



Instituto Superior de Economia e Gestão

UNIVERSIDADE TÉCNICA DE LISBOA

DESDE 1911

MASTER OF SCIENCE IN CORPORATE SCIENCES

MASTERS FINAL WORK DISSERTATION

ONLINE REVIEWS ANALYSIS THROUGH THE
APPRAISAL THEORY – B&B'S AND INNS IN LISBON

SARA EVANS MACHADO DOS SANTOS

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Glossary

- B&B – Bed and Breakfast
- UGC – User-generated Content
- CO – Concept of Ontology
- SP – Strenght of Polarity
- eWOM – Electronic Word of Mouth
- RSI – Recommendations, suggestions and intentions

Acknowledgements

To develop a dissertation is, without a doubt, one of the biggest challenges of the academic life. It requires dedication and a lot of hard work, throughout the whole process but it is definitely rewarding to get to the final result.

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Abstract

User-generated content (UGC) is a growing segment in Web 2.0. Many people are attracted by being able to make choices that take the experiences of others into consideration and not only brand publicity. Hospitality is one of the sectors where UGC has more impact and therefore we focused this study on alternative accommodation – B&B's and Inns - where online review websites frequently have more visibility than the B&B's and Inns' own website. We collected a sample of 450 online reviews and analyzed them segment by segment, making a total of 4621 segments. We used the Appraisal Theory of Martin and White (2005) to assess what attitudes online reviewers are expressing about B&B's and Inns in Lisbon. We verified that appreciation is the most expressed attitude while the expression of affect and judgment is relatively limited. This study and its deep analysis of online reviews will be a contribution to B&B and Inn managers by giving them a better understanding of their clients. Moreover, it contributes to the academy as it brings a new parameter of analysis of UGC in the hospitality field – the Appraisal Theory.

Resumo

O conteúdo gerado pelo utilizador é um segmento em crescimento na Web 2.0. A possibilidade de fazer escolhas, tendo em consideração experiências de outras pessoas e não só publicidade da marca atrai muitas pessoas. Hotelaria é um dos sectores em que o conteúdo gerado pelo utilizador tem mais impacto e assim sendo, focámos este estudo em alojamento alternativo – B&B's e Inns – onde os websites de comentários online têm frequentemente mais visibilidade do que o website da propriedade. Foi recolhida uma amostra de 450 comentários online que foram analisados por segmento, perfazendo um total de 4621 segmentos. A Teoria da Avaliação de Martin e White (2005) foi utilizada para compreender quais as atitudes expressas nos comentários online em B&B's e Inns de Lisboa. Verificou-se que apreciação foi a atitude mais expressa, enquanto que afecto e julgamento não têm grande expressão. Este estudo e a sua análise profunda de comentários online vai contribuir para os gestores de B&B e Inns, que serão capazes de melhor entender os seus clientes. Para além disso, contribui para a academia uma vez que traz um novo parâmetro à análise do conteúdo gerado pelo utilizador no domínio dos alojamentos – a Teoria da Avaliação.

1. Introduction

Web 2.0 has contributed to society in many different fields. In Hospitality, for example, one of the major contributions has been user-generated content, open-ended online reviews. These make it easy for users to evaluate whether or not they think an accommodation or a restaurant is appropriate for the kind of holidays they are looking for, based on the experiences of others; it also allows hotel managers and restaurateurs to have honest feedback from their clients and to take appropriate action. Since Hospitality services are intangible, it is important for travellers to listen to the voice of experience through online reviews (Cox, Burgess, Sellitto & Buultjens., 2009).

As time passes, online reviews have had increasing impact. They are particularly relevant for smaller and cheaper types of lodging like B&B's and Inns because the quality and service vary more than that of hotel chains. Consumers are also more likely to find a small property in an online review website than to find the actual website of the property (Gretzel, 2006). In addition, the present economic situation means that these types of lodging are now a good and attractive alternative to accommodation in the most of the European cities.

In this context and considering the lack of studies about B&B's and Inns or other alternative accommodation in Portugal, this research seeks to fill this gap. Although there are many studies about user-generated content in Hospitality, most of them focus on hotels and restaurants. This study explores an alternative hospitality industry.

Lisbon was the chosen city because the National Strategic Plan for Tourism, drawn up by Tourism of Portugal in 2006, claims it is the most suitable city for the 'city break' type of tourism; this is a large target for B&B's and Inns as the standard consumer spends at least €60 per day and chooses cheap accommodation. City Break tourism is expected to grow 13.5% per year between 2004 and 2015 and it also has a low degree of seasonality (Turismo de Portugal, 2006).

The online reviews will be evaluated based on an ontology of the hotel domain used to standardize accommodation concepts and their relationships. This ontology was originally developed by Chaves and Trojahn (2010) but in this work it is adapted to fit our specific target, namely B&Bs and Inns.

Finally, I use the Appraisal Theory to analyze online reviews with the aim of identifying which attitudes – affect, judgment or appreciation – guests express about their experiences in B&B's and Inns in Lisbon.

The results of this study can help managers to know their guests better as well as to make more appropriate decisions in response to the type of evaluation their guests make; it will allow them to use their strengths in the areas of accommodation the guests express more (or less) positive (or negative) judgments, affects or appreciations. It is therefore a study that will help managers using an online review website to improve hospitality services.

This dissertation consists of six sections. We will start by presenting the current literature on the subject (Section 2) before describing the methodology adopted (Section 3). In Section 4 we will present the results of our study; Section 5 we discuss them and finally we will present our conclusions in Section 6, together with the limitations and suggestions for further studies.

2. Literature Review

Web 2.0 has revolutionized our lives – a revolution created by all us users. It can be seen as a platform where consumers help develop its content, tools and communities online (Shang, Ly, Wu & Hou, 2011). The term Web 2.0 was first used by O'Reilly in 2007, but since then has had an enormous evolution that not even its mentors expected (O'Reilly & Battelle, 2009).

The revolution is such that nowadays we can talk with the web instead of typing, when we want to search a location near our own with specific characteristics (O'Reilly, 2007).

In contrast to a static Web 1.0, Web 2.0 is characterized by services and its core values are interaction, participation and sharing allowing users to connect to it with other devices besides PC's (Chen, Yen & Hwang, 2012). Users play the main role on web 2.0 that is seen to be created by a collective intelligence and at the same time is enhanced as more people 'consume' it. Hence, O'Reilly (2007) defined that trusting users as co-developers was one of the core competencies that web 2.0 companies should have. We can take applications such as Facebook or Youtube as examples that, thanks to its users, have a realtime update and generate visits from other users to the applications.

A key aspect from this user contribution to the web is the electronic word-of-mouth (eWOM), which will be central throughout this work. With the simplicity of sharing in the web, users have gained more and more tendency to share daily experiences (Chen *et al*, 2012) which forces service providers

to adapt their strategies to web 2.0, be receptive to consumers' opinions and know how to respond to them.

Web 2.0 has become a powerful tool for companies to approach and connect with their clients and also prospective clients. Hospitality enterprises interact with their guests through social media and travel 2.0 websites and can take precious information from these as we will discuss ahead (Rosa, Pedron & Chaves, 2011).

This section will address the following topics: User-Generated Content (UGC) and Hospitality with the subtopic Alternative Accommodation and Online Review Websites; Appraisal Theory and Electronic Word-of-Mouth.

2.1. User-Generated Content and Hospitality

UGC is considered to be all the content available on the Internet that is digitalized and uploaded by users (Munar, 2010). According to López, Gidumal, Taño and Armas (2011), UGC is considered to be one of the fastest growing segments on the web; it includes various different types of opinion sharing such as blogs, social photo and video sharing. When used by consumers sharing their own experiences, UGC generates a non-structured text with indirect experiences of products or services and gives the perspective of real consumers that have purchased and used a certain product containing experiences, evaluations and personal opinions that will then be resumed in a final rating (Park, Lee & Han, 2007; Ricci & Wietsma, 2006). These online opinions about products or service experiences can be

interpreted as electronic word of mouth (eWOM) and contrary to the regular word of mouth – which we share personally after an experience with our close ones, mostly immediately after that experience (50% in the same day) (Cox *et al.*, 2009) – it will be stored online and available to be accessed, linked and searched (Litvin, Goldsmith & Pan, 2008) giving a much bigger dimension to the term word of mouth.

In Hospitality and Tourism, UGC plays a central role and tourists use web 2.0 tools to get information about tourism destinations and also to share their own experiences (Munar, 2010). Since Hospitality services are intangible it is understandable that travellers embrace the information given by experienced travellers through UGC (Cox *et al.*, 2009). They are of greatest use during the planning phase of a trip, when travellers are still deciding on their accommodation, places to visit and activities to make (Saranow, 2004). Although, not greatly used until now, UGC can also be useful during en-route decision-making to help generate ideas (Gretzel & Yoo, 2008).

The content provided by UGC is, however, a different type of information than the content provided in guidebooks. A guidebook will give consumers information about museum opening hours for example, while UGC will give information about security issues in a country with political problems (Saranow, 2004). A majority of travellers agree that online reviews help them avoid places they would not enjoy and discover new places with other ideas (Gretzel, 2007).

In a study made by Gretzel in 2007, over 80 percent of those enquired agreed that online travel reviews increase confidence in decisions, allow them to picture what the destination would look like, reduce the risk and uncertainty

and helps plan holidays more efficiently. With the emergence of UGC, it has become easier for consumers to materialize hospitality services into products. It is also commonly agreed by various authors, such as Stringam, Gerdes and Vanleeuwen (2010), that travellers consider online travel reviews to be more updated, detailed and relevant than other traditional travel resources, as for example a hotel official website.

Many authors have already studied the profile of the average traveller that searches for UGC related with Hospitality. Online review readers, are considered to be highly educated, with a high income, people who travel regularly, use the Internet considerably and mainly men, since women tend to be less influenced by other reviews and base their decisions based on their own opinion. According to these characteristics, online review readers are a very important target to Hoteliers (Gretzel & Yoo, 2008; Ricci & Wietsma 2006).

However, it is very important that reviewers provide information about themselves and about the trip they made so that the information is contextualized and readers can identify or not with the review (Gretzel, 2007). When related with the readers, online reviews – eWOM – can be one of the most influential sources of information during travel planning (Burgess, Sellitto & Cox 2009).

Besides identifying with the reviewer, the quantity and quality of the reviews is also relevant. According to Park *et al.* (2007), “Purchase intentions of consumers will increase along with the number of reviews”, which makes us believe that a large number of reviews indicates that a product is popular. Regarding quality, a review has to be logical, credible and with adequate

reasons based on specific facts about the product to have a positive influence on purchasing intentions.

The fact that consumers are now using the Internet in different ways to find information about products or services they intend to purchase and also that three quarters of travellers have been influenced by online reviews, raises concerns for Hoteliers (Ye, Law & Bin, 2009; Burgess *et. al*, 2009). These are valid concerns since web branding content is no longer controlled by organizations and corporations but is now dominated by the interaction and participation of users that have become incredibly active when it comes to creating web content (Munar, 2010). This means that Hoteliers should harvest all the UGC found about their Hotel and use it in a productive way in order to improve consumers' satisfaction through product improvement, solving problems described online, discovering what consumers complement and criticize about their stay, analyzing competitive strategies and keeping up to date with the Hotel's online image (Litvin *et al*, 2008).

It is also important that Hoteliers are aware that negative reviews have a greater impact than positive reviews and it is likely that when reviewers are disappointed with one aspect of the hotel, the whole review will be influenced negatively by that aspect (Stringam *et al*, 2010).

It is plausible that a hotel with more and better reviews than others will be more trusted and get more booking than a hotel with bad reviews (Gidumal, Gonzalez & Valcarcel, 2011). For this reason, it is important for Hoteliers to encourage and stimulate their guests to spread positive eWOM so as to develop business activity (Litvin *et al*, 2008).

In order to succeed in this web 2.0 Era, Hoteliers must use all emerging technologies and take online reviews into consideration, replying to them when the websites in question allow it to demonstrate concern to their clients and potential clients. Hoteliers must gain competitive advantage by taking the lead and control, instead of being controlled by UGC (Ye, Law, Gu & Chen, 2010; Litvin *et al*, 2008).

UGC in Hospitality has undeniably changed the way people plan and decide their holidays, influencing popularity of accommodation and therefore changing all the Hospitality Industry performance.

2.1.1. Alternative Accommodation and Online Review Websites

Bed and Breakfast's (B&B's) and Inns are small unique and individualized places with a low rate of customization that have gained popularity in the last decade with guests who do not want to stay in conventional Hotels (Lituchy & Rail, 2000; Lee, Reynolds & Kennon, 2003). These accommodation units contribute to tourism's diversity and are popular for providing a friendly atmosphere for guests. This concept is not new and was first seen in Europe (Nuntsu, Tassiopoulos & Haydam, 2002). A stay in a B&B or Inn is always interactive and unique, in that the personality of the operator/owner will influence its operation (Lee *et al*, 2003; Kline, Morrison & John, 2004).

Marketing is an important task for B&B's and frequently gets neglected, maybe because owners were used to getting reservations by email or even through guests that were wandering past looking for accommodation. Nowadays, travellers prefer to book online and therefore owners should

embrace the new technologies to promote and advertise online (Lee *et al*, 2003; Huang, 2008).

When promoting themselves, B&B websites should clearly describe the property and innkeepers and also the experiences provided. This is very important since guests do not know what to expect, giving chain hotels that have a clear brand identity a big advantage (Kline *et al*, 2004).

It has been shown in previous studies that Word of Mouth is one of the most effective marketing strategies for this type of unit. Consequently, it is important for owners and operators to assure maximum quality consistence in order for the feedback from guests to be positive (Lee *et al*, 2003). It is essential for B&B's to do it right the first time since they will not get another opportunity to impress their guests; this gives chain hotels the advantage as they can use other powerful marketing strategies to protect themselves from bad feedback from customers (Kaufman & Weaver, 1998).

The above paragraph shows that online reviews are therefore of particular importance for alternative accommodation. According to Gretzel (2006), "especially for smaller properties, a consumer is very likely to stumble across reviews before even reaching the branded website."

These reviews can be found in specific online review websites that are becoming increasingly popular and are now of obligatory passage for many travellers when going through the buying process (Jeacle & Carter, 2011). These websites are mostly visited by frequent travellers (more than 5 weeks' holiday a year) (Harwood, 2007).

For inexperienced B&B customers, these websites are very important and they are looking for information not only about rooms and location but also

reputation. The online reviews can have a big influence on the customers' choice (Jeong, 2004).

Online review websites can act as travel agents and travel advisors at the same time; not only do they offer reviews, but also airline tickets, hotel reservations, rental car reservations, and other travel services (Stringam, *et al*, 2010). Nevertheless, the greatest phenomenon of online review websites is Tripadvisor.com – an unbiased website that provides reviews about hotels and other travel information. Tripadvisor.com is one of the few online review websites that provides impartial information and that does not make reservations. It only allows users to find rates for the same hotel from the major suppliers (Law, 2006).

Tripadvisor.com has a total of 108 B&B's and Inns in Lisbon (www.tripadvisor.com), which we will later study using the Appraisal Theory.

2.2. Appraisal Theory

Martin and White (2005) shaped an Appraisal Theory dealing with “the interpersonal in language, with the subjective presence of writers/speakers in texts as they adopt stances towards both the material they present and those with whom they communicate”. It also addresses the way in which writers and speakers not only react positively or negatively but also manipulate their readers and listeners to do the same. It deals with the way communities that share feelings and values are constructed through text, and the way language is used to share sensations, preferences and normative assessments. In addition, it looks at the way writers and speakers interpret identities and how

they associate themselves or not with real or possible respondents. Finally, it is concerned with the way they create the perfect or intended audience for their text.

The appraisals are relevant because they show how the speaker and/or writer feel and what they value; they also show how the text perceives the position and authority of the speaker and/or writer; they serve to build links or relationships between the writer and/or speaker and/or the potential respondents.

For Martin and White (2005) feelings can be divided into two types – the feelings we are born with (affect) and institutionalized feelings (judgement and appreciation).

Affect refers to positive and negative feelings expressed, such as happiness and sadness. However, affect can be expressed in different grammatical forms. It can be expressed as a quality, when one is describing someone; as a process, when referring to an affective mental or affective behavioural process; and also as a comment – desiderative – using modal adjunct.

In order to obtain a better understanding of how to classify affect, Martin and White (2005) presented a list of when to use this attitude:

- Positive or negative affect;
- Behavioural surge or mental process;
- Reaction to other or undirected mood;
- Scale of intensity that evaluates feelings: low, median, high;
- Feelings that involve intention;
- Variation of affect: un/happiness, in/security and dis/satisfaction.

Examples of the attitude affect include:

- “This place and the people who run it favored my desire.” and
- “We loved this Guesthouse.”

Judgement as an attitude moves into people’s character and behaviour – how we should or should not behave. It can be divided into ‘social esteem’ and ‘social sanction’:

- ‘Social esteem’: focused on ‘normality’, ‘capacity’ and ‘tenacity’; It is associated to oral conversations – gossip and chat for example.
- ‘Social sanction’: focused on ‘truth’ and ‘ethics’; Associated to being codified in writing, such as regulations and laws (Martin & White, 2005).

In online reviews, most commonly we find judgement when reference is made to the staff, as we can observe in the following examples:

- “They spoke excellent English and were a great resource for my daily plans.”
- “We arrived at around midnight, but they had made arrangements in advance for us to access the room – thoughtful & organized”

Regarding the attitude appreciation, it is the attitude where we express our evaluations of semiotic and natural phenomena. It can reveal our reactions to ‘things’, their composition and their value:

- Reaction: impact and quality.

- Example: “Breakfast was very good.”
- Composition: balance and complexity.
 - Example: “The room was simple, but well decorated.”
- Valuation: ‘worthwhile’.
 - Example: “Our room was absolutely unique.”

The Appraisal Theory helps us classify sentences in terms of their attitude, but nevertheless it is a subjective theory that will always have a certain dependence on every evaluator’s way of understanding each sentence that is the object of evaluation.

Feelings are undoubtedly expressed in eWOM, which can be accessed, linked and searched (Litvin *et al.*, 2007), therefore it is propitious to apply Appraisal Theory in eWOM.

eWOM communication reaches a vast number of people given that it stays online and is accessible to everyone. Its capability to influence consumers provides a mechanism to shift power from companies to consumers (Thurau, Gwinner, Walsh & Gremler, 2004), showing us the major importance and relevance of eWOM and justifying its deeper analysis with Appraisal Theory.

In this context, we will analyze online reviews from B&B’s and Inns in Lisbon that seem to be in high demand.

3. Methodology

Since we are searching for a better understanding of online reviewers' behaviour, we conducted an exploratory study in order to attain these objectives (Babbie, 2010). A comprehensive analysis was made of 450 online reviews on B&B's and Inns in Lisbon taken from Tripadvisor, an independent website. We obtained a total of 3409 sentences and 4621 segments following our segment by segment analysis of these 450 online reviews.

The first step of this analysis was to collect the reviews of the B&B's and Inns in the Lisbon area from the corresponding area of the website. We analyzed 30 reviews from 15 B&B's and Inns. The criteria used for selection were as follows: the B&B's and Inns had at least 40 online reviews; the dates of the reviews went from June 1st 2012 until March 25th 2013; only reviews in English, Portuguese, Spanish and French were collected. We followed Tripadvisor's ranking to select the B&B's and Inns, beginning with the one with the top ranking, and in accordance with all the above criteria.

The next step of the methodology process was to transfer the 4621 segments from the online reviews collected to a spreadsheet and analyze them using a number of parameters described below:

- Concept of Ontology (CO) – we identified the CO present in each segment. We defined 10 CO's basing ourselves on the paper from Chaves, Gomes and Pedron (2012); however, since we are dealing with a different kind of accommodation, we altered three of the original

concepts (Parking, Restaurant and Service). We replaced parking for neighbourhood, because this type of tourist typically does not have a car on their holidays; restaurant for facilities, as the B&B's and Inns analyzed did not feature a restaurant but included common areas in their facilities instead such as a kitchen and living room; finally, we integrated the service concept into the Staff concept as these are alike mostly in these accommodation that have a low amount of staff and that generally deal with all tasks of the B&B or Inn. Moreover, we added the value concept, as it is important in this kind of distinctive accommodation for clients to know the ratio between quality and price – value.

- Strength of Polarity – the strength of the positive or negative adjectives, adverbs and other expressions e.g. spotless, clean, filthy were measured using a scale of 1 to 5: 1 = very positive; 3 = neutral and 5 = very negative;
- Qualifier of each Concept of Ontology (CO) – the word or expression used that reveals a positive, neutral or negative feeling of the guest e.g. spotless;
- Attitude – three types of attitude were classified - judgment, affect, appreciation;
- Recommendation, Suggestion or Intention – we identified sentences which indicated the guest's intention to transmit information to the manager for improvement or change and also show intentions e.g. soap dish on shower wall would be beneficial; I plan to come back next time I'm in Lisbon.

- Fact – defined as something known to exist; truth; reality. This parameter allowed us to locate expressions of veracity and reality of the online reviewers; i.e. well informed staff as opposed to the staff seemed well informed; room clean with comfortable bed as opposed to I slept well and thought the bed quite was comfortable.
- Type of Customer, rating and country according to the Tripadvisor categories indicated by guests e.g. solo traveller, 5 star, Portugal;

The third step of the methodological process was to use Excel's pivot table function, which can summarize, sort, count and intersect variables from the Excel spreadsheet, to analyze the collected data. With this function we were able to study the variables and identify if patterns existed that could help managers better understand their guests.

The final step was to validate the degree of agreement of the attitude evaluation. For that, we made a random selection of 20% of the sample – an approximate amount of reviews for each hotel - reviews were selected as a whole in case any sentences would lose their meaning unless they were contextualized. This sample was given to two external evaluators.

With the four steps mentioned above our aim is to answer the following questions:

1. What is the profile of online reviewers from B&B's and Inns in Lisbon?
2. What attitudes are guests expressing in online reviews?

4. Data Analysis

This section holds the analysis of the 450 online reviews and consequently 4621 segments of the top B&B's and Inns in Lisbon gathered from Tripadvisor, which follow our criteria. First we characterize the sample studied, followed by a deeper analysis of the online reviews – correlating several parameters in order to attain more information about the subject. Also in this section we will analyze the degree of agreement with the external evaluators.

4.1. Sample Characterization

Once the data was collected and uploaded to spreadsheets as described in the above methodology, we obtained a sample with the mentioned criteria that we will now describe. This sample comprised 450 online reviews and 3409 sentences; however, in cases where a sentence had more than one CO, it was analyzed for each concept thus giving rise to 4621 segments.

- Types of client: the types of client defined by Tripadvisor website are business, couple, friends, solo and family. In this sample, according to figure 1, couple travelers are the most common with 46.9% of reviews. 20.7% of the reviewers did not identify which type of traveler they were.

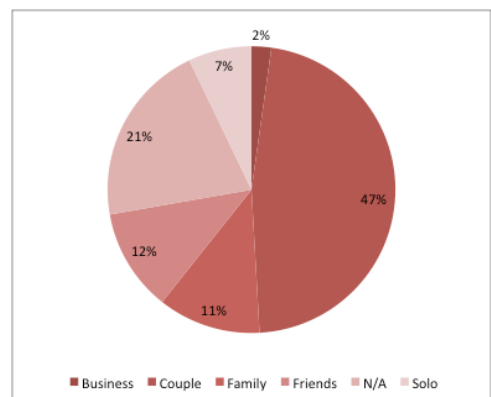


Figure 1 - Type of Client. *Tripadvisor Data analysis*

- Country of Origin: 45 different countries were identified, such as Sudan, Chile, Mozambique, but the top two, according to Figure 2, were the United Kingdom (17.8%) and France (16.7%). Also, 10% of the reviewers did not identify their country of origin.

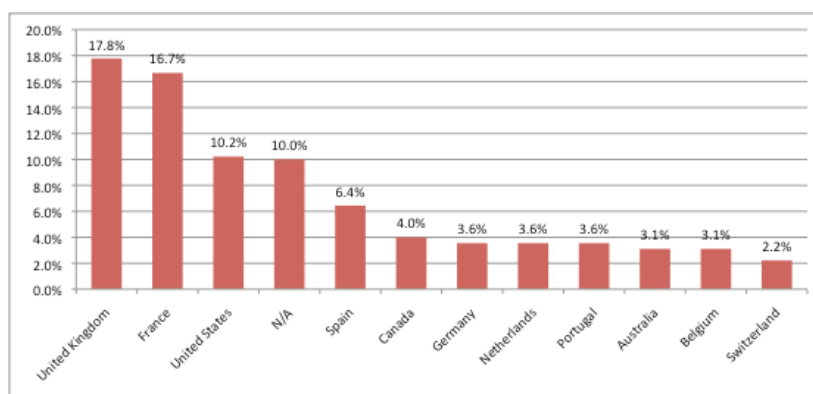


Figure 2 – Top Countries of the reviewers. *Tripadvisor Data analysis*

- Language: given that the reviews from the sample were limited to four languages (English, French, Portuguese and Spanish), the English reviews summed more

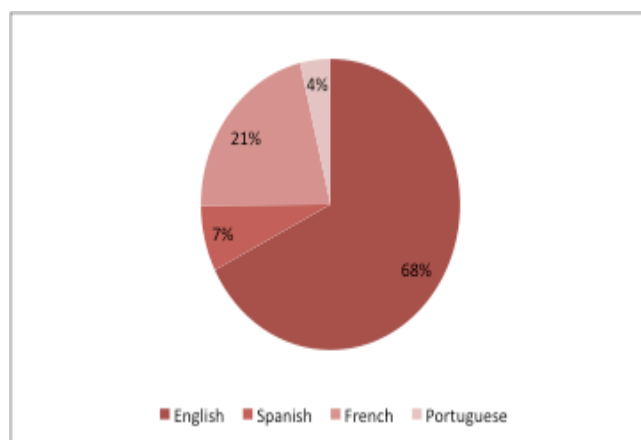


Figure 3 - Language of the reviews. *Tripadvisor Data analysis*

than half of the sample (67.6%) followed by the French reviews with 21.3%, as Figure 3 shows.

- Rating: Tripadvisors' scale for the ranking goes from one star (terrible) to 5 stars (excellent). As Table I demonstrates, positive rankings (4 and 5 stars) summed a total of 96.9% whereas only one

Table I - Rating given by reviewers. *Tripadvisor Data analysis*

Rating	%
*	0.22%
**	0.44%
***	2.44%
****	20.89%
*****	76%
Total	100.00%

reviewer gave a poor ranking (0.2%).

- Concepts of Ontology: considering this parameter and according to Table II, 13.4% of segments did not mention any of the defined CO's. However, Hotel was the most mentioned concept by reviewers with 17.9% of all the defined concepts. Staff and Room were also very relevant with 17.3% and 14.9%.

Table II - Concepts of Ontology. *Tripadvisor Data analysis*

CO	%
Hotel	17.94%
Staff	17.31%
Room	14.91%
N/A	13.42%
Location	10.99%
Breakfast	8.89%
Facilities	6.12%
Bathroom	3.68%
Neighborhood	2.55%
Others	2.47%
Value	1.71%
Grand Total	100.00%

- Qualifiers: The most strongly expressed qualifier in the 4621 segments were general appreciation, cleanliness and helpfulness, as shown in Table III. Also in this criteria 13.4% were non applicable. Possibly due to

Table III – Qualifiers. *Tripadvisor Data analysis*

Qualifiers	%
General Appreciation	15.30%
N/A	13.44%
Cleanliness	4.22%
Helpfulness	3.77%
Decoration	2.99%
Size	2.66%
Friendliness	2.60%
Centrality	2.53%
Proximity to public transport	2.51%
Variety	2.42%
Recommendations	2.25%
Comfortable	1.69%

the uniqueness of B&B's and Inns, we collected a high number of qualifiers – a total of 451 in the 4621 segments. The most popular ones were general appreciation (e.g. the best, good, perfect, amazing) with 15.3%, followed by the non-applicable sentences (13.4%). After these two most strongly expressed qualifiers, cleanliness, helpfulness and decoration were the most mentioned.

- Strength of Polarity (SP): According to Figure 4, the most frequent SP was very positive with 49% followed by positive with 26.8% forming a total of 75.9% of the sample. Neutral polarity had 2.8%, negative 6.6% and very negative 1.3%.

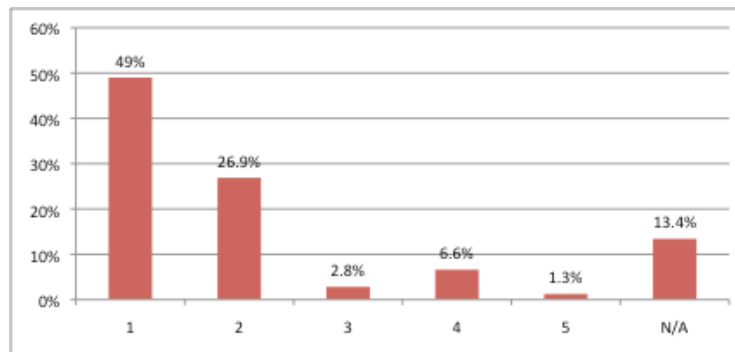
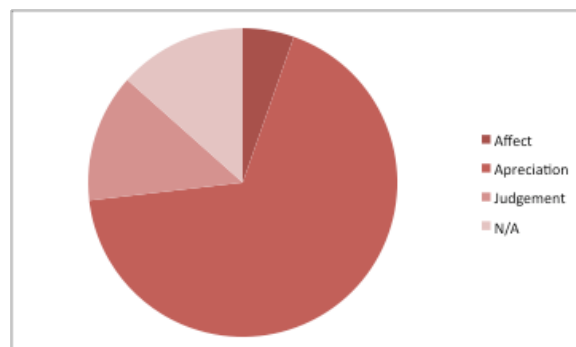


Figure 4 – Strength of Polarity. *Tripadvisor Data analysis*

- Recommendations, Suggestion and Intentions: Only 3.5% of the sentences gave recommendations, suggestions or intentions to the managers.
- Facts: The expression of facts by the reviewers in our sample was relatively equally divided between yes and no. 47% expressed facts vis-à-vis 53% that did not express any facts.

- Attitudes: The majority of the sentences from the sample express appreciation from the



- guests (67.8%), followed by 13.4% of judgment and also 5.4% of sentences expressing affect, as Figure 5 shows.

4.2. Review Analysis

In this section, we will correlate different parameters to gain a deeper understanding of the online reviewer's behavior. We will focus on the CO, SP and the Attitude expressed.

- CO and SP: with this analysis we understand the most appealing concepts to the clients. Staff and Hotel are the concepts that stand out as the most appreciated with the highest percentage of very positive evaluations (74.2% and 73%). Regarding the negative and very negative SP, Neighborhood clearly stands out with 37.3% of segments with these SP giving us the idea that the neighborhood and surroundings of B&B's and Inns are not truly appreciated by guests. Neutral SP represents 13.42% of the sample. Table IV shows us this analysis in detail. Also we present some examples.

Table IV - Concepts of Ontology vs. Strength of Polarity *Tripadvisor Data analysis*

CO/SP	Very Positive	Positive	Neutral	Negative	Very Negative
Bathroom	23.53%	46.47%	8.82%	17.65%	3.53%
Breakfast	65.94%	23.36%	4.62%	6.08%	0.00%
Facilities	34.98%	40.99%	7.07%	15.19%	1.77%
Hotel	74.19%	17.01%	2.65%	5.55%	0.60%
Location	58.46%	34.65%	0.98%	5.12%	0.79%
N/A					
Neighborhood	22.88%	33.05%	6.78%	33.90%	3.39%
Others	27.19%	42.98%	11.40%	12.28%	6.14%
Room	36.14%	46.30%	3.92%	10.45%	3.19%
Staff	73.00%	25.75%	0.13%	0.88%	0.25%
Value	64.56%	26.58%	1.27%	3.80%	3.80%
Total	48.99%	26.88%	2.83%	6.62%	1.26%

Examples of expressed concepts:

- Bathroom – Negative SP:
 - “The shower is a little tight and some people may have trouble with that.”
- Facilities – Negative SP:

- “Steep stairs to rooms makes it less suitable for families with small children and disabled.”
- Hotel – Very Positive SP:
 - “I simply fell in love with the Guesthouse.”
- Location – Very Positive SP:
 - “The Guesthouse has an absolutely perfect location in the heart of Lisbon.”
- Staff – Very Positive SP:
 - “The staff is awesome and really helpful, it makes you feel at home.”

- CO and Qualifier: The most frequent qualifiers for Bathroom were cleanliness and shared; general appreciation and variety were the two most mentioned qualifiers for Breakfast, while common areas and terrace were stood out for Facilities. General appreciation and decoration were mentioned for Hotel. Regarding Location, centrality and proximity to public transports were the top qualifiers. For the concept Neighborhood, clients mention quiet and noise, while in others food & drinks and bathrobe are the most mentioned. Size and cleanliness are the most mentioned for Room; helpfulness and friendliness for Staff. Finally for the Value concept, general appreciation and reasonable are mentioned.

Here we present some examples of the top qualifier for each CO:

- “Bathrooms were extremely clean”. In this segment the qualifier cleanliness is used to describe the bathrooms

- “Breakfast to die for”. The reviewer uses general appreciation to describe breakfast.
 - “The common areas had cosy couches”. Here the common areas are described, part of the facilities.
 - “The Guesthouse was perfect for staying in Lisbon.” The word *perfect* is used to describe the Guesthouse (Hotel CO) – a General Appreciation.
 - “The B&B is in an ideal central location”. The reviewer describes the location as very central – centrality qualifier.
 - “The square is very quiet”. Here the qualifier Quiet is used to describe the neighborhood.
 - “Any drinks consumed are paid for by an honor system”. The reviewer speaks about Food and Drinks at the B&B, the concept used for this segment was Others.
 - “The rooms are very very spacious.” The size of the room is described in this segment.
 - “The staff were incredibly helpful”. In this segment the reviewer characterizes the Staff using the qualifier Helpfulness.
 - “The apartment was extremely good value”. The Value is here described as *extremely good*: a general appreciation.
- CO and Attitude: Appreciation was undoubtedly the most expressed attitude in our sample according to Table V. With the exception of Staff, where Judgement was the most observed, there is a large majority of appreciation in all the other concepts as Table V shows.

Table V - Concept of Ontology vs. Attitude. *Tripadvisor Data analysis*

CO - Attitude	Affect	Appreciation	Judgement
Bathroom	2.35%	97.65%	0%
Breakfast	3.41%	96.59%	0%
Facilities	5.30%	94.70%	0%
Hotel	11.22%	88.54%	0.24%
Location	2.36%	97.64%	0%
N/A	0%	0%	0%
Neighborhood	5.93%	91.53%	2.54%
Others	11.40%	86.84%	1.75%
Room	3.48%	96.52%	0%
Staff	7.88%	15.38%	76.75%
Value	3.80%	96.20%	0%

Examples:

- Bathroom – Appreciation:
 - “Bathroom extremely clean.”
- Hotel – Affect:
 - “We absolutely loved this place”
- Staff – Judgement:
 - “Staff was super friendly and available.”
- CO and RSI: The expression of RSI was very limited in all concepts, there was no RSI made for the Neighborhood concept, and there were 8.24% RSI for Bathroom. This concept, alongside with Hotel were the concepts with more RSI. Regarding the concept Bathroom, most were recommendations as we see in the example below. These recommendations were mostly made in a negative way, appealing for improvement. When writing about the concept Hotel, reviewers revealed intentions to revisit the B&B or Inn.

Examples:

- Bathroom – Recommendation:

- “Perhaps to consider placing an anti-slip mat outside the shower area.”
- Hotel – Intention:
 - “We will definitely stay here again on our next trip to Lisbon.”
- CO and Fact: the relation between these parameters is very balanced. Whereas some CO have more segments that are facts, others have a little less than 50%. Table VI gives a better understanding of this. In the concepts Breakfast, Location and Room nearly 75% of the segments are expressed in the form of facts; these are the concepts where we can find most facts.

Table VI - Concept of Ontology vs. Fact.

Tripadvisor Data analysis

CO - Fact	No	Yes
Bathroom	35.29%	64.71%
Breakfast	25.79%	74.21%
Facilities	33.92%	66.08%
Hotel	55.85%	44.15%
Location	26.97%	73.03%
N/A	97.90%	2.10%
Neighborhood	46.61%	53.39%
Others	71.05%	28.95%
Room	26.85%	73.15%
Staff	42.75%	57.25%
Value	49.37%	50.63%

Examples:

- Breakfast and Fact:
 - “Breakfast is excellent and bread is always fresh.”
- Room and not Fact:
 - “We loved the view from our room of the square, and the comfortable beds.”

- SP and Attitude: Appreciation always has the largest percentage, as Table VII demonstrates. However its lowest percentage is on the very positive segments (72.2%), where judgement has 19.7%. In the very negative segments, 8.6% of the segments express affect – the strength of polarity where we can find most of this attitude.

Table VII - Strength of Polarity vs. Fact. *Tripadvisor Data analysis*

SP - Attitude	Affect	Appreciation	Judgement
V. Positive	7.86%	72.17%	19.96%
Positive	4.43%	83.09%	12.48%
Neutral	2.29%	95.42%	2.29%
Negative	2.29%	95.10%	2.61%
V. Negative	8.62%	86.21%	5.17%

- SP and Fact: It is in the positive segments that we can find the largest amount of facts, with 70.3% as shown in Table VIII. In the very negative facts, only 37.9% of segments are expressions of certainty – facts. In the remaining SP the segments are relatively well divided between facts and non-facts. It is therefore possible to verify a tendency regarding the SP and Facts: in the positive and very positive segments there is a larger expression of facts (both over 50%) than in the negative and very negative (both below 50%).

Table VIII - Strength of Polarity and Attitude. *Tripadvisor Data analysis*

SP - Fact	No	Yes
V. Positive	41.03%	58.97%
Positive	29.71%	70.29%
Neutral	52.67%	47.33%
Negative	52.61%	47.39%
V. Negative	62.07%	37.93%
N/A	97.90%	2.10%

- Attitude and Fact: Regarding the correlation of these parameters, we can observe in Figure 8 that 90.3% of the segments that express affect are not facts whereas in segments expressing appreciation and judgement the amount is quite similar – 64.9% and 61.2% in that order.

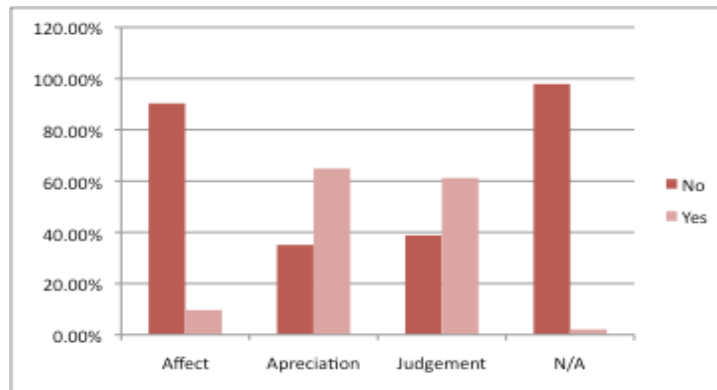


Figure 6 - Attitude vs. Fact. *Tripadvisor Data analysis*

Examples:

- Appreciation and not fact segment:
 - “Probably the only negative is find the guesthouse.”
- Appreciation and fact segment:
 - “Our room was spacious with a charismatic décor.”

4.3. Degree of Agreement

In order to certify an accurate study, external evaluators were asked to classify 20% of the sample, regarding the attitude. The fraction of the sample was given in a random way – selecting comments as a whole from each B&B and Inn. The evaluators were given a definition of every attitude as well as some examples for each one. Both external evaluators were female, one of them with a bachelor degree (29 years old) and the other with a master’s degree (24 years old). The evaluator of this study is also female, 24 years of age and with a bachelor degree.

Table IX sets out the results from the three different evaluators. All three evaluations were very similar, with small variations in each attitude. This further strengthens the confidence in the accuracy of the findings herein.

Table IX - Classification of each evaluator. *Tripadvisor Data analysis*

	Evaluator A	Evaluator B	Evaluator C
Affect	7.58%	6.72%	4.55%
Appreciation	81.37%	80.72%	84.29%
Judgement	11.05%	12.57%	11.16%

The minor variations from each evaluator are probably due to a different interpretation of the segments evaluated, since the Appraisal Theory is a somewhat subjective theory that can lead to different interpretations. The attitude that varies the most is affect, followed by appreciation. On the other hand, the variation for judgement is minor.

In table X, it is possible to understand the agreement of each evaluator with each other. We can see that although all evaluators have a high degree of agreement, evaluators B and C have the lowest degree. The total of segments analyzed was 923 corresponding to 20% of the sample.

Table X - Degree of Agreement (Number of Segments). *Tripadvisor Data analysis*

	A B C	A B	A C	B C
Total Agreement	855	897	879	856
Partial Agreement	67	-	-	-
No Agreement	1	26	44	67
Average of Agreement	97%	97%	95%	93%

5. Discussion

This dissertation, contributes with the first general characterization of Lisbon's B&B and Inns guests and their consequent overall appreciation.

Almost 50% of the guests that visited B&B's and Inns in Lisbon from June 1st 2012 until March 25th 2013 were travelling as a couple and the most common countries of origin were the United Kingdom, France and the United States of America. When compared with the overall results of Portuguese tourism in 2012, published by the Tourism of Portugal in March 2013, we can find the United Kingdom and France in the top 5 nationalities that most visited Portugal in 2012 but not the United States of America. This makes us think that American tourists in Portugal tend to opt for these typologies of accommodation as opposed to Spanish guests that represent the second nationality most visiting Portugal in 2012 (15.8%), which in our sample only appears with 6.4% (Turismo de Portugal, 2013).

Another significant finding from this dissertation is that 97% of our sample gave a positive ranking in their online review (76% very positive and 21% positive), which shows that guests are satisfied with B&B's and Inns in Lisbon.

Although there is a general approval, analyzing the CO we can recognize the most appreciated features of B&B's and Inns. Hotel and Staff are the concepts that present a largest percentage of segments with 'very positive' SP. These are extremely important concepts, since they stand for the general appreciation of B&B's and Inns and the entire Human Recourses component. The concept with most segments with a 'negative' SP is Neighborhood, where

'negative' and 'very negative' SP represent 37%. This concept is not the direct responsibility of B&B and Inn managers once the place already exists, since they are not capable of changing the surroundings of their B&B or Inn. It is important though, that managers continue to direct their strengths to other concepts in order for the neighborhood concept to affect the rating given by guests as little as possible and always paying attention to negative and also positive reviews.

The analysis of RSI of the sample allowed us to understand whether clients express recommendations, suggestions or intentions to the managers. These represented a very low percentage of our sample – 3.5%. This demonstrates that clients do not feel the need to express specific changes they would find important in the B&B's and Inns of our sample.

When analyzing if sentences are expressed in the form of facts or mere opinions, we deduce that the division is almost identical – 47% express facts against 53% do not. The number of clients who are absolutely convinced about their stay and the B&B and Inn which accommodated them and the number of clients that only state an opinion without giving an expression of certainty and veracity is therefore almost exactly the same. As a result managers should take into consideration both types of expression; although the sentences in the form of facts can give better directions on how to operate and the changes that may require action due to their certainty, opinions may also contain important advice for the managers.

The analysis of the attitudes expressed in the online reviews allowed us to understand what type of attitude clients were expressing about B&B's and Inns in the gathered sample; if this attitude was expressed in a positive or

negative way crossing this parameter with SP; and also in which CO each attitude was most expressed.

Undoubtedly, appreciation was the attitude that clients most express in our sample with 68% of segments, followed by judgement with 13% and affect with 5%. However, 14% of segments did not express any attitude and therefore were classified as N/A.

Appreciation is the attitude clients express the most in all CO's, except in the Staff concept, where judgement takes its place as the most popular attitude. This is due to the judgements that are made about the staff members of B&B's and Inns – if they were polite or spoke correct French during check in, for example. Affect has a large expression in the Hotel concept when compared with others – clients speak about how lovely their experience was at the B&B or Inn for example.

It is important for managers to take into account where affect is more expressed and in which terms it is expressed, to be aware of the feeling and emotions that clients have for their B&B or Inn. Taking these into consideration will help managers to improve one concept and/or the other.

When correlating the attitude expressed and the SP, the statistics do not alter much. Appreciation is the most used attitude in all five SP, but judgement has its biggest expression in 'very positive' segments, which leads to the deduction that judgements made regarding the staff are very positive, since the majority of judgements were related to this concept. This gives managers the hint that the staff members are competent and have a good sense of hospitality.

Another interesting correlation is the attitude expressed and whether the reviewers express themselves in the form of facts or not. The majority of facts are expressed in the attitudes of appreciation and judgement – where we can agree that clients are certain about their affirmations. However, 90% of segments in which affect is the attitude expressed do not state known facts. This might be due to the fact that most segments that express affect have a construction of this kind: “we loved our room at this Guesthouse”.

Given the above conclusions, some major contributions can be drawn from this dissertation for B&B and Inn managers:

- Profile of reviewer: travelling in couples and the most relevant countries are United Kingdom, United States and France. It makes it important for managers to focus on packages and facilities attractive to couples and also to invest in training in English and French for current staff and making these languages a requirement when recruiting new staff.
- Although the ratings of the reviews reveal the great satisfaction of the clients, it is essential to analyze positive reviews as carefully as negative reviews.
- Managers must protect themselves from the consequences that the surroundings of the B&B and Inn can bring, by investing in good infrastructures that make guests feel safe and in peace when inside the B&B and Inn; also as it is a factor that does not directly depend on the managers, it makes it particularly important to improve all the other factors that are in their hands as much as possible.
- Recommendation, Suggestion and Intention are expressed in a minor part of the sample but it is still important for managers to take note of

these, as they can bring useful tips from a client point of view that a manager may not have perceived. For example, suggesting more storage space or an extra shelf in the bathroom – things that may easily be fixed and can make a substantial difference to clients' satisfaction and subsequent reviews.

- The fact that nearly half of the segments express facts should help managers to have a clear idea of what clients honestly assume from the B&B or Inn and use this information to take necessary action.
- Finally and most importantly, the attitudes expressed in online reviews can elucidate managers on how their guests are expressing themselves. It is important for managers to take into consideration the type of attitude expressed and better understand their clients. The fact that most segments express appreciation and that this is a large majority in all SP shows that clients are reviewing based on their evaluation of the B&B and Inn and express very few feelings about this.

Regarding the academic contributions of this dissertation, it is known to be the first study about alternative accommodation in Portugal. Also, despite the growing tendency to study UGC and eWOM, this dissertation is a pioneer in applying the Appraisal Theory in the analysis of hospitality services. It is therefore a deeper analysis that allows more to be taken from a given sample.

6. Final Remarks

The growing importance of online reviews for consumers is changing the way they make their choices, in this case regarding accommodation, but it is also a new form of feedback for managers to analyze. Online reviews should therefore be handled with attention and responsibility in order to capture as much information from previous clients as possible to maximize clients satisfaction.

This dissertation allowed us to understand what measures B&B and Inn managers can take to improve their business. It was possible to recognize the profile of the reviewer and realize that there is a general agreement that B&B's and Inns in Lisbon are very good.

It is important to highlight that through the correlation of the CO and the SP it was possible to understand that Neighborhood was the least appreciated concept and Staff and Hotel the most appreciated. With online reviews managers should therefore understand their positive and negative strengths and work together with their staff to improve the negatives and maintain the positives. It is important that managers do not neglect the positive reviews as these also carry useful information for the well being of the B&B or Inn.

Finally, the analysis of the attitudes expressed can help managers better understand and know their clients. It was possible to understand that clients are expressing themselves mostly through appreciations and that judgement only has a big expression in the concept Staff, whereas affect has a small expression in all concepts.

The limitations of this study started with the impossibility of obtaining an official list with all alternative accommodation from Lisbon, making us resort to the listing of Tripadvisor of B&B and Inns, which included the most popular alternative accommodation of Lisbon. Also, there was an initial objective of studying not only Lisbon, but also the second most important Portuguese city for tourism – Oporto. This was not possible to pursue due to the limited presence and importance of alternative accommodation in Oporto found in Tripadvisor. It was impossible to follow the same parameters that we had defined for the sample in Lisbon in this second city.

For further studies, it would certainly be relevant to expand the sample of this study and also to apply it in different locations. Alternative accommodation is becoming more popular and, as mentioned during this dissertation, online reviews have more impact in these small and independent places than in big chain hotels. Also, it would be pertinent to do a deeper analysis of RSI in online reviews related to Hospitality, since this parameter was not very conclusive in this dissertation. Finally, it would also be of interest to study the managers' perspective and reaction to online reviews; whether or not these are taken into consideration and on what scale.

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