The Image of **Hostel Accommodation** From the Tourist's Perspective - An Analysis of **Online Booking Platforms**

A Imagem do Alojamento Local na Perspetiva do Turista - Uma Análise às Plataformas de Reserva Online

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Abstract | The purpose of this study is to analyse the image created in tourists' minds, at times prior to the trip, and specifically, when choosing accommodation, with the source of information being the comments posted on online booking platforms. The Echtner and Ritchie model was used to analyze and treat a sample of 2210 comments, collected from three different booking platforms. To validate this research, a content analysis was performed using Echtner and Ritchie models which analyses an image from tourist destination by three dimensions. The comments were analyzed from the following dimensions of a tourist destination: holistic and individual attributes, functional and psychological characteristics, and the common or unique character of the destination's features. It was found that guests tend to perceive an image based on Functional/Attribute and Functional/Psychological attributes, which include facilities, meals and drinks, location, cleanliness and staff. This study utilizes original and authentic data, from tourists who spent time on lodging accommodations. The study is of practical relevance since it gives suggestions that should be used by hostel managers.

Keywords | Tourist accommodation, image, hostel, online comments, online booking

Resumo | O presente estudo visa analisar a imagem criada na mente dos turistas, durante os momentos que antecedem a viagem, na escolha do alojamento local, tendo como fonte de informação os comentários alocados nas plataformas de reserva online de alojamentos turísticos. Para a concretização da investigação foram recolhidos e tratados um total de 2210 comentários, retirados das plataformas Booking.com, Hostelworld e TripAdvisor. Para proceder à análise do conteúdo, recorreu-se ao modelo

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de Echtner e Ritchie (1991, 1993), que analisa a imagem de um destino quanto às seguintes dimensões: atributos holísticos e individuais, características funcionais e psicológicas e o caráter comum ou único das características do destino. Neste sentido, verificou-se que os hóspedes dos alojamentos locais tendem a percecionar uma imagem que tem por base os atributos relacionados com as comodidades, as refeições e bebidas, a localização, a limpeza ou com os funcionários. O estudo utiliza dados reais, recolhidos a partir de revisões feitas online após a estadia dos turistas nos alojamentos turísticos. O estudo tem uma relevância prática, permitindo retirar ilações pertinentes que podem ser aplicadas na gestão dos alojamentos.

Palavras-chave | Alojamentos turísticos, imagem, hostel, revisões online, reserva online de alojamentos

1. Introduction

We live in an increasingly technological world, which has transformed individuals' daily habits. Consequently, today the individual, as a consumer, demands companies and organisations understand these habits. Every day, the use of new technology and the internet marks the daily routine of people, companies and societies.

Simultaneously, many countries and cities are experiencing a tourist boom. In recent years, tourism has become one of the main economic forces. According to the UNWTO (2018), it represents the greatest economic weight in at least 83% of countries. Approximately 1,326 million tourists were registered in 2017, a record number which validates and proves its true economic value. According to Eurostat (2017), tourism's impact is even more relevant if we consider the positive consequences of increased employment, regional development and the cultural and financial impact. An important fact presented by Eurostat (2017) reveals the impact of tourism on the European business sector, whereby one in every ten non-financial firm belongs to the tourism industry, accounting for a total number of 2.3 million companies. These employ around 12.3 million people in Europe as a whole.

Currently, the figures for tourism in Portugal are in line with what the sector's development strategies, plans and policies aim for. Portugal has not

yet reached the top 10 most competitive countries, but in 2017 came close, and today is the 18th country presenting greatest value concerning tourist arrivals (UNWTO, 2018; Turismo de Portugal and TravelBI, 2018; INE, 2018).

The Portugal Tourism entity has promoted a programme named Tourism 4.0. This programme covers four areas of intervention: innovation and computerization, qualifying Portugal as a destination, segmented targeting and Smart Destinations, with clear emphasis on a tourism supply integrating digital means (platforms, sites, apps). The aim is to attract international tourists and provide them with a personalized experience.

The great majority of studies are essentially focused on examining the concept of image applied to a place (e.g. Camprubí et al., 2013; Echtner & Ritchie, 1991, 1993; Marine-Roig & Huertas, 2020; Rafael & Almeida, 2014), and despite the extent of research in the field, the results of these studies are very heterogeneous (Afshardoost & Eshaghi, 2020). Nevertheless, so far, little research has been published on the image of accommodation, and more specifically on the image of hostels, specially the image in the virtual context. Since at this point peer-to-peer online platforms assumed relevance, by creating new business models and bringing changes in the way customers feel and express experiences (Casais et al., 2020), this research intends to study the Image of Accommodation, and more specifically of Hostels, after the trip, based on content analysis of comments shared by tourists on online booking platforms, applying the Echtner and Ritchie Model (1991; 1993) to study the image of nine accommodation units in Portugal.

According to Veríssimo and Costa (2018, p. 4), "hostels can be considered as a category of tourist accommodation that offer lodging with communal facilities for an affordable price in a unique social environment". Usually they have a communal environment, favoured by the sharing of dorms, but nowadays the most part of these lodges have also private rooms. It should be emphasised that most of them have an online presence (Veríssimo & Costa, 2018). According to the current Portuguese law¹, hostel accommodation includes all types of temporary accommodation provided to tourists for payment. This type of accommodation is formed of rooms, included in independent parts of buildings. Considered as hostels are those establishments where the accommodation unit is mostly dormitories.

The impact of these accommodation units on tourism is seen by the increased number of beds available for the tourist demand, but also in the redevelopment of areas at destinations, influencing other industries. According to INE (2017), in 2016 hostel accommodation units received around 2.6 million guests, who accounted for 6.3 million bednights, an average of 2.38 nights per tourist, with these being an essential element nowadays of the whole tourism process in Portugal and elsewhere.

2. Digitalisation of the Tourism Sector

With the introduction of new technology, tourism adjusts and evolves towards the concept of electronic tourism, stimulated by the appearance of new social networks and platforms, forcing the tourist industry to change its presence and form

of operating in the market (Buhalis, 2003; Casais et al., 2020). In the specific case of online platforms, they enter in the market competing with the traditional reservation channels including travel agencies, direct reservations made at the property and tour operators (Gössling & Lane, 2015). This adaptation of the industry is due essentially to the role of the consumer, both as a tourist and active internet user, who regularly contributes tourist content to be shared in blogs, websites and social networks. In turn, that content will influence the decisions of other potential consumers. Therefore, and in the case of the tourism sector, tourists themselves are today the main organic, and independent, agents in promoting and creating a destination's image (Camprubí et al., 2013; Rafael & Almeida, 2014).

Various studies validate the importance of the internet in the specific case of the tourism sector. For example, China is a case study in terms of computerized tourist services and products. The research by Cao and Yang (2016) revealed that in a sample of 258 tourist platforms, 75% permitted online booking, and presented the information in at least two languages. The authors found that options such as online booking and online payment have a considerable weight in sales made.

Nowadays, consumers tend to be more selective in both searching and purchasing. The study of Pina et al. (2017) about the usability of a tourist website and its effects on digital demand and satisfaction concluded that tourists tended to place more trust in official pages of tourist products and services. The study also indicated the importance of other related platforms in forming opinions, image and expectations in the consumer's mind. So, blogs, and tourist assessment and opinion sites are considered a source of information able to influence consumption decisions (Pina et al., 2017). This type of platform is mostly used to compare accommodation units and digital in-

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termediaries able to promote the existing supply, its availability, prices and attributes (Crnojevac et al., 2010).

With the development and benefits of digital communication channels, all the impressions generated by the consumer become the target of communal sharing, so that others, with the same doubts regarding choice, can make decisions where the associated risk is less (Kotler et al., 2017).

In fact, online reviews, criticisms or recommendations have considerable importance in consumption decisions. According to Souza et al. (2019), the others experience may contribute to place attachment engaging tourist in a more authentic experience. This importance increases when the decision is related to tourist products. According to Ong (2012), there is greater trust in recommendations when these refer to hotels rather than, for example, restaurants. This type of review or recommendation is called User Generated Content (UGC). It can appear in different formats (photos, videos, comments), and has the capacity to affect, both positively and negatively, the value of brands, companies and even hotels, above all in the eyes of other potential consumers (Puri, 2007; Wilson et al., 2012; Ayeh et al., 2013).

2.1. The lodging image in the virtual context

For Ghazali and Cai (2013), the formation of an image in virtual environments (via new media and social networks) is determined by three elements: the tourist supply, the consumer and "third parties", those who have an influence through their opinions and past experiences. In this connection, Kim et al. (2017), in a study assessing the quality and effect of the information available in virtual environments, indicate the need to pay attention to the sharing of content about tourist destinations. The authors argue that the more reliable and interesting the content, the greater the capacity to retain the consumer's attention, and consequently, a positive evaluation will help to create a better image for the potential tourist.

Besides having an effect on forming the organic image, thereby avoiding the image induced by information produced with commercial aims, the consumer needs to validate and confirm their search, and therefore, the role of word-of-mouth is useful and warrants greater credibility. However, word-of-mouth can influence the individual positively or negatively. A positive recommendation will favour the perception, or image, of the place, while a negative recommendation will detract from the perception, and future recognition, of the place (Zhang, 2015). In the same line of thought, Lu et al. (2016) reinforce the importance of the wordof-mouth received by tourists at times preceding a decision to travel, which may increase or reduce the perceived reliability and risks of destinations. So the content produced by consumers becomes one of the most important sources of information. The globalization of the internet has contributed to this situation, since its users interact with each other and are permanently connected (Kotler et al., 2017).

A recent study by Yan et al. (2016) demonstrated there are two types of content produced by internet users: one produced on specific websites or platforms, and another through social networks such as Facebook, Twitter or Instagram. The authors sought to find out which types of content would have greater influence on consumers' decisions. The conclusions drawn demonstrated that the majority of consumers trust, and choose in the first place, recommendations on websites and platforms. However, when the content present there can have a negative influence on the consumers' opinion, or is not organised in such a way as to save them time and cognitive effort in the analysis, they tend to confirm their opinion by turning to social networks.

Online recommendations should therefore be part of a modern marketing strategy implemented in online communication channels, as these can attract new consumers and generate closer relationships with current ones. The whole experience of online consumption influences the individual's way of being. Yoo et al. (2013) indicate each individual's personal motivations as the main driver of their willingness to recommend products or services they have tried out. Therefore, their satisfaction is central, since a satisfied customer will always be likely to give a positive recommendation of products and services (Purnasaria & Yuliando, 2015).

As tourism is a sector where the main assets are difficult to measure, the role of word-of-mouth in virtual environments becomes relevant, both through the computerization of the sector and the internet's impact on consumers' daily lives. Defined as a form of informal communication established between consumers about the possession, use and characteristics of products or services (Westbrook, 1987), it is increasingly sought as a source of credible information (Mack et al., 2008), at times when there is a lack of knowledge about the bodies promoting the destination (Chatterjee, 2001) and because it is more flexible and less interruptive than publicity or direct sales (Levy & Gvili, 2015).

According to Gretzel and Yoo (2008), 90% of searches related to preparing holiday travel, namely booking accommodation (Dubé & Renaghan, 2000), are made with the intention of analysing content produced by other consumers. This material produced in the form of a text, and of a communicational and informative nature, about products or services, appears in the form of reviews and ratings (Chateerjee, 2001). Empirically, various authors have confirmed the importance, above all of online reviews, for increased sales (Chen & Xie. 2008).

But what, in fact, is an online review? It is formed of a numerical rating and a body of descriptive comment. These two elements, when associated, determine the value and (positive or negative) orientation of the reviews. When positive, they tend to encourage positive attitudes in the consumer, for example, in the analysis or feedback given about a stay in tourist accommodation (Vermeulen & Seegers, 2008; Cheung & Thadani, 2012).

An important characteristic of online recommendations is their degree of consistency or similarity between two or more reviews. On the same platform, for the same product or service, diverse opinions are found, and the greater the degree of coherence, the greater the value perceived by readers (Zhang & Watts, 2003). In a study about TripAdvisor, Barreda and Bilgihan (2013) state that tourists reveal specific patterns in reviews about the hotels they have stayed in. Generally, positive comments tend to describe the location and the quality of service (provided by staff). On the other hand, negative comments are based above all on aspects related to hotels' cleanliness.

According to Crnojevac et al. (2010), two types of attributes can be classified regarding hotel products and services: those presented and those experienced. While the former are easily described by tourists, the latter are more difficult to communicate in text, given their subjective nature. Price and location are examples of presented attributes, whereas security, cleanliness or comfort are attributes that depend on other variables, such as the tourists' own interpretation. In the Veríssimo and Costa (2018) study, hostels were appreciated by the Millennials because of their central location, interactive atmosphere, functional facilities, wellplanned design, decoration, the set of activities and events, and personal treatment.

A study by Zhang and Mao (2012) assessed the image of six hotels in different categories, chosen at random according to a ranking published at the time in a tourism and travel magazine. Subsequently, through online booking platforms and travel blogs (expedia.com, hostels.com and orbitz.com), they subjected a total of 3197 comments and 4141 numerical classifications to content analysis, which revealed a list of the words most frequently used by guests. Another study of a similar nature by Law et al. (2010) demonstrated that also aspects such as the reviewers' geographical proximity, their values, education and preferences, as well as age and gender, have an impact on the credibility and value of reviews

The studies analysed reveal some attempts to examine how hotel establishments are classified and characterised on booking platforms. However, as far as we know, no systematization of the dimensions assessed by tourists has been carried out yet. The study by Crnojevac et al. (2010) classified them between presented attributes and experienced attributes. Nevertheless, we believe that, as with a tourist destination, tourists could resort to a more complex set of dimensions to evaluate accommodation.

According to Echtner and Ritchie (1991; 1993), a destination's image is a multidimensional concept, where the context or domain in which it is applied influences how the image is perceived by the tourist. For these authors, the destination's image is formed of elements that can be confirmed, appreciated or measured, namely more individual or holistic elements, more functional or psychological elements and common or unique elements of the destination (Table 1).

Table 1 | Multidimensional model of a tourist dimension

Dimension I	Horizontal axis. A tourism destination image can be perceived through individually identifiable attributes, or as a whole, holistically		
Dimension II	Vertical axis. Contrasts a given destination's psychological and functional characteristics, i.e., observable and measurable characteristics (e.g. prices, products, amenities, facilities etc.) and more intangible assets that are difficult to measure (e.g. social environment, the feeling of safety etc.)		
Dimension III	Diagonal axis. This axis identifies the destination and its specificities and characteristics regarding its common or unique nature, irrespective of being functional or psychological characteristics		

Source: Echtner and Ritchie (1991 and 1993)

A destination's image is built considering its exclusive attributes, as well as the combination of services, products and experiences that complement them and represent their meaning (Buhalis, 2000). The model presented above shows a possible way to measure and evaluate the image of accommodation and the diverse components contained therein.

3. Methodology

Hostel accommodation, as a tourist service, is found to be one of the fastest growing accommodation types chosen by tourists, with an increasingly strong presence in the virtual world. It is therefore reasonable to ask whether it is possible for any individual to have a clear image of any such accommodation unit through reading opinions that are shared virtually. Consequently, another question arises: what types and what dimensions of hostel accommodation image can be perceived based on reading comments, reviews and evaluations posted on online booking platforms online?

This research takes as its subject hostel accommodation, and more specifically, hostels. Thus, the empirical analysis considered three online booking platforms and nine hostels in Portugal (according to the Hoscards awards, attributed by the Hostelworld platform, Portugal has eight of the best hostels in the world), located in Lisbon and Porto. Various platforms allow both reservation of tourist accommodation and the share of opinions about them. Given their size, it would be difficult to analyse them all. Therefore, the choice of three arises from a number of previously defined criteria: they allow online booking of hostel accommodation; they allow tourists' assessment and comments, only after actually booking the accommodation; they must have an identical system of assessment and comment concerning rules and form; and they have hostel accommodation on their database.

The selected platforms were Booking.com, TripAdvisor and Hostelworld. The accommodation units were also defined according to various criteria. Firstly, the selection of accommodation was according to the following criteria: the units are hostel accommodation; they are located in Portugal; they must be mentioned by the awards established by the Hostelworld community, the major reference and platform of hostels worldwide; and all the accommodation units selected are mentioned by Hostelworld in the Hoscars 2017 or Hoscars 2018 awards.

Three hundred and three hostel accommodation units were registered in Lisbon and 133 in Porto, showing the former city to have more than twice as many as the latter. It was therefore decided that in the sample, accommodation units in Lisbon would be twice that of Porto, in a proportion of 6 to 3. The second-order criteria took into account factors such as the representativeness of local accommodation at the regional level, international references to accommodation, and also their classification on each of the platforms chosen previously. Thus, a convenience sampling approach was used.

For the purpose of this research, the proposal of Echtner and Ritchie (1991 and 1993) was used. as it was considered to be the most appropriate for our needs, aiming to analyse the images created in tourists' minds, at times after the journey and choosing the destination, with the source of information being comments posted in virtual environments.

The objective being to exemplify how the model of Echtner and Ritchie (1993) can be applied to the specific case on hostel accommodation, we expect to find different types of image according to tourists' experiences, opinions and To pursue this goal, qualitative perceptions. analysis and the content analysis method was adopted. To validate this type of analysis and method, four categories were established, based on the model referred to above. Each of these categories is framed in one of the four quadrants present in the model proposed by Echtner and Ritchie (1993). The categories defined are named: Q1) Functional/Holistic, Q2) Functional/Attribute, Q3) Functional/Psychological and Q4) Psychological/Holistic.

 Category Q1 – Functional/Holistic, includes all references which, in the comments, demonstrate tourists' understanding and perception, generically or holistically, in relation to the functional or psychological attributes of the accommodation

Category Q2 - Functional/Attribute, includes references to functional and tangible aspects of the accommodation, for example, its amenities and facilities, the activities it carries out and other measurable aspects (e.g. location).

- Category Q3 Functional/Psychological, includes intangible aspects such as references to staff, service quality and attitudes, welcome and socializing with guests.
- Category Q4 Psychological/Holistic, groups references to guests' sensations, emotions and feelings about the atmosphere and environment, determining whether the accommodation is more of the social type or tending towards events and celebrations.

Finally, the comments placed on each of the selected platforms were analysed, in relation to each of the local accommodation units selected for the sample. All the comments shared by tourists, written in Portuguese, Brazilian Portuguese or English during January, February, March and April 2018, were subject to analysis. After collection, the data were treated using Nvivo software for qualitative analysis.

4. Results Presentation

This chapter presents the results obtained, from content analysis of a set of comments shared on online booking platforms for hostel accommodation - Hostelworld, TripAdvisor and Booking. Table 2 presents the results of the three platforms by category.

Table 2 | References, as a percentage, by category

Quadrants/Categories	References	%
Category Q1	572	9.5%
Category Q2	2984	49%
Category Q3	1492	25%
Category Q4	945	16.5%
Total of References	5993	100%

The sample of comments analysed is set above all in categories Q2 (Functional/Attribute) and Q3 (Functional/Psychological), which represent respectively 49% and 25% of the results of the total sample. Concerning the percentage of each platform analysed, the greatest number of comments were found to come from the Booking platform.

After analysing the frequency of words corresponding to synonyms, so as to validate the results found when consulting specific words and therefore confirming the same trends in subjects or domains dealt with by tourists in their evaluation

of the accommodation units studied, an optimized analysis was performed by grouping words by domains/subjects.

In category Q1, various distinct domains are found. Naturally, cleanliness is one of the most frequently mentioned aspects generically, with the overall weight in the comments being 38.80%, as is stated in this comment: "Everything is clean and smell good" (#C1). Aspects related to the premises (7.50%), decoration (4.95%), as stated in the comment (#C2)"The originality of the building", organisation and amenities or facilities (1.82%), between other aspects, are also frequently referred to. On the other hand, the attractiveness of the accommodation units is not frequently mentioned, and is therefore of little importance or relevance for visual effects of Accommodation Image (Table 3).

Table 3 | Table of frequency of exact words in Q1

Ranking	Word	Count	%
1	Clean/Cleanliness	406	38.80
2	Premises/Building	61	7.50
3	Decoration	42	4.95
4	Organisation	18	2.55
5	Facility	13	1.82
8	Generally	3	0.42
6	Beauty/Attractive/Nice	9	1.26
7	Cheap/Prices	7	0.99
8	Quiet	3	0.42
9	Artistic	2	0.28

When optimizing the results of consulting word frequency by synonyms (Table 4), the number of subjects is naturally lower than when corresponding to exact words. Therefore, cleanliness, general aspects of the accommodation concerning the structure or building, a vague description of the premises or amenities, aspects such as attractiveness and also non-explicit description of the prices charged, are grouped in three subjects: Cleanliness (39.15%), General aspects of the accommodation/buildings/premises (25.21%) and Prices (1.06%).

Table 4 | Table of frequency of synonymous words in Q1

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Ranking	Word domains	Count	Weight %
1	Cleanliness/Clean	277	39.15
	General aspects of the		
2	accommodation/building/premises	240	25.21
2	accommodation/building/premises	270	25.21
2	Prices	8	1.06
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Table 5 | Table of exact word frequency in Q2

Ranking	Word domains	Count	Weight %
	Amenities (bedrooms, WCs and		
1	other parts of the accommodation)	1025	10.78
2	Activities (trips and events)	480	5.05
3	Location	388	4.09
4	Meals and drinks	330	3.49
5	Cleanliness	202	2.13
6	Prices	123	1.29
7	Wi-Fi	53	0.56

In turn, the Q2 category, when optimized, also allows a complete vision of the subjects mentioned most by tourists, namely those that can be measured in quantity and quality, considering very specific characteristics of a given set of attributes. Here, aspects related to the accommodation's amenities stand out most. Amenities account for 10.78% of references found in the quadrant corresponding to category Q2. Amenities associate attributes related to bedrooms (6.02%), bathrooms (4.09%) and others (0.67%), for example, kitchens and public rooms. Activities organised by the accommodation units themselves (5.05%), location (4.09), and aspects related to meals and drinks (3.49%) served or provided as complementary services ("They have a great location and nice dinners" - #C3), also appear quite frequently in comments in this domain. Briefly, the domains found seem to be similar to the set of fundamental

characteristics of any type of tourist establishment (see Table 5).

In consulting words considering synonyms, the results obtained are similar to those found when corresponding to exact words, despite the weight by domain being greater in this case (Table 6).

Table 6 | Table of synonymous word frequency in Q2

Ranking	Word domains	Count	Weight %
1	Amenities	1351	13.57
2	Activities	521	5.45
3	Location	536	5.36
4	Meals and drinks	413	4.36
5	Cleanliness	215	2.20
6	Prices	174	1.82

In category Q3, the framework by subject is more objective and summarised, due to most of the references found here being a description of the staff, their characteristics and other complementary functions they participate in. So, naturally, objective references to staff have the greatest weight in this category, totalling 33.86%. Staff's characteristics, the qualities tourists perceive through direct contact, are in second place, with a total of 18.52%. Other aspects, related above all to employees' support in activities organised by the accommodation, or only to how they make suggestions and provide tourists with information, is also commented on, although with a low frequency (Table 7).

Table 7 | Table of exact word frequency in Q3

Ranking	Word domains	Count	Weight %
1	Staff	1301	33.86
2	Staff characteristics	713	18.52
3	Information/Tips	20	0.52
4	Tour	15	0.39

In the analysis of category Q3 by synonyms, the previous results are summarised in two fundamental aspects: staff (34.65%) ("A very warm greeting from the staff" - #C4) and their characteristics (20.66%), optimizing the results by subject even more (Table 8).

Table 8 | Table of synonymous word frequency in Q3

Ranking	Word domains	Count	Weight %
1	Staff	1332	34.65
2	Staff characteristics	811	20.66

In category Q4, two domains or subjects are described most frequently by tourists: Atmosphere and Security ("Safe and great for meeting people" - #C5, "The social vibe of the hostel is fantastic" - #C6). Tourists tend to show how they perceive and feel the atmosphere of each accommodation unit they stay in. This description, although subjective and related to each tourist's feelings, emotions and individual tastes, tends to be greatly exploited and specific, since the characteristics of the very atmosphere are a subject concentrated on by tourists (31.49%). Security is another fundamental aspect listed in the comments analysed, something that is described separately from the atmosphere and its characteristics. In the analysis by synonyms, the situation described is similar, reinforcing the results obtained and the frequency of the topics described by tourists (see Tables 9 and 10).

Table 9 | Table of exact word frequency in Q4

Ranking	Word domains	Count	Weight %
1	Characteristics of the Atmosphere	421	31.49
2	Atmosphere/Environment	266	19.91
3	Security	50	3.74

Table 10 | Table of synonymous word frequency in Q4

Ranking	Word domains	Count	Weight %
1	Characteristics of the Atmosphere	493	35.39
2	Atmosphere/Environment	324	24.25
3	Security	33	1.57
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5. Conclusion

It is therefore concluded that it is appropriate to apply the model of tourist destination image by Echtner and Ritchie (1991; 1993) to the Image of Non-Hotel Accommodation. The dimensions of this type of tourist product or service - non-hotel accommodation - are the same as those used to describe a tourist destination. In the same way, there is assessment of amenities and facilities, the people involved in the space, services and the perceived atmosphere. Also in this type of accommodation, those characteristics are not only easily identified but are also frequently evaluated, and appreciated by tourists as consumers. This type of image will be even more relevant from the perspective of a tourist who is planning a holiday trip. With the development of dialogic communication channels, the impressions caused by this type of information source in the consumer connected regularly to the internet are decisive at all stages of the purchase process.

The results of the research confirm it is possible to construct the virtual image of non-hotel accommodation through the evaluations, comments or criticisms posted on the online booking platforms of these establishments, as was already stated by Veríssimo and Costa (2019). This image is a multidimensional perception, where different attributes and characteristics of accommodation are highlighted, differentiating their strengths and weaknesses (Crnojevac et al., 2010).

The results obtained provide relevant information with practical effects in implementing models of operational and strategic management in this type of accommodation. Since a number of attributes or characteristics are mentioned more frequently in comments, these aspects should be considered a starting point to structure a management strategy and to operationalize the service. As consumers, when choosing to book accommodation, have an anticipated perception of its main features, it is necessary to ensure those features are looked after and promoted. It is recommended, therefore, that in team meetings, there should be concern about presenting, discussing and emphasizing the importance of maintaining the main strengths of the accommodation and, if possible, gradually improving the weaknesses, since tangible attributes, those that can be observed, as well as the role of employees, are two of the aspects most frequently assessed. In practical terms, it will be important to apply routine methods of functioning in the accommodation service. Cleanliness, for example, is constantly subject to criticism, and as such, requires greater attention. Employees' role extends to other domains beyond that of service. They are seen as credible sources of information regarding possible places of interest to visit and catalysts in providing a positive surrounding atmosphere and organising activities that ensure added value to the accommodation service. Marketing and communication actions should also be subject to analysis by accommodation managers. Since tourists turn increasingly to social networks before and after their stay, it is necessary to devote efforts and greater attention to the communication established through digital communication channels.

The research has several limitations. The number of accommodation units and platforms analysed does not allow generalization of the results. As found previously, the number of non-hotel accommodation units is much greater than that analysed, and as such, nine units may not be enough for the conclusions to be seen as relevant for all and every accommodation of this type, above all if considering that such establishments are scattered over the whole country. It is believed that the region and the surroundings where a given accommodation is located have a strong influence on its image as perceived by tourists. In addition, the platforms (only three) may also be insufficient. Another limitation is the period set for collecting comments, as well as the selection of the languages used. The four-month period chosen may not be enough to cover the multiplicity of comments. The absence of similar studies, in this specific domain of non-hotel accommodation, was another limitation found throughout the research, affecting the choice of the model to implement and the contrast/discussion of the results. Finally, some guidelines for future research are suggested. Firstly, replicated application of the model and criteria, considering a longer period of analysis and using a larger number of platforms and evaluations written in various other languages. It would also be beneficial to compare these results with others of quantitative research, through, for example, a survey of tourists who gave their opinion about nonhotel accommodation. Other ideas are proposed: interviews with accommodation managers and collaborators, to find out how they perceive the establishment's image and whether it is similar to that of the guests; extending the research to other accommodation units in other regions of Portugal and abroad; applying the model to another type of holiday accommodation; applying the model to other types of tourist products and services; and finally, optimizing the results through the machine learning technique, which aims to achieve a virtual image as close as possible to the true situation.

Acknowledgements

This work supported by National Funds through the FCT Foundation for Science and Technology - Project UID/GES/04630/2020.

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