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Article
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European Journal of Management and Business Economics (EJM&BE)

Provided in Cooperation with:
European Academy of Management and Business Economics (AEDEM), Vigo (Pontevedra)


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Study of the critical success factors of emblematic hotels through the analysis of content of online opinions

The case of the Spanish Tourist Paradores

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Abstract

Purpose – The purpose of this paper is to identify the critical success factors of emblematic hotels from the perspective of the guest, by analysing the direct activities that make up the value chain of these types of establishments.

Design/methodology/approach – The authors use the case study methodology to derive conclusions that contribute to the development of a theory about the success factors of emblematic hotels. The case selected is the Spanish Tourist Parador chain. The authors carried out over a period of two years a data mining analysis of the online comments posted by its guests.

Findings – The results indicate that the attributes of location and facilities are critical success factors expected a priori given the nature of the business of such establishments, based on the singular nature of the buildings. Another critical success factor is personnel, which seems to indicate that the Paradors support their business model by employing highly qualified staff, but give less attention to restaurant services or the room, according to guest perceptions.

Originality/value – The paper provides required evidence on the critical success factors of emblematic hotels adapting Porter’s value chain, for the tourism accommodation sector, through the analysis of direct value chain activities. In addition, the existing literature is broadened by taking a perspective scarcely studied, the guest perception of hotel establishments, online content posted by the user on the establishment’s website, rather than simply considering the traditional views of the experts/managers, through structures questionnaires. Besides, the results provide practical and useful implications for the managements of the emblematic hotels under study.

Keywords Critical success factors, Sentiment analysis, Analysis of content, Emblematic hotels, Spanish Tourist Paradors

1. Introduction

The restoration of historical and artistic buildings through the assignment of new uses distinct from the original is becoming more frequent. Among these uses, the hotelier stands out and, in both Spain and Europe, the number of emblematic hotel establishments is increasing. Generally, these are located in buildings of great heritage or artistic value (historic buildings or buildings of architectural value) or in unique environments or environments with special charm (of special scenic or nature interest).
In Europe, various associations have been created that bring together hotels located in buildings with historical and artistic value. The European Federation of Traditional Accommodation and Historic Houses groups national associations of Austria, Denmark, Spain, France, Ireland, Italy, Portugal, the UK and Sweden. The Europe Traditionae Consortium groups associations from Ireland, Holland, Portugal and the UK. In addition to these, there are other private initiatives on the part of hotel chains with units with these characteristics such as the Relais Et Château, Relais du Silence and NH Collection, with hostelries in several countries, including Spain, or the Estancias de España, Hospederías Reales or Haciendas de España, with establishments in Spain.

In our country, the Red de Paradores de Turismo de España (Network of Spanish Tourist Paradors) is a publicly owned hotel chain, which has 96 establishments, and has operated since 1928. It has been dedicated to the rehabilitation and maintenance of buildings of great historical and artistic value, in many cases set in places far off the traditional tourist circuits. Traditionally, these Paradors have been the most identified entities within this segment, until the emergence of the initiatives discussed in the previous paragraph.

In general, it is established that at European level there is great interest on the part of the hotel sector to have presence in this segment[1], which has been progressively taking into their portfolios diverse establishments, including historical buildings, building of significant design, monasteries, convents, etc. In many cases, this entails very heavy restoration expenses to get the establishments back into operation and continuing high maintenance costs.

Therefore, this paper tries to discover which factors are important or critical for the success of this type of hotel from the perspective of the consumer, those factors that managers should take into account as they provide valuable information to reach company goals and objectives. In line with our research question, the general objective of this paper is to identify the critical success factors of emblematic hotels in Spain. This is done from the perspective of the guest or consumer, by analysing the direct activities that make up the value chain, using a methodological case study framework and referencing the Spanish chain that has the most experience in the management of these types of establishments, the Parador network. In order to develop this general objective, we propose others of a second order: to adapt the Porter (1980) value chain to the hotel industry; to use the consumer perspective as a source of identification of competitive advantage in the emblematic hotel segment; and to derive practical implications for the managements of the emblematic hotels under study.

There is much literature on critical success factors in the field of business information systems and strategic and operational planning[2], but work oriented to the lodging sector is scarce and limited. Thus, Avciikurt et al. (2011), Brotherton (2004), Brotherton et al. (2003), Brotherton and Shaw (1996), Melia (2010) and Olsen et al. (2005) address the problem from the perspective of business owners/managers or from company business results. Only Hua et al. (2009) and Wang and Hung (2015) focus their research on the consumer perspective; the first paper also considers other stakeholders and views of the experts in the area under study.

In most of these studies, primary sources of a subjective type have been used. These structured questionnaires have the disadvantage that they may allow possible bias, since predetermined items can force the respondent to answer questions about issues that otherwise they would not have considered. (Hung, 2013). In addition, to the best of our knowledge, previous literature has not addressed the study of critical success factors in the emblematic hotel segment based on value chain activities. Therefore, the study of critical success factors is not a novelty in tourism research. However, this work focuses its analysis on an area scarcely studied, that of emblematic hotels and from the perspective of the consumer or guest.
The work is structured as follows. In the following section, the theoretical framework discussed above is expanded, developing the adaptation of the value chain to the hotel sector and its relation to the critical success factors of the emblematic hotel segment. Next, in Section 3, a review is carried out of the previous literature on the importance of online guest opinions in determining critical success factors. The methodology and data used to carry out the study are presented in Section 4. The results of the analysis are presented in Section 5 and they are discussed in Section 6. The paper ends by presenting the conclusions, the implications for management, the limitations of the work and proposes possible future lines of work.

2. Critical success factors and the value chain of emblematic hotels

Daniel (1961) was the first to propose the identification of success factors that Rockart (1979, p. 85) subsequently defined as “the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization”. This is still the most widespread definition in the literature. Similarly, Leidecker and Bruno (1984) argue that critical success factors are those elements of the company that, when properly managed, have a significant impact on its success; and Johnson et al. (2005, p. 79) incorporate the customer perspective by defining critical success factors as “those product features that are particularly valued by a group of customers and, therefore, where the organisation must excel to outperform competition”.

According to Esteves (2004), in the literature, there are two perspectives that connect critical success factors and business strategy. The first aims to determine what information is relevant to the business management control system and the second one uses critical success factors in support of the strategic planning process. In both cases, critical success factors must be identified. Rockart (1981) identifies the sources of critical success factors as: industry characteristics, competitive strategy and position in the industry, environmental factors, temporal factors and managerial position. Caralli et al. (2004) also consider the operational units of the organisation as critical success factors, due to their contribution to the achievement of company objectives and mission. On the other hand, Esteves (2004) lists different methods to identify critical success factors[3], such as literature review, field studies, case studies, the Delphi method, focus groups, group interviews, multivariate analysis, scenario analysis and structured interviews that can be used in combination.

On the other hand, Leidecker and Bruno (1984) consider that critical success factors can be identified from different sources of information, among which we highlight the so-called environmental analysis, which consists of identifying the economic, political and social forces that affect the company, so taking into account the views of different stakeholders, including consumers. Also for Esteves (2004), the identification of critical success factors by stakeholders is important, especially with regard to consumer opinion. Similarly, Johnson et al. (2005) argue that in companies, the value of a product or service is generally created internally and therefore organisations may have an erroneous view of what is really valued by customers. It is also essential to understand the customer perception. In the same vein, Esteves (2004) and Sedera et al. (2004) point out that the success of an organisation does not depend solely on the management. It is important to capture the critical success factors of different stakeholders, so that these factors reflect the vision of the different levels of the organisation, as well as the customers, suppliers, investors and employees. The design of any corporate strategy should also take into account the perspective of other stakeholders such as consumers since, according to Cetin et al. (2014), there must be a connection between the elements of the value chain and the clients’ experiences. Opinions on these experiences are currently easy to obtain, as it is increasingly common for consumers to publish their opinions on the internet, whether on opinion portals or on the website of the establishment itself, and the hotel industry is not an exception, rather the opposite. This information is of
great value to companies, since its analysis helps in the identification of those activities that are more (or less) valued by consumers. This, therefore, constitutes an opportunity for the discovery of critical success factors that can be sources of competitive advantages.

The second conceptual element on which the development of this research is based is the Porter (1980) value chain. The value chain model analyses the business by disaggregating the company into the generic activities that must be carried out to sell a product or service, in order to identify the elements that most contribute to the generation of the value obtained. That is to say, identify the sources of competitive advantage that can have their origin in, or be obtained by, optimising some activity in the value chain or by achieving a high degree of coordination between activities, coming not just from a specific activity, but also from the interrelationships between the different activities of the chain and/or between customer and supplier value systems (Porter, 1985). The competitive advantages of a company can be achieved in two ways: by developing strategies of cost leadership or through differentiation of the product or service.

The activities that make up the value chain are classified into: primary activities, which are directly related to the company’s production process and which include: internal logistics, operations, external logistics, marketing and sales and after-sales service; and support activities, those carried out for the normal operation of the company and which support the primary activities: procurement, technology development, human resources management and infrastructure.

This approach to value creation from activities is valid for all industries (Porter, 1985), although it is especially oriented to manufacturing companies; each entity undertakes different activities depending on its particular circumstances (Porter and Millar, 1985). In this sense, Alonso (2008), based on the arguments of Eiglier and Langeard (1987), adapts Porter’s (1980, 1985) value chain to study service companies, in which support activities are minimally modified in regards to the original design, while primary activities are redesigned and differentiated between controllable: marketing and sales, contact staff, physical support and skills and service provision; and non-controllable: customers and other customers.

The marketing and sales group includes promotional activities (advertising, campaigns, etc.) and the development of commercial proposals after the contracting of the service. The contact staff are those who directly provide the service and so are one of the elements of greater influence in service quality. The physical support and skills staff form part of the service delivery, defining the quality of the service and influence the customer experience. The provision is the service itself. The customer determines the quality of the service through his own perception of it and the other customers are those who live in the same time and place when and where the service is provided and who can influence the experiences of others.

On the other hand, regarding support activities, Alonso (2008) considers jointly infrastructures and environment, which comprises in a broad sense the physical space in which the service takes place and that forms the environmental framework of the service.

Following Alonso (2008), the value chain is adapted for the study of hotels, taking into account that hotels are, very often, part of a network and membership of a network will condition internal organisation activities and technology, and general management of human resources, as the establishments would follow parent company guidelines. In addition, we include, within infrastructure and environment, the location of the tourist establishment.

In relation to primary activities, contact staff can be taken to include both customer service at reception, restaurant and coffee shop, as well as in other accommodation facilities. Physical support and activities cover the state and comfort of the rooms and facilities, as well as the activities undertaken in the establishment and complementary services. Service provision activity covers both accommodation and catering services. It must be considered that customers, through their perception of the service, and their communication about this with the contact staff, will influence the quality of the service. In addition, the customer
becomes an experiential recipient and potential communicator of the experience to other customers and, finally, other customers and electronic word-of-mouth (eWOM), referring to the coexistence of clients both in the establishment and through the communication of their experiences on the internet.

In the case of tourist accommodation, it is possible to think that the emergence and development of the internet has meant a great change in the organisation of the sector value chain, allowing direct access by tourists to the final providers (Buhalís and Licata, 2002), the tourism sector being in a disintermediation process (Calveras and Orfila, 2010). As Porter and Millar (1985) argue, information technologies are also affecting the value chains of companies, their competitive environment and the ways to meet the needs of the buyer. These basic effects explain why information technology has acquired strategic importance and is different from the many other technologies that companies use.

Figure 1 shows the adaptation of the value chain that we propose for the hotels in generic form. The value chain shared by emblematic hotels differs from other establishments in the sector. This is, basically, due to their being located in special environments, picturesque, historic or unique places, and in their main infrastructure, that is to say, the patrimonial, artistic or historical characteristics of the buildings where the accommodation service is provided. This is covered in the value chain proposal in support activities under the heading: “infrastructure, environment and location”.

Brotherton et al. (2003) link critical success factors to the Porter (1980) value chain. They argue that these can be derived from both the external and the internal environment and reflect the critical capabilities and competencies of the firm to achieve the competitive advantage that the company obtains from the set of elements that contribute most to value creation and that show the ability of the company to attain a superior performance in comparison to other companies in the sector. In this sense, our proposition is that it is possible to establish a relationship between the critical success factors and competitive advantage of an organisation through the value chain concept. Therefore, through an analysis of online opinions – the evaluation that customers give to the value chain activities – one can identify the critical success factors of emblematic hotels, which will be those activities that are most valued.

In the literature review, no studies were found on value chain/identification of critical success factors using the opinions of guests of emblematic hotels. Some studies have identified success factors in the lodging sector in general and have proposed success...
models for specific areas of the industry. Brotherton and Shaw (1996) conducted questionnaires and interviews with managers of some British hotels. Their work suggests that success factors include customer service and support, staff quality, which includes attitude, skills and appearance, the quality of the product, income and benefits, safety and hygiene and cost efficiency. Brotherton et al. (2003) analysed the critical success factors of British and Dutch hotels through questionnaires, finding that 33 of 59 were statistically significant. These critical success factors are categorised into two types: generic or technical (64 per cent) and human (36 per cent) and they suggest that the success of hotel companies is based more on technical aspects and that human factors are more context specific. Brotherton (2004) identified 37 critical success factors for UK hotels by means of questionnaires and divided them into seven categories: basic product, consistency, customer service, quality and hygiene, strategic control, pricing and location. Olsen et al. (2005) identify through literature review and hotel company annual reports some critical factors such as location, marketing, brand management and human resources management. Hua et al. (2009) examine hotel critical success factors from a multi-stakeholder perspective through interviews and questionnaires. They note that the five success factors of major importance highlighted by guests in relation to service quality are: guest security, comforts, the hotel’s capacity to respond to client demands, operational flexibility and the speed of customer service. Melia (2010) conducted in-depth interviews and held focus groups with owners and managers of independent hotels in Ireland and identified four common critical success factors: infrastructure and product quality, location, customer service and staff. Avcikurt et al. (2011) conducted questionnaires with managers and owners of a sample of small hotels in Turkey, as well as a literature review, and found that hotel critical success factors are the availability of internet, service quality, financial performance and marketing. Wang and Hung (2015) conducted an online content analysis of clients of a sample of guest houses in China and concluded that success factors, from highest to lowest satisfaction scores awarded by the consumer, are: the environment or atmosphere of the establishment, cleanliness, location and room features.

3. The consumer’s perspective: the online opinions of hotel clients

In the present, thanks to the development of information technologies and Web 2.0, it is common for hotel users to share their consumer experience in reviews, comments or opinions published online. These generally incorporate an overall experience score and/or individual scores on certain relevant aspects of the service. This information, called user-generated content, has become an essential element in the decisions of other clients. In this regard, a number of studies have concluded that most users consult the opinions expressed by other users about hotel products and services in advance of a purchase decision (Pan et al., 2007; Vermeulen and Seegers 2009; Ye et al. 2011). These reviews or comments are made through electronic communication: eWOM, which is defined as “[...] all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers” (Litvin et al., 2008, p. 459).

The impact of these types of opinions on hotel companies has been studied. This has given results showing, for example, that positive online opinions can increase a hotel’s bookings so that a 10 per cent improvement in comment rating can increase sales by 4.4 per cent (Ye et al., 2009) or permit an increase in price of hotels with better scores (Yacouel and Fleischer, 2011). The impacts of guest online comments can be viewed from the perspective of the manager as critical success factors, since the companies see them as opportunities because an analysis of, and an appropriate reaction to, the reviews can lead to the achievement of competitive advantage (Ye et al., 2009).
Understanding the guest experience of a hotel and his/her perception of the service can help managers improve quality and identify the most important client complaints (Levy et al., 2013; Stringam and Gerdes, 2010). This facilitates the creation of effective marketing strategies, the identification of innovative methods of business management and development of new policies (Jun et al., 2010; Loureiro and Kastenholz, 2011). In short, investigating consumer experience through online commentaries can identify the critical success factors that should be taken into account by managers; hence, this has been the source of information adopted in the present work.

Some research has previously used online guest opinion to explore user satisfaction, focussing on the coding review content and using different indicators representative of the services in the hotels. One of the most used representative indicators discussed in the literature is the “room” as the core of the accommodation service, grouping with it multiple items such as cleaning, size, bed, silence, air conditioning, television, etc. (Chaves et al., 2012; Dong et al., 2014; Li et al., 2013; Lu and Stepchenkova, 2012; Magnini et al., 2011; Zhou et al., 2014). Another indicator frequently analysed in the empirical studies is the “location” of the establishment, grouping aspects such as proximity to the city/town centre, proximity to public transport, proximity to the beach, shops, etc. (Chaves et al., 2012; Dong et al., 2014; Lu and Stepchenkova, 2012; Magnini et al., 2011; Zhou et al., 2014). The personnel and customer service is another of the most studied indicators in terms of tourist opinion; attributes valued are friendliness and willingness to help, language skills and efficiency in the resolution of problems, etc. (Chaves et al., 2012; Dong et al., 2014; Magnini et al., 2011; Zhou et al., 2014). Restaurant and food and drink services usually appear in some works; valued aspects are variety, the dining area atmosphere and the offer of special menus, etc. (Dong et al., 2014; Li et al., 2013; Lu and Stepchenkova, 2012; Magnini et al., 2011; Zhou et al., 2014). Some authors also discuss indicators related to facilities in general, such as WiFi operation, availability of a gym, swimming pool, spa, decoration and noise levels in common areas and parking availability, etc. (Chaves et al., 2012; Dong et al., 2014; Li et al., 2013; Lu and Stepchenkova, 2012; Magnini et al., 2011; Zhou et al., 2014). Finally, several works also include indicators measuring price of the accommodation, services, restaurant facilities, etc. (Dong et al., 2014; Li et al., 2013; Lu and Stepchenkova, 2012; Magnini et al., 2011; Zhou et al., 2014).

4. Methodology and data

The methodology that, in our opinion, is best adapted to our purpose corresponds to the case studies that can be used to describe phenomena within real organisations or to explore situations where there is no well-defined theoretical framework, this being the case for the critical success factors of emblematic hotels. Case studies allow the development of a theory that can be transferred to other cases, since it is not our intent to generalise the results to other individuals (statistical generalisation) but rather to generalise the results to a theoretical framework (analytical generalisation) (Yin, 1989, 1993). Consequently, given that we do not wish to test any hypothesis, or to predict the behaviour of the company under analysis, or to obtain conclusions extrapolable to the sector as a whole by the logic of the case, we consider this methodology appropriate to meet the main objective of our investigation. Generally, the case study method is carried out through the analysis of one or more companies and, although normally we associate case studies with quantitative research, one can actually base them on any combination of quantitative and qualitative evidence (Ghauri et al., 1995) and therefore statistical techniques or other quantitative methods can be applied, as when searching for patterns in existing data (Bryman, 1984).

There are different typologies of case study. In this work, we have applied the exploratory modality. This is appropriate when seeking to explore a phenomenon for which
there is no well-defined theoretical framework (Yin, 1989), or is in its preliminary stages, where there are few previous studies (Cepeda, 2006) and for problems where participant experience is important and the context of the situation is fundamental (Bonoma, 1985), as for the success factors of emblematic hotels. The case study methodology for detecting critical success factors in accommodation services has previously been used in the field of tourism in the work of Camillo et al. (2008) for restaurants and Hua et al. (2009) in the study of budget hotels.

On the other hand, our analysis focuses on reviews that users have posted on the websites of the establishments themselves. Krippendorff (1990, p. 28) defines content analysis as “a research technique designed for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use”. Following the collection of the data, a well-organised classification and categorisation method is required to allow for its further analysis. Text mining or text analysis seems to be an appropriate method to carry out this task since it allows the analysis of the words and phrases that guests, who have already visited the hotels, have posted online and to classify them into simpler categories with the aim of discovering patterns or trends depending on the research questions raised (Weber, 1990).

Following Weber (1990), who points out that a true analysis of content must incorporate qualitative and quantitative aspects, in our study we consider both. Thus, we perform a quantitative content analysis that aims to determine the words most frequently used. This serves as a basis for choosing groups of words linked to the elements of the value chain under analysis, and a qualitative content analysis that focuses more on exploring the underlying meaning of the opinion. On the one hand, we use sentiment analysis, which consists of analysing the vocabulary of a text, in our case, the users’ online opinions, in order to determine the mood or the emotional load of the reviewer (Leetaru, 2012). On the other hand, polarity analysis or opinion mining is used, which allows us to find out if the message is in general positive, negative or neutral (Feldman, 2013). Both analyses operate automatically through statistical software R that consists of various packages that process, recognise and evaluate polarity and feelings based on a vocabulary or lexicon provided for that purpose, in particular using the SEL lexicon (Spanish emotion lexicon) created by Díaz-Rangel et al. (2014).

Text mining enables the analysis of the frequency of mention of certain words, the associations between them, the similarities and differences between different groups of comments and the sentiment analysis. Text analysis has been used by different authors in relation to online opinions on generic hotel establishments to assess client satisfaction with services received in the establishment based on their expressed opinions: Chaves et al. (2012), Dong et al. (2014), Li et al. (2013), Lu and Stepchenkova (2012), Magnini et al. (2011) or Zhou et al. (2014). However, it has not yet been used in relation to emblematic hotels. In addition, Chaves et al. (2012) and Geetha et al. (2017) analyse the sentiment attached to the comments.

Based on the previous literature on critical success factors, value chains and online opinions, we identify five elements, information on which it is likely to generate utility for the guests; room, facilities, location, personnel and restaurant services. These form part, directly or indirectly, of guest experience and satisfaction and, by extension, will be reflected in the comments they make about their experience. To each of these elements are assigned a group of related words so that, when at least one of the words in the group is present in the comment, it is linked to the corresponding element.

To carry out the study, as a representative example of emblematic hotels of Spain, the hotel chain the Spanish Tourist Paradors (Paradores de Turismo de España) was selected. First, because its experience in managing emblematic hotels is very extensive, both in the number of establishments in the network and by its length of operation. And, second,
because the Parador network has an information and reservation portal on the internet where tourists can directly search for general information, configure it according to their requirements, enjoy membership advantages and post information (to inform the company and other users) about their experience.

The Spanish Tourist Paradores is a Spanish State publicly owned hotel chain founded in 1928. It employs 3,500 staff and currently offers more than 10,000 beds in 96 Paradors with an average establishment size of 65 rooms. The establishments are grouped into three categories, namely, Naturia, Civia and Esentia. The majority, 45, fall into the category Esentia, which is formed by hotels located in historic and monumental buildings. For its part, the Civia encompasses 23 establishments, also located mainly in emblematic buildings, but in urban destinations. The remaining 28 Paradors, grouped under the name Naturia, include establishments in natural spaces both in the interior of the country and on the coast (Table I). The network has establishments in all the autonomous communities[4], half of them located in environments considered a combination of historical-artistic or in cities declared UNESCO World Heritage Sites.

The qualitative data collected come from verified reviews made by real guests, who belong to the loyalty programme “Friends of the Paradors” (Amigos de Paradores)[5]. The data appear on the website of each of the Paradores. The reviews include written free style comments and a scoring system between 1 and 10 evaluating the overall hotel visit experience. These opinions and ratings were collected for each hotel from January 2014 to March 2016 and make up the data on which our analysis is based. The total for the period was 10,362 opinions, with an average of 108 opinions per hotel (Table I).

The object of study are the elements of the value chain cited in the comments; the general stay score serves only as a segmentation variable for the comments that are classified into three levels according to that score. Thus, it is considered that the score associated with a comment is favourable if the user has scored the establishment with 7, 8, 9 or 10 points, unfavourable when the score is 1, 2, 3 or 4 and neutral when the score is 5 or 6. In general, as shown in Table I, 88 per cent of the commenting guests give a favourable score, with the average score in the three Parador categories being above 8. The best rated Paradors, on average, are those of the Esentia type, of which there are also a greater number of opinions per establishment.

To summarise, based on the Villarreal and Landeta (2010) model, we propose the fact sheet shown in Table II for our case study.

### Table I.

<table>
<thead>
<tr>
<th></th>
<th>Civia</th>
<th>Esentia</th>
<th>Naturia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourables</td>
<td>84%</td>
<td>90%</td>
<td>88%</td>
<td>88%</td>
</tr>
<tr>
<td>Neutrals</td>
<td>9%</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Unfavourables</td>
<td>7%</td>
<td>4%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Average score</td>
<td>8.1</td>
<td>8.5</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Number of opinions</td>
<td>2,306</td>
<td>5,688</td>
<td>2,368</td>
<td>10,362</td>
</tr>
<tr>
<td>Number of Paradors</td>
<td>23</td>
<td>45</td>
<td>28</td>
<td>96</td>
</tr>
<tr>
<td>Average of opinions per Parador</td>
<td>100</td>
<td>126</td>
<td>85</td>
<td>108</td>
</tr>
</tbody>
</table>

Source: Own design

5. Analysis and results

We have divided the analysis into two parts: in the first part, we perform a classical analysis of the frequency of word usage and the differences that these frequencies represent in the comments of establishments belonging to different categories. In addition, in this first part, we analyse each comment, through polarity analysis, to discover whether the opinion
expressed is positive, negative or neutral. And with sentiment analysis, we determine the attitude or affective state of the person writing the review or comment, assigning each comment an emotional state; this is usually a question of determining whether the subject feels anger, joy, sadness, fear, disgust or surprise with his experience, focusing on our case on the states of joy as positive and of anger and disgust as negative, and eliminating the rest as being inconsistent with the emotional state that a hotel stay should cause.

In a second part of the analysis, we focused on the study on the elements of the value chain selected for the present study: room, facilities, location, personnel and restaurant services. Thus, in a first step, each element of the value chain is associated with a set of words used in reference to it. The comments are then classified based on whether or not they mention each element of the value chain. The words associated with each element of the value chain have been chosen based on the results of the previous stage, so that the words with the highest frequency of use are classified, where possible, with some of those elements analysed. The list of words on each element is completed by the words used or found in the earlier literature commented on in the previous section.

Specifically, in order to evaluate whether a comment refers to a room item, we searched for the following words: wardrobe, carpet, pillow, cupboards, bathtub, bathroom, bed, mattress, decoration, sleep, shower, mirror, room, sink and towel rack; for the attribute facilities, the keywords were: nice, comfortable, construction, care, building, facilities, pool and spa. For location, the words were: isolated, around, area, countryside, central, closeness, city, environment, location, sea, mountain, landscape, beach, situation, situated and views. For the personnel item, we searched for: friendly, employee/s, staff, reception, staff and treatment. Finally, for the item restaurant services, the following were used: lunch, drinks, coffee, coffee shop, waiter, dinner, chef, dining room, food, breakfast, gastronomy, menu, restaurant and wine.

Once the comments had been classified, the frequency of mention within them of the different attributes of the value chain was calculated and the statistical significance of the results was determined through the non-parametric \( \chi^2 \) test for difference of proportions between two groups. The frequency analysis is done by grouping comments by type of Parador, and considering the scores that accompany each comment. Finally, to determine the relative positioning of each Parador with respect to the others, from the frequency of mention of the value chain attributes in the comments, we use correspondence analysis, which is a statistical technique that allows an analysis of contingency tables with numerical frequencies of different categories and provides a graphical representation that allows a quick interpretation of, and facilitates the understanding of, the data (Greenacre, 2008).

Thus, as a result of the analysis as a whole, the following results will be obtained: which words are the most frequent used in the comments and if there is a difference in frequency according to the type of Parador; what percentage of comments express positive/negative content; what percentage of comments express positive/negative emotions; what attributes

<table>
<thead>
<tr>
<th>Research methodology</th>
<th>Single case broken down into different sub-units. Exploratory study</th>
</tr>
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<tbody>
<tr>
<td>Geographical ambit</td>
<td>The whole country of Spain</td>
</tr>
<tr>
<td>Universe</td>
<td>Spanish emblematic hotels</td>
</tr>
<tr>
<td>Type of sampling</td>
<td>Theoretical, non-statistical sampling</td>
</tr>
<tr>
<td>Sample</td>
<td>Network of Spanish Tourist Paradors</td>
</tr>
<tr>
<td>Data collection methods</td>
<td>Extraction from user-generated online content</td>
</tr>
<tr>
<td>Information sources</td>
<td>Online platform of the Network of Spanish Tourist Paradors</td>
</tr>
<tr>
<td>Key contributors</td>
<td>Parador guests belonging to loyalty programme</td>
</tr>
<tr>
<td>Data analysis methods</td>
<td>Text and opinion mining</td>
</tr>
<tr>
<td>Study period</td>
<td>January 2014-March 2016</td>
</tr>
</tbody>
</table>

**Source:** Based on Villareal and Landeta (2010)
of the value chain are the most commented on and therefore most noticed by guests, both globally and by each type of hotel; what items in the value chain are most frequently mentioned with higher scores; if there are statistically significant differences in the proportion of comments that mention the different items of the value chain according to the hotel type of and/or score that accompanies the comments to allow a comparison between them; which Paradors most closely resemble each other based on the frequency of which the attributes of the value chain are mentioned in their comments; and the position of each Parador from different perspectives in relation to other establishments in the chain.

Finally, it must be noted that, in order to carry out both phases, the text of the opinions had been purified to eliminate or group words that could distort the results. Thus, we discarded articles, prepositions, the word Parador for appearing very frequently (in 40 per cent of the comments), plurals and genders and, as far as possible, suffixes or variations of the same word, maintaining only the root.

Moving to the first stage of the analysis, the frequency of occurrence of each word is calculated on the total words of the comments, both globally and by type of Parador. Thus, Table III shows, by way of example, the 20 most frequently used words, among which we can find words related to the five analysed items. In fact, personnel, room and views are the three most frequently used words, as well as the adjectives that show satisfaction, such as excellent, good, etc. These 20 words alone cover 16.62 per cent of the cumulative frequency and the first 50 words alone cover 29.25 per cent of the cumulative frequency.

The set of the 300 words most frequently used in the comments is shown in the word cloud in Figure 2, where the size of each word is directly related to its frequency of use.

In order to establish another perspective of the analysis of the comments and to evaluate the differences between the three types of Paradors, in terms of the words used in the reviews, in Figure 3 is the so-called comparison cloud showing the words most associated with the different types of Parador based on relative frequency of use. It is observed that the differences between the three types of establishments are directly related to their characteristics, that is to say, with the attributes that the company uses when classifying an establishment as Civia, Esentia or Naturia.

Thus, we note that for the Civia Paradors we see the words “city” or “modern”, which do not appear for the other hotel types, which is in accordance with the characteristics ascribed to this type of establishment by the management. Equally, in the Esentia Paradors, prominence is given to the words “building” and “castle”, being Paradors located in unique historical buildings. Finally, in the Naturia Paradors, the words “environment” and “beach” were highlighted, in agreement, as previously stated, with the description that the company provides for this type of establishment. Therefore, it is clear that guests clearly perceive the peculiarities of each type of hotel and this shows in their comments.

<table>
<thead>
<tr>
<th>Word</th>
<th>Times</th>
<th>Freq. (%)</th>
<th>Word</th>
<th>Times</th>
<th>Freq. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>2,727</td>
<td>2.21</td>
<td>Restaurant</td>
<td>897</td>
<td>0.73</td>
</tr>
<tr>
<td>Room</td>
<td>2,331</td>
<td>1.89</td>
<td>Better</td>
<td>872</td>
<td>0.71</td>
</tr>
<tr>
<td>View</td>
<td>1,389</td>
<td>1.12</td>
<td>Breakfast</td>
<td>842</td>
<td>0.68</td>
</tr>
<tr>
<td>Excellent</td>
<td>1,279</td>
<td>1.04</td>
<td>Environment</td>
<td>673</td>
<td>0.54</td>
</tr>
<tr>
<td>Good</td>
<td>1,254</td>
<td>1.02</td>
<td>Place</td>
<td>619</td>
<td>0.50</td>
</tr>
<tr>
<td>Treatment</td>
<td>1,218</td>
<td>0.99</td>
<td>Spectacular</td>
<td>605</td>
<td>0.49</td>
</tr>
<tr>
<td>Good</td>
<td>1,042</td>
<td>0.84</td>
<td>Stay</td>
<td>585</td>
<td>0.47</td>
</tr>
<tr>
<td>Service</td>
<td>1,010</td>
<td>0.82</td>
<td>Building</td>
<td>497</td>
<td>0.40</td>
</tr>
<tr>
<td>Attentiveness</td>
<td>931</td>
<td>0.75</td>
<td>Beautiful</td>
<td>458</td>
<td>0.37</td>
</tr>
<tr>
<td>More</td>
<td>924</td>
<td>0.75</td>
<td>Pretty</td>
<td>383</td>
<td>0.31</td>
</tr>
</tbody>
</table>

**Table III.** Words most frequently used in comments

**Source:** Authors’ own design
A classic sentiment analysis test and a polarity test of the comments were made. Regarding polarity (Table IV), it is clearly seen that the comments with a favourable score have a mainly positive sense (88.4 per cent), while the majority of comments with a negative score have a negative polarity (59.4 per cent). As for the emotions expressed in the opinions, of the six analysed by the usual methodology (anger, joy, sadness, fear, disgust and surprise), we consider it useful to focus on the comments that express joy as a positive or favourable emotion towards the stay in the Parador and the comments that express anger or disgust as negative or unfavourable emotions towards the stay. In this sense, the percentage of comments with favourable scores expressing anger or disgust is only 1.9 per cent, whereas those same emotions appear in 15.6 per cent of comments with unfavourable scores (Table IV). On the other hand, joy is noted to be the predominant emotion in 31.2 per cent of the comments with favourable scores; however, it is also the main emotion in comments with unfavourable scores.

The latter is because there is sometimes no agreement between the meaning of the comment and the accompanying scoring, as pointed out by Tsuji et al. (2015). Even if the overall assessment of the stay is not good, in the commentary the user focuses on highlighting the positive and not negative aspects, something that does not usually happen in the case of comments with very high scores. This result reveals the need to
analyse both elements of the review (comment and scoring) together in order to obtain results to help managers.

Entering the second stage of our analysis, we identify which attributes of the Parador value chain appear more frequently in reviews. To do this, we search the comments for any references to the value chain items: room, facilities, location, personnel and restaurant services.

From this coding, the percentage of comments by type of Parador mentioning the analysed items is calculated, that is to say, the percentage of comments with a word

<table>
<thead>
<tr>
<th>Polarity</th>
<th>Positive (%)</th>
<th>Negative (%)</th>
<th>Joy (%)</th>
<th>Emotion</th>
<th>Anger and disgust (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable score</td>
<td>88.4</td>
<td>10.1</td>
<td>55.2</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Unfavourable score</td>
<td>37.5</td>
<td>59.4</td>
<td>29.0</td>
<td>15.6</td>
<td></td>
</tr>
</tbody>
</table>

Note: The remaining comments up to 100 per cent are identified as neutral, when analysing polarity; or in the case of sentiment analysis correspond to emotions not analysed or have not been assigned to any emotion in particular.

Source: Authors’ own design
related to the value chain items (Table V). It should be noted that, for each type of Parador, the frequency total is not 100 per cent, as the same comment can refer to more than one attribute.

It is noteworthy, for both the Paradors Civia and Esentia, that the comments with words related to staff are the most frequent (39.5 and 33.4 per cent of the comments, respectively), while in the Naturia Paradors, the most frequent comments are those that mention the location of the establishment. For the whole sample set of Paradors, location and staff are the items that appear most frequently (Table V).

This same analysis is performed on the scores given by the guests to their overall experience, that is, analysing separately the comments accompanied by favourable scores and the comments accompanied by unfavourable scores. As shown in Table VI, in the reviews with the best scores, the result shown above is maintained for all comments regarding the item in the value chain that has a higher frequency. Thus, 41.1 per cent of the best rated comments of the Civia Paradors mention personnel; this percentage is 33.9 per cent for the Esentia Paradors. Meanwhile in the Naturia Paradors, the highest frequency is location, present in 46.4 per cent of the comments. Therefore, as in the previous analysis, the personnel and location attributes are the most mentioned with higher scores.

As for comments accompanied by unfavourable scores, we note that the attributes most mentioned are room and restaurant services. Specifically, the room attribute is mentioned most frequently in the Civia Paradors (43.9 per cent), while it is restaurant services in the Esentia (48.9 per cent) and in Naturia (38.3 per cent).

In order to evaluate if there are statistically significant differences in the distribution or weight of the elements of the value chain dependant on type of Parador, we undertook a non-parametric test for proportional differences, or $\chi^2$, that verifies if there are differences in the frequency of comments mentioning the value chain items analysed between the different types of Paradors, taken as a whole. Table VII shows the $p$-values of the contrast for the

<table>
<thead>
<tr>
<th></th>
<th>Civia (%)</th>
<th>Esentia (%)</th>
<th>Naturia (%)</th>
<th>All (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>25.8</td>
<td>23.7</td>
<td>22.1</td>
<td>23.8</td>
</tr>
<tr>
<td>Facilities</td>
<td>23.1</td>
<td>25.2</td>
<td>21.6</td>
<td>24.3</td>
</tr>
<tr>
<td>Location</td>
<td>33.1</td>
<td>31.9</td>
<td>44.8</td>
<td>35.5</td>
</tr>
<tr>
<td>Personnel</td>
<td>39.5</td>
<td>33.4</td>
<td>36.4</td>
<td>35.5</td>
</tr>
<tr>
<td>Restaurant services</td>
<td>34.0</td>
<td>29.6</td>
<td>29.3</td>
<td>30.5</td>
</tr>
</tbody>
</table>

**Source:** Authors’ own design

![Table V. Frequency of mention of value chain attributes in comments](#)

<table>
<thead>
<tr>
<th></th>
<th>Civia Fav. score (%)</th>
<th>Esentia Fav. score (%)</th>
<th>Naturia Fav. score (%)</th>
<th>All Fav. score (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>24.2</td>
<td>22.0</td>
<td>20.2</td>
<td>22.1</td>
</tr>
<tr>
<td>Facilities</td>
<td>25.5</td>
<td>24.9</td>
<td>21.5</td>
<td>24.3</td>
</tr>
<tr>
<td>Location</td>
<td>36.3</td>
<td>32.5</td>
<td>46.4</td>
<td>36.5</td>
</tr>
<tr>
<td>Personnel</td>
<td>41.1</td>
<td>34.2</td>
<td>37.5</td>
<td>36.2</td>
</tr>
<tr>
<td>Restaurant services</td>
<td>33.0</td>
<td>28.4</td>
<td>28.7</td>
<td>29.4</td>
</tr>
</tbody>
</table>

**Source:** Authors’ own design

![Table VI. Frequency of mention of the attributes of the value chain according to accompanying score](#)
results given in Tables V and VI. The figures in the italic type indicate that there are differences between the two types of Paradors under comparison.

When analysing the comments as a whole, regardless of the score that accompanies them (Table VII – upper panel), it is observed that the three types of establishments differ in the proportion of comments made about location. The frequency of occurrence in the comments of the room attribute is only significantly different between the Civia and Naturia Paradors, while the facilities attribute does not differ in frequency of mention between the Civia and the Esentia. The personnel item has a different frequency of mention among all types of Paradors with a 95 per cent confidence level, but it is highly significant only with the Civia and Esentia Paradors. Finally, Esentia and Naturia do not show a difference in the proportion of comments mentioning restaurant services. In summary, according to these results and in terms of frequency of mention of the different items in the value chain, Civia and Naturia are the most differentiated and Esentia and Naturia are the most similar, thus placing Esentia at an intermediate point between the other two types. The results are almost identical when only comments with favourable scores are analysed (Table VII – intermediate panel). However, we do not detect significant differences in the frequency of comments according to attributes when we analyse only the comments accompanied by unfavourable scores (Table VII – lower panel). Therefore, since the three types of Parador do not differ from one another in terms of the frequency of mention of the different items if the score is unfavourable, while there are differences when the score is favourable, we can conclude that when the stay is satisfactory, the elements that stand out, that have generated utility, or have made an impression on the guest, differ among Parador type.

We also analysed whether for all or each type of Parador, there are differences in the frequency of mention of the attributes of the value chain in relation to whether the score is favourable or unfavourable (Table VIII).

It is observed that for the attributes facilities and personnel, there are no significant differences, that is, the frequency by which they appear is similar in both the comments with favourable scores and with unfavourable scores. While for the rest of attributes

<table>
<thead>
<tr>
<th></th>
<th>Civia-Esentia</th>
<th>Civia-Naturia</th>
<th>Esentia-Naturia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room</td>
<td>0.0510</td>
<td>0.0031</td>
<td>0.1208</td>
</tr>
<tr>
<td>Facilities</td>
<td>0.9677</td>
<td>0.0058</td>
<td>0.0008</td>
</tr>
<tr>
<td>Location</td>
<td>0.0056</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Personnel</td>
<td>0.0000</td>
<td>0.0291</td>
<td>0.0117</td>
</tr>
<tr>
<td>Restaurant services</td>
<td>0.0001</td>
<td>0.0006</td>
<td>0.8132</td>
</tr>
<tr>
<td><strong>Favourable score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room</td>
<td>0.0602</td>
<td>0.0026</td>
<td>0.0889</td>
</tr>
<tr>
<td>Facilities</td>
<td>0.6547</td>
<td>0.0038</td>
<td>0.0027</td>
</tr>
<tr>
<td>Location</td>
<td>0.0028</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Personnel</td>
<td>0.0000</td>
<td>0.0234</td>
<td>0.0040</td>
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<tr>
<td>Restaurant services</td>
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<td>0.0032</td>
<td>0.8317</td>
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<tr>
<td><strong>Unfavourable score</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Room</td>
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<td>0.3571</td>
<td>0.2018</td>
</tr>
<tr>
<td>Facilities</td>
<td>0.5574</td>
<td>0.6902</td>
<td>1.0000</td>
</tr>
<tr>
<td>Location</td>
<td>0.7791</td>
<td>0.1757</td>
<td>0.0637</td>
</tr>
<tr>
<td>Personnel</td>
<td>0.8774</td>
<td>0.6443</td>
<td>0.7788</td>
</tr>
<tr>
<td>Restaurant services</td>
<td>0.03198</td>
<td>0.5056</td>
<td>0.0886</td>
</tr>
</tbody>
</table>

Source: Authors’ own design
(room, location and restaurant services), there are differences between both the groups of comments in general for the network of Paradors and for the Paradors of each type.

To complete the global analysis of the value chain attributes and in order to try to determine if these attributes contribute positively or negatively to the overall valuation of the guest stay, we calculate the percentage of unique comments, understanding that these refer only to one attribute of the value chain, expressing a positive/negative opinion and showing a favourable (joy) or unfavourable (anger or disgust) attitude on the part of the guest commenting (Table IX). It is observed that for location, personnel and facilities, the percentage of comments with positive polarity is higher, while the highest percentage of those with negative polarity is recorded for room and restaurant services. As for the emotion transmitted by the comments, personnel stands out among the favourable and, once again, restaurant services and room among the unfavourable.

If we analyse the information in Tables VI, VIII and IX in conjunction, we can establish some interesting results in relation to the attributes of the analysed value chain. Thus, we can infer that, since the room attribute is more frequently mentioned in the comments with unfavourable scores than favourable (Table VI), this difference is statistically significant (Table VIII) and that the percentage of comments with negative polarity and that express anger and disgust is high in relation to other attributes (Table IX). The management of the room attribute must be improved since it is generating client dissatisfaction and could cause the award of a poorer score for the stay. An identical result is given for restaurant services. Thus, the same recommendation can be made for the restaurant services attribute as it also manifests itself as a source of Parador guest dissatisfaction. At the other extreme is the location attribute, which is most frequently mentioned in the comments with a favourable score (Table VI) in a significantly different way in relation to its frequency of use in comments with unfavourable scores (Table VIII) and that has the highest percentage of unique comments with positive polarity (Table IX); so we can conclude that this attribute contributes positively to the guest’s perception of

<table>
<thead>
<tr>
<th></th>
<th>Civia</th>
<th>Esentia</th>
<th>Naturia</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Facilities</td>
<td>0.6024</td>
<td>0.6631</td>
<td>0.3119</td>
<td>0.6203</td>
</tr>
<tr>
<td>Location</td>
<td>0.0068</td>
<td>0.0046</td>
<td>0.0133</td>
<td>0.0000</td>
</tr>
<tr>
<td>Personnel</td>
<td>0.0565</td>
<td>0.9817</td>
<td>0.0951</td>
<td>0.4044</td>
</tr>
<tr>
<td>Restaurant services</td>
<td>0.0124</td>
<td>0.0000</td>
<td>0.0418</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

**Source:** Authors’ own design

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Positive (%)</th>
<th>Negative (%)</th>
<th>Joy (%)</th>
<th>Anger and disgust (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>72.5</td>
<td>22.4</td>
<td>28.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Facilities</td>
<td>86.5</td>
<td>4.3</td>
<td>22.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Location</td>
<td>90.1</td>
<td>7.2</td>
<td>21.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Personnel</td>
<td>87.0</td>
<td>9.9</td>
<td>33.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Restaurant services</td>
<td>78.2</td>
<td>16.5</td>
<td>24.4</td>
<td>7.7</td>
</tr>
</tbody>
</table>

**Notes:** The remaining comments up to 100 per cent are identified as neutral, when analysing polarity; or in the case of the sentiment analysis correspond to unanalysed emotions or have not been assigned to any particular emotion

**Source:** Authors’ own design
the stay, generating utility and promoting general satisfaction with the experience, that is, in general terms, they think that the locations of the Paradores are excellent.

Finally, focusing our analysis on each Parador individually, we carried out a correspondence analysis to observe similarities and differences between the hotels based on the frequency of comments that mention the different analysed attributes (Figure 4).

The two dimensions explain 76 per cent of the variance. The attributes are indicated in red by their initial letter. The Paradors are named in blue. Thus, by way of example, to help interpret the graph we point out that the Paradors of Cruz de Tejeda, Plasencia and La Granja are similar in terms of the frequency in which attributes are mentioned and stand out because of the greater use of the word facilities. Similarly, the Paradors of Bielsa, Málaga Gibralfaro, Aiguablava, Toledo and Cervera de Pisuerga are similar and stand out because of the high frequency of the use of the word location.

For each establishment, we obtained the attribute with the highest frequency of mention according to type of score (favourable or unfavourable) accompanying the comment, the three most frequent unique words in the overall comments, the average guest overall rating, the percentage of comments with positive (+) and negative (−) polarities, and the percentage of comments expressing positive feelings (+), and negative feelings, disgust or annoyance (−)[10]. It is observed that the Parador best rated on average in the country is Cangas de Onís (9.37 points), a Naturia type, and the worse rated is Santo Domingo Bernardo de Fresneda (6.54 points), of the Esentia type. The next best rated are those of Santiago de Compostela, Corias, Casa de Ínsua, Santo Estevo and Lorca, all of the Esentia type. In relation to the polarity, at first sight neither a direct relationship between the percentage of comments with positive polarity and the average score of each Parador, nor between the emotion expressed in the comment and the average score, is observed. We do

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**Figure 4.** Graphic correspondence analysis by Parador of the frequency of comments mentioning value chain attributes

**Notes:** Where H stands for room, I stands for facilities, L stands for location, P stands for personnel and R stands for restaurant services

**Source:** Authors' own design
not go deeper into analysing further aspects of the table, since we consider that the true recipients of the information should be the managers of the establishments, leaving to their discretion the interpretation and treatment of these results.

6. Discussion of results

The managers of accommodation establishments in general, and of emblematic hotels in particular, are aware of the current importance of the online content generated by their guests, given the multiple impacts this can have on their businesses. Similarly, they are conscious of its utility to improve the quality of their services and the adoption of effective marketing strategies, as it allows the identification of which aspects of the service are perceived positively and negatively by clients.

We examined more than 10,000 comments and ratings awarded by guests to a chain of emblematic hotels, on its own website, in a first exploratory study. In this work, we focus on a study of the language used in online commentaries, through the methodology of text analysis. We examined the most frequently used words in the comments in various forms, grouping them in relation to the different attributes that make up the value chain of a network of emblematic hotels, The Spanish Tourist Paradores. We use tools of different natures, based on textual analysis, with a descriptive purpose as an aid to identification and to highlight aspects that are not at first sight evident, given the high number of opinions available. The results obtained serve as a basis to answer the research questions and meet our objectives.

It must be taken into account that in order to fulfil the objective of the work, an exploratory analysis of the valuations (comments and scoring) of the hotel services was carried out in the guest post-consumption phase. We did not consider the expectations that they held prior to their stay, only the more concrete aspects of the service that they received.

On the other hand, we must emphasise that the data used in the analysis come from guests belonging to the Parador loyalty programme, so their opinions are of great value to managers to preserve and boost client loyalty, with the positive consequences that this would have for their business. In addition, it has been verified that many of the guests have stayed in several establishments of the chain, so their opinions are even more valuable, since they have a greater knowledge of the product, and can make comparisons between hotels.

In relation to the research question and the objectives of our work on the factors that contribute to the success of the emblematic hotels, our results suggest that the personnel attribute, in the comments where it is mentioned in a unique way, show it as having mostly positive polarity and the highest percentage of positive feeling (joy). Similarly, the facilities attribute, in those comments in which it is uniquely named, shows the lowest percentage of negative feeling (anger or disgust). Therefore, these attributes contribute positively to the guest’s perception of the stay, generating utility and promoting general satisfaction with the experience, that is, in general terms, it is possible to think that they are elements well valued by users and that are critical success factors and contribute to the creation of competitive advantage for the chain. A similar conclusion came from the work of Brotherton and Shaw (1996), who emphasise staff quality. Melia (2010) accords with our results, highlighting facilities and staff quality as critical success factors. In works on online satisfaction, Chaves et al. (2012), Dong et al. (2014) and Stringam and Gerdes (2010) establish that staff quality is a factor that determines higher guest satisfaction in standard hotels. Zhou et al. (2014) find that the facilities attribute is important for guest satisfaction.

In the same sense, the findings show that the attribute location seems to be linked with higher scores and appears in the positive comments, and although it is not controlled by the management except in the initial decision to open the establishment, it contributes positively in the guest perception of the experience, generating utility and promoting general satisfaction with the stay. That is to say, in general terms, the location of the Paradores is...
excellent, being a critical success factor. These results coincide with those of Olsen et al. (2005), who also identify the location of an establishment as a critical factor. Melia (2010) finds that both location and the personnel are critical factors of the hotels analysed in their work. These results also confirm those obtained in the work of Wang and Hung (2015) that highlight the location of guest houses in China as critical success factors. For standard hotels, the works of Chaves et al. (2012), Dong et al. (2014), Magnini et al. (2011) and Stringam and Gerdes (2010) point to location as one of the most influential factors in guest satisfaction.

Contrary to these findings, we note that the value chain items that more score more negatively and generate emotions related to anger and disgust are room and restaurant services. In the case of the room attribute, in works related to online satisfaction, such as those of Lu and Stepchenkova (2012) and Zhou et al. (2014), it is found that some room characteristics generate dissatisfaction in standard hotel guests. However, in the literature, there are also works such as Wang and Hung (2015) that argue that the room can be a critical success factor and can be a source of satisfaction for the tourists staying in such hotels (Chaves et al., 2012), so there is thus no consensus in the literature. Something similar happens with restaurant services, which in our case does not provide competitive advantage for the emblematic hotels analysed. These results coincide with those of other studies on critical success factors. However, in other online satisfaction studies, such as those of Dong et al. (2014) and Stringam and Gerdes (2010), food and drink-related aspects are cited by tourists when they assign higher scores to an establishment.

In addition, a more detailed analysis of the results shows that for the most part, the most used adjectives have favourable connotations; excellent, good, well, spectacular, beautiful, nice, showing that guests, in general, seem to have a positive impression of their experiences. These results are similar to those obtained for standard hotels in the studies by Stringam and Gerdes (2010) which highlight words related to personnel and room and Geetha et al. (2017) that connect the words room and personnel with the adjective “good”.

7. Conclusions and implications
In view of the results, it can be concluded that the critical success factors of the emblematic hotels analysed, the Spanish Tourist Paradores, are similar to the critical factors for standard hotels. The attributes of location and facilities are critical success factors expected a priori given the nature of the business of such establishments, based on the singular nature of the buildings. Another critical success factor is personnel, which seems to indicate that the Paradores support their business model by employing highly qualified staff, according to guest perceptions, with less attention being paid to restaurant services or the room. We believe that this last aspect about the room should be especially taken into account by emblematic hotels since the clients of this type of establishment expect to a greater extent than in other types of hotels that the rooms are in keeping with the rest of the facilities. If they are not, this can generate dissatisfaction as expectations are not met. However, given the absence of other similar works, it would be important to have more empirical evidence to support or refute the conclusions of the present study.

In addition, because most of the adjectives used in the comments have a favourable connotation, we can conclude that guests seem to have a generally positive impression of their experience. On the other hand, a positive relationship has been detected between the scores and the polarity of the opinions, that is to say, when a user awards higher scores to a hotel, his/her comment is expressed more positively. In comparative terms, between the three types of emblematic hotels analysed, with respect to the attributes of the value chain, we can conclude that when the stay is satisfactory the elements that stand out, that have generated utility or have given a favourable impression to the guest differ between the Parador types, in relation to the frequency of their mention in the comments. The Paradores
Civia and Naturia are the most differentiated and the Esentia and Naturia the most similar, placing the Esentia in an intermediate point between the other two. Of course, given the nature of its classification, the only item whose frequency of mention is significantly different among the three types is location. The restaurant services item is significantly different in its frequency of mention between the Civia type and the other two types and the facilities item between the Naturia type and the other types. The opinions seem to show therefore a guest tendency to comment on different aspects according to the nature of the Parador.

In general, this paper offers a number of contributions to the literature. First, it contributes to existing research by adapting Porter’s (1980, 1985) value chain for the tourism accommodation sector in general. Second, it provides required evidence on the critical success factors of emblematic hotels through the analysis of direct value chain activities, those involved in creating value for the buyer, in order to identify sources of competitive advantage, following the Porter (1980, 1985) value chain model. Third, the existing literature is broadened by taking a perspective scarcely studied, the guest perception of hotel establishments using the factors that add most value, rather than simply considering the traditional views of the experts/managers. Fourth, we collect information on consumer perceptions of success factors, and explore alternatives to structured questionnaires by replacing them with online content posted by the user on the establishment’s website. This content consists of voluntary and unstructured information provided by the consumer and provides a number of advantages such as the free availability of a large amount of organised and diverse data which is cheap to gather.

Text analysis has proved to be a valuable tool that shows some very useful results that we emphasise below as having practical implications for the management of the Parador hotel chain:

- Parador guests who belong to their loyalty programme give a very high average score to these establishments, with the highest ranked Paradors being Esentia (8.5 points) followed very closely by the Paradors Naturia (8.3 points) and Civia (8.1 points). As is clear from the comments, in many cases, the opinions come from customers who have stayed more than once in an establishment of the Parador network, since they are members of the loyalty programme. That is, customers loyal to the brand show high scores, which possibly means for the chain that it has achieved competitive advantage as loyal customers make a greater number of stays, are less price sensitive, make favourable recommendations to other potential customers, show less interest in moving to the competition and provide other series of advantages as shown in empirical work.

- Guests seem clearly to perceive the differences between the three categories of Paradors. Thus, guests highlight different words according to Parador type and these words coincide with the character which the hotel chain has wanted to ascribe to each of them: Esentia – historical character, Civia – urban and Naturia – natural environment. The directors and management of the chain have been able correctly to design a strategy of differentiation based on the location and physical characteristics or infrastructure of the establishments.

- Comments with favourable ratings (more than 6 points) express positive content in 88.4 per cent of cases and, in 31.2 per cent of cases, also joy. On the other hand, comments with unfavourable opinions (less than 5 points) express negative content in 59.4 per cent of cases with 15.6 per cent expressing anger or disgust. It has been found that in some cases, there is no agreement between the meaning of the comment and the score (e.g. comments with a general negative sense but accompanied by high scores), so it is necessary to warn managers that they must take into account the language of the reviews and their accompanying scores.
As mentioned, room and restaurant services are those that seem to have more relation with low scores, appearing in negative comments and, in addition, they generate more feelings of anger and disgust. These items would benefit from management attention as they are generating client dissatisfaction and this could influence a diminution of the overall stay score.

The work provides managers, graphically and through a detailed summary table, information on each of the Paradors. This can help them place each Parador in relation to the rest of the chain, in terms of aspects such as the average stay score and the feelings generated by the experience. A ranking of hotels according to overall score and type is also given. In this last regard, we note that the best average scored Parador is in Cangas (Naturia) and the worse scored is in Santo Domingo Bernardo de Fresnedo (Esentia).

Finally, the limitations of the present study suggest future research lines. Thus, the work is a first step of an exploratory type and, as has been discussed, it will be necessary to validate and contrast it with other empirical analyses in the field of emblematic hotels, both national and international. Regarding the methodology, it is necessary to go deeper to try to determine the positive or negative meaning of the comments in a specific way, for each item of the value chain, and not just in a generic way for the whole of the commentary as done in this study. This is an important limitation. In relation to the case study, the results could be used as starting point for other analyses, such as a study of the efficiency in the use of resources by each establishment.

Notes
1. For example, the NH chain has 67 establishments in its “NH Collection”, based in 13 countries, eight of them in Europe, including 22 in different cities in Spain.
2. A review of these is found in Brotherton et al. (2003).
3. A literature review of works identifying critical success factors through different techniques is found in Esteves (2004).
4. The Eivissa Parador (Ibiza) had not yet been opened to the public at the time of the work so, consequently, there are no reviews available.
5. Friends of the Paradors is a points programme with rewards for consumption. Conditions can be seen at www.parador.es/es/tarifas/condiciones-del-programa-amigos.
6. The words shown in Figures 2 and 3 are in Spanish as this was the language used in the analysis.
7. In Spanish in Figure 3: “ciudad” and “moderno”, respectively.
8. In Spanish in Figure 3: “edificio” and “castillo”, respectively.
9. In Spanish in Figure 3: “entorno” and “playa”, respectively.
10. Available under request from the corresponding author.

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