value for customers in the lodging industry, based on the proposal by Holbrook (1994) and Rust and Oliver (1994). This relationship was verified in all the destinations together, as well as in each destination individually. Moreover, the category and price are indirectly related to the perceived value, according to the academic literature, again testing the consistency of the data from Booking.com, even though the relationship between price and perceived value was not always verified. These results confirm the theoretical view of value developed by Zeithaml (1988) and Naumann (1995) and, therefore, the internal consistency of the variables and the quality scale used in the study. Likewise, the predictive validity of the model is also tested, demonstrating that the perceived value can be predicted by the quality of service, price, and category of the lodging. In addition, all the

theoretical proposals about the perceived value formulated in the academic literature are also verified in the combined structural model. Moreover, the results demonstrate that the Ye et al. (2014) and Rodríguez-Díaz et al. (2015) proposal about dividing the scale for tourism opinion webs into two parts is supported, not only theoretically, but also empirically. Furthermore, the structural model shows that perceived value is a concept that can be predicted by the quality of service. Therefore, perceived value and quality are different, closely related concepts.

5. Conclusions

Perceived value is a key concept in the development of frameworks for management and marketing. This study demonstrates that perceived value is a concept that contributes to analyzing the lodging offer of different tourism destinations competing in similar market segments. The testing of the three hypotheses confirms that the theoretical propositions about perceived value are supported empirically. Service quality has a direct relationship with perceived value, whereas the relationship between the price and category of lodgings is inverse, not only studying all the destinations together, but also in each of the five destinations analyzed. The only exception is the hypothesis about the price, which is not supported in the destinations of Gran Canaria, Tenerife, and Fuerteventura separately because they have a great variety of lodging offers, from hotels to apartments, with a peculiar price range. However, the relationships are negative in these destinations, but not significant. The results obtained in the study confirm the reliability and validity of the scale used by Booking.com to measure online customer evaluations. Because online reviews by customers currently provide strategic information in tourism, the results found in this research confirm that the variables used are consistent and provide a model that can collaborate in making decisions in the lodging industry and in the analysis of the competitiveness of destinations.

These results support the between-destination analyses carried out with the variables of quality of service, price, and category. The ANOVA demonstrates that there are significant differences among the destinations studied. All the variables show significant differences in the destinations' averages, revealing the relevance of the results obtained in determining the different strategies applied by the lodgings in these destinations. The variables with a greater differences in means are 'category', 'staff', 'value for money', and 'average score'. The main reason for the high discrimination capacity of the 'category' is that the offer developed in Agadir and Sharm El-Sheikh is based mainly on four- and five-star hotels, whereas the offer of apartments is very limited. Moreover, the destinations on the Canary Islands (Gran Canaria, Tenerife, and Fuerteventura) are older and have a very important infrastructure of apartment complexes. The Scheffé test more specifically determines the differences between the destinations analyzed. The classifications of destinations obtained lead to the conclusion that there are two clusters. The Canary destinations normally make up a group, especially Gran Canaria and Tenerife, whereas Agadir and Sharm El-Sheikh show greater similarities. The variables measuring service quality are the most significant in determining these two groups. By contrast, the variables 'price' and 'category' show another clustering due to the specific characteristics of the Gran Canaria destinations. These results demonstrate the validity of similarities or differences between goods or services as a new condition to take into account in determining the general validity of the databases of online reviews of touristic customers.

5.1. Academic and practical implications

The methodology carried out in this study contributes to exploring a new line of research focused on analyzing the available databases on websites with online customer reviews of lodgings. The information obtained through these sources is very important in defining a dynamic

competitive strategy for lodgings and destinations because the information is constantly updated and based on real customer evaluations, and it displays the competitive positioning of hotels at a given point in time. The results obtained in this study reinforce the reliability and validity of the variables used in online surveys to measure perceived value and service quality, as well as the strong interest in developing different studies in order to create and contrast new management and marketing models. Specifically, the methodology proposed provides reliable and valid comparative information about the key factors of the service quality, price, and perceived value of destinations. This information is important for making decisions at the management level in destinations, as well as for the individual management of lodgings in a competitive environment. Methodologies based on this type of information have a real view of the market, practical applications, and the need for practitioners to manage new tools adapted to the Internet environment. Nevertheless, different databases with online customer reviews in tourism must be studied in order to determine their validation and range of reliability from statistical and practical perspectives. Moreover, practitioners are constantly making decisions based on online reputation. Therefore, internal and competitive analysis must focus on satisfying the practical needs of firms. Competitive positioning in the web is critical for lodging firms in defining a price strategy, direct communication with customers, community management, and the sales strategy in a dynamic market like tourism. Today, tourism firms can lose customers if they do not have agile mechanisms to react in real time to decisions made by competitor lodgings and destinations. This study contributes to strengthening and highlighting the importance of developing methodologies based on powerful online databases, in spite of evaluating only a few, but very strategic, variables.

Appendix A

Table A1
Scheffé Test CLEANLINESS.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
SHARM EL-SHEIKH (Egypt)	151	7.164	
AGADIR (Morocco)	49	7.259	
TENERIFE SUR (Canary Islands, Spain)	82		7.894
GRAN CANARIA SUR (Canary Islands, Spain)	273		7.913
FUERTEVENTURA (Canary Islands, Spain)	188		8.141
Sig.		0.978	0.552

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A2
Scheffé Test COMFORT.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
AGADIR (Morocco)	49	7.035	
GRAN CANARIA SUR (Canary Islands, Spain)	273	7.450	7.450
SHARM EL-SHEIKH (Egypt)	151		7.498
TENERIFE SUR (Canary Islands, Spain)	82		7.718
FUERTEVENTURA (Canary Islands, Spain)	188		7.879
Sig.		0.068	0.054

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A3
Scheffé Test LOCATION.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
SHARM EL-SHEIKH (Egypt)	151	7.727	
AGADIR (Morocco)	49	7.880	
TENERIFE SUR (Canary Islands, Spain)	82		8.272
GRAN CANARIA SUR (Canary Islands, Spain)	273		8.346
FUERTEVENTURA (Canary Islands, Spain)	188		8.350
Sig.		0.776	0.977

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A4
Scheffé Test FACILITIES.

DESTINATIONS	N	Subset for alpha = 0.05		
		1	2	3
AGADIR (Morocco)	49	6.671		
SHARM EL-SHEIKH (Egypt)	151	6.975	6.975	
GRAN CANARIA SUR (Canary Islands, Spain)	273		7.382	7.382
TENERIFE SUR (Canary Islands, Spain)	82			7.550
FUERTEVENTURA (Canary Islands, Spain)	188			7.776
Sig.		0.314	0.074	0.093

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A5
Scheffé Test STAFF.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
SHARM EL-SHEIKH (Egypt)	151	7.3192	
AGADIR (Morocco)	49	7.3633	
TENERIFE SUR (Canary Islands, Spain)	82		8.0829
GRAN CANARIA SUR (Canary Islands, Spain)	273		8.1758
FUERTEVENTURA (Canary Islands, Spain)	188		8.3739
Sig.		0.998	0.212

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A6
Scheffé Test QUALITY.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
AGADIR (Morocco)	49	7.2416	
SHARM EL-SHEIKH (Egypt)	151	7.3409	
GRAN CANARIA SUR (Canary Islands, Spain)	273		7.8468
TENERIFE SUR (Canary Islands, Spain)	82		7.9034
FUERTEVENTURA (Canary Islands, Spain)	188		8.0364
Sig.		0.949	0.624

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A7

Scheffé Test PERCEIVED VALUE (Value for Money).

DESTINATIONS	N	Subset for alpha = 0.05		
		1	2	3
AGADIR (Morocco)	49	7.057		
SHARM EL-SHEIKH (Egypt)	151	7.279		
TENERIFE SUR (Canary Islands, Spain)	82		7.644	
GRAN CANARIA SUR (Canary Islands, Spain)	273		7.693	
FUERTEVENTURA (Canary Islands, Spain)	188			8.047
Sig.		0.342	0.994	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A8

Scheffé Test AVERAGE SCORE.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
AGADIR (Morocco)	49	7.2061	
SHARM EL-SHEIKH (Egypt)	151	7.3272	
GRAN CANARIA SUR (Canary Islands, Spain)	273		7.8319
TENERIFE SUR (Canary Islands, Spain)	82		7.8610
FUERTEVENTURA (Canary Islands, Spain)	188		8.0936
Sig.		0.880	0.236

Means for groups in homogeneous subsets are displayed.

a. Uses harmonic mean sample Size = 103,717.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A9

Scheffé Test ADDED VALUE.

DESTINATIONS	N	Subset for alpha = 0.05	
		1	2
TENERIFE SUR (Canary Island, Spain)	82	– 0.2595	
AGADIR (Morocco)	49	– 0.1845	– 0.1845
GRAN CANARIA SUR (Canary Islands, Spain)	273	– 0.1541	– 0.1541
SHARM EL-SHEIKH (Egypt)	191	– 0.0491	– 0.0491
FUERTEVENTURA (Canary Islands, Spain)	286		0.0068
Sig.		0.055	0.106

Means for groups in homogeneous subsets are displayed.

(a) Uses harmonic mean sample Size = 111,115.

(b) The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

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