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EXPLORING CUSTOMER INTERACTION AND MANAGEMENT RESPONSE IN LUXURY HOSPITALITY THROUGH ONLINE REVIEWS IN SOCIAL MEDIA

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MMA1

Dissertation submitted as partial requirement for the conferral of

Master in Marketing

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October 2019

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Acknowledgments

The current dissertation embodies the culmination of two years of intense learning about marketing. After a degree on communication sciences, I decide to venture into this specific domain, and ISCTE provided me the basic concepts and tools to become a professional on the field. This period of acknowledging was very challenging, but worthwhile. Although I already appreciated tourism, it was during the master that I realized it was possible to combine my passion for communication /marketing and tourism, which was materialized on this thesis. Thus, it represents a major achievement on my academic path. I found on Professor Ricardo Godinho Bilro an expert on both research areas, which was a great advantage to fulfil my goals. I would like to thank him for the support, guidance, patience and encouragement he provided me during this process.

Friendship was also fundamental, so I would like to express my gratitude to my friends. They allowed me to balance my professional and personal life, which was really important for a mental equilibrium. A special thanks to Marta, for always believing in my capabilities, and to boost my motivation when needed it.

And lastly, I want to thank my family, my great pillar, for the support they have provided throughout this phase, for being there in the worst moments, and helping me to overcome them, and for experiencing this dissertation as if they were doing it themselves. Thank you for letting me choose my path, giving me necessary tools, and for always believing in me. My appreciation goes also to my cats, those little living beings, that can't even imagine the happiness they bring me just for being there.

Resumo

Esta dissertação visa compreender os sentimentos expressados pelos consumidores nas online reviews, sobre os diferentes elementos que compõe uma experiência hoteleira luxuosa, assim como de que forma a resposta dos hotéis reflete esse mesmo *feedback*. Para contextualizar esta moderna interação online, a investigação compreende o estudo dos conceitos de *relationship marketing* e *customer engagement*, como pilares teóricos, bem como de *social media marketing* e *electronic word-of-mouth*. Com um conhecimento alargado sobre o tipo de relação estabelecida entre hotéis e hóspedes nos dias de hoje, foi possível estudar o sector hoteleiro em específico, dando destaque às *online reviews* e à forma como têm contribuindo para um estudo mais aprofundado das experiências dos consumidores. Depois, analisou-se o processo que envolve a resposta dos hotéis ao *feedback* disponível *online*, traduzido na noção de *management response*, em termos da sua conceptualização, benefícios e possíveis estratégias.

Foi realizado um estudo netnográfico a duas marcas pertencentes ao sector hoteleiro de luxo - Hilton e Marriott, tendo sido oito hotéis selecionados - quatro de 5 estrelas e quatro de 4 estrelas - na cidade de Londres. Foram extraídas 200 *reviews* sobre cada uma das propriedades no *Tripadvisor*, assim como a resposta dos respectivos hotéis, traduzindo-se num total de 2864 comentários analisados entre Fevereiro e Março de 2019.

A análise comprovou que os consumidores em geral expressaram sentimentos positivos sobre os hóteis Marriott. Em contrapartida, os hóteis Hilton ficaram associados a sentimentos neutros por parte dos seus hóspedes. Além disso, atestou-se que "Staff" e "Localização", em particular, foram os atributos que representaram mais sentimentos positivos nos consumidores em geral, ao passo que "Processes" foi o que gerou menos. O segmento dos hotéis de 4 estrelas expressou os mesmos resultados, porém no de 5 estrelas, "Eventos", "Localização" e "Medidas" foram os fatores que geraram mais sentimentos favoráveis, enquanto que "Produtos/Serviços Complementares" e "Processos" foram os que geraram menos. No respeitante à resposta dos hotéis, os sentimentos associados ficaram muito próximos do espectro positivo, ainda que em alguns hotéis tenham sido menos satisfatórios comparativamente aos resultados da investigação ao *feedback* dos consumidores. "Reconhecimento", "Hotel/Marca", "Produtos/Serviços" foram as dimensões que expressaram mais sentimentos positivos, e podendo ser todos englobados numa estratégia de "Reconhecimento", com eficácia previamente comprovada,

expressaram uma resposta apropriada dos hotéis face ao feedback recebido. A resposta dos hotéis confirmou ainda a valorização de "Eventos" no segmento de 5 estrelas, de igual modo que "instalações" foram um dos elementos com fraca representação em termos de sentimentos positivos para os consumidores, dado que foram a dimensão que obteve mais menções em toda a análise.

Palavras chave: *Social Media Marketing; Online reviews;* Resposta dos hóteis; *Consumer Engagement; Electronic Word-of-Mouth;* Hotelaria e Turismo; Hotelaria de luxo;

Sistema de Classificação JEL: M31; Z32

Abstract

This dissertation aims to understand the feelings expressed by consumers on online reviews, regarding the different dimensions that comprise a luxurious hotel experience, alongside with how management response reflects guests 'feedback. To contextualize this modern online interaction, the research comprises the analysis of relationship marketing and customer engagement concepts, as basis theoretical constructs, alongside with social media marketing and electronic word-of-mouth. Giving this broad knowledge concerning the type of relationship established between hotels and guests nowadays, it was possible to investigate much further the hospitality sector, highlighting online reviews and how they have been promoted a deeper study about consumers 'experiences. Afterwards, one analysed the process behind hotels' response to the online available feedback, translated into the concept of management response, in terms of its conceptualization, benefits and potential strategies.

A netnographic study was conducted on two luxury hotel brands - Hilton and Marriott, and eight hotels were selected - four of 4-star and four of 5-star - on London. Two hundred reviews were extracted for each property on Tripadvisor, side by side with hotels 'responses, so in the end 2864 online comments were gathered between February and March 2019.

The analysis showed that on general consumers expressed positive feelings about Marriott. By contrast, Hilton's guests uttered higher neutral feelings. In addition, it was found that "Staff" and "Location" were the dimensions that represented the most positive feelings among consumers, while "Processes" caused the least. The 4-star segment displayed the same results, however, on the 5-star category, "Events", "Location" and "Unites" were the attributes that triggered the most favourable feelings, while "Complementary Products/Services" and "Processes" revealed the fewer. Respecting management response, its affiliated feelings were very close to the positive spectrum, although in some hotels they were less satisfactory compared to consumers 'feedback research. "Acknowledgment", "Hotel/Brand" and "Products/Services" were the elements that represented the most satisfactory sentiments, and as they can all be included on an "Accommodative Strategy", with proven effectiveness, it states that hotels had an adequate response towards the received feedback. Management response also confirmed the importance of "Events" for the 5-star segment, as well as "Facilities" being one of the most underrepresented elements regarding consumers 'positive sentiments, since it was the most mentioned on the overall analysis.

Key Words: Social Media Marketing; Online consumer reviews; Management Response; Consumer Engagement; Electronic Word-of-Mouth; Hospitality and tourism; Luxury Hospitality

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1. Introduction

1.1 Research Goals

The relationships established between firms and consumers have been significantly changing due to social media, especially on service companies that suppose their products/services are experienced and consumed at the same time. As the hospitality sector includes such organizations is one of those who had been significantly affected by the emergence of social networks.

Before social media, hotels held the communication power together with travel agencies, conveying the marketing messages they wanted to spread, in the time and space that suited them. Consumers received those messages and could discuss them with their nearest social circles, in a process known as WOM. Nevertheless, the scope of consumers' influence was limited, so the relationship established between hotels and consumers was one-sided.

Social networks have modified this parading, introducing considerable shifts in relationship marketing and customer engagement concepts. Hence, through online platforms, particularly online reviews platforms, consumers can share their opinions/experiences, and reach substantially current and potential consumers, by the wide reach these platforms have. This new process known as e-WOM has the ability to bring information to an unlimited number of consumers in different geographic locations. In light of this, consumers become empowered. They are any longer just receivers of corporate messages, they create their own content (user-generated content), so relationships become bilateral, forcing businesses to consider this new source of communication. Through first-hand online experiences, hotels have access to worthwhile knowledge regarding consumers' opinions on different aspects that are part of the accommodation experience. Therefore, online reviews platforms have been made possible for a much deeper and complex study of consumers 'needs, due to the quantity and quality of the available information.

However, they have also brought major challenges to hotels, as they need to have an efficient online posture, so that they can monitor e-WOM, and also control it when negative, as it may have a detrimental impact on the companies' long-term performance. One of the available features for organizations to handle e-WOM is management response, which ensures constant communication between hotels and consumers. By responding to consumers' feedback, hotels prove how much they value their assessments, and how they are committed to enriching their products/services. This might have an impact on future e-

WOM, as management response may neutralize negative e-WOM and enhance positive e-WOM, which will affect future sales.

In view of these considerations, a dissertation will be carried out, alongside with an empirical investigation, to ascertain what consumers prioritize the most on their experience, and how management takes into account those dimensions on their response, on an online review platform. Furthermore, in order to limit the breadth of the analysis, the luxury hospitality sector was selected. This segment is been particularly impacted by the increased competitiveness on the market, and it's been compelled to prove the quality of its products/services. To establish deeper research within the luxury hospitality sector, two brands were chosen - Hilton and Marriott, and to verify if there are differences between consumers from hotels on different categories, two 4-star, and two 5-star hotels were picked up for each chain. For a reliable comparison between both brands, there were elected hotels in the same location (or as close as possible).

With this in mind, the topic proposed for the following dissertation aims to analyse consumers' expectations in a luxury accommodation experience, expressed on online reviews, about Hilton and Marriott's properties (from both 4 and 5-star categories), as well as to study management response to those online comments. Four research questions were established in view of the research's overall goal, namely: (1) What is the degree of importance between different attributes on a luxury consumer experience?; (2) How do hotel categories differ regarding the attributes prioritized by consumers?; (3) Is there consistency between consumer reviews and management response? (4) Are there any differences between Hilton and Marriott on both analyses?

With the purpose of finding relevant information to address the questions mentioned above, some pertinent considerations were reached within the research goal. Firstly, when comparing overall average polarities, Hilton had a lower outcome (3,83) compared to Marriott (4,03), meaning that Hilton represented more neutral rather than positive feelings, as took place on Marriott's properties. The discrepancy between the two brands also occurred in the 4-star segment, in which Hilton had a polarity mean of 3,62 and Marriott 4,04. On the 5-star segment, the average polarities outcomes were only separated by a residual point (4,03 on Hilton's hotels and 4,02 on Marriott's). It was not feasible to settle a correlation between hotels' categories and their polarity means, as Marriott's average polarity on 4-star hotels was larger than average polarities of both chains on the 5-star

segment. Nevertheless, this partially corroborates that consumers' expectations rise as the number of stars increases, which may be represented on the less favorable feelings they express when writing an online review. On Hilton this was not verified, because the variance between the two categories was considerable (4-star hotels embodied neutral feelings, while 5-star properties comprised positive sentiments).

Regarding the most important features for consumers in a luxury hotel experience, the findings verified that consumers had more satisfactory feelings towards "Staff" and "Location". On the other hand, "Processes" and "Complementary Products/Services" were the dimensions that revealed lower favorable feelings. There were also some differences concerning the most pertinent aspects for consumers between the 4 and 5-star segments. With respect to 4-star hotels, "Staff" and "Location" were also the features that generated the most pleasing feelings on consumers, whereas "Processes" caused the least. However, "Facilities", despite being the dimension with the largest number of topics, which proves its high relevance for luxury consumers, unlike "Staff" and "Location", that also had a substantial amount of topics and higher positive polarities, "Facilities" had lower polarities' means compared with other features, mainly in the 4-star segment (for both chains, but especially on Hilton's). With reference to the 5-star category, the features that incorporated larger positive feelings were "Events", "Location" and "Units". On the other hand, those who expressed less beneficial opinions were "Complementary Products/Services" and "Processes". Despite being also considered unfavorably in the analysis of overall clusters polarities, "Complementary Products / Services" had a larger representation in the 5-star segment, validating that this dimension affects consumers of 5-star hotels more negatively than on 4-star hotels, when expectations are not met. However, it is important to note that consumer reviews' investigation has also proved that because both Hilton and Marriott are luxury brands, consumers expect excellent service across all properties.

Regarding management responses, Hilton had a higher average number of responses than Marriott (187,25 and 128,75, respectively), but both chains had the same polarity average (3,99). The disparity between both chains within the two segments was very small (only 1 tenth), and between categories as well. These values are very different from those collected on consumers' feedback research. Marriott's average polarities (and on Hilton's 5-star hotels) were higher compared to management responses' outcomes. These values were justified by a higher frequency of reviews on scales 1 or 5, which was not the case for management responses, where most of the comments were on scale 4, so there was no

balance between the most extreme polarities as happened on consumer reviews' analyse. Yet, although the difference between segments was minimal, the 5-star segment was more linked with positive polarities, while the 4-star segment represented more neutral polarities, establishing a correlation between larger hotel categories and higher average polarities.

1.2 Methodology

In order to find out the expectations luxury consumers have regarding the multiple features that make up an accommodation experience on the 4 and 5-star segments, as well as hotels' response to those attributes mentioned on consumer reviews, it was decided that netnography would be the most appropriate methodology.

Konizets (1988) conceptualized this notion for the first time, as a qualitative technique that grants researchers the study of virtual communities, and the compilation of very relevant information. Therefore, as the dissertation's goal is to analyse the interaction of guests and hotels on an online review platform, netnography will provide behavioral patterns (Konizets, 2002), concerning expectations and experiences (Tavakoli and Wijesinghe, 2019). Moreover, this methodology has been largely used by tourism researchers to investigate consumer experiences (Tavakoli and Wijesinghe, 2019).

After selecting netnography as the adequate methodology, a text mining technique was performed, to extract online reviews and management responses on the selected online review platform, and then to conduct a sentiment analysis in order to interpret the collected information, based on the feelings online interactions expressed.

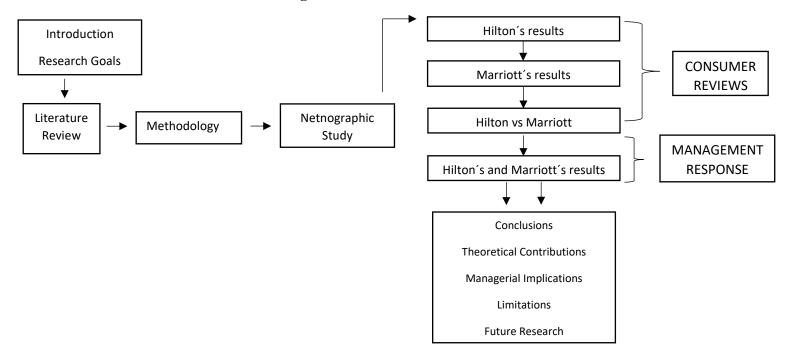
1.3 Dissertation Structure

With the aim of fulfilling the desired goals, a literature review will be conducted to ascertain what has been investigated in this field. Nevertheless, before ensuring the hospitality research domain, one must define the concepts of relationship marketing, customer engagement, social media marketing and electronic-word-of mouth. Under this theoretical background, the hospitality sector will be analysed, taking into account the impact of online reviews on the undergoing investigation about the most valued dimension for consumers in a hotel experience on different segments, including the luxury hospitality sector. Finally, one will define management response based on service recovery notion, as well as addressing its benefits for firms, and the strategies they might undertake when responding to consumers 'feedback, by their level of efficiency.

The following chapter is the Methodology. Netnography will be the procedure used for inquiring guests' interactions regarding their experiences, on the eight chosen properties, as well as hotels' responses to those online comments, on the selected online review platform. First, it will be conducted a text-mining and data extraction of online reviews and management responses on the online review platform, followed by a (1) sentiment analysis, to measure the feelings affiliated with each interaction, taking into account their polarities, and a (2) topic sentiment analysis to determine the attributes most commonly mentioned by consumers and hotels, as well as their attached polarities, to ascertain their importance.

Subsequently, the netnographic study will be presented based on the steps defined before, and results will be exposed throughout its disclosure. First, Hilton's consumer reviews will be analysed and compared at the end, following by the investigation of Marriott's consumer feedback, with a similar overall comparison. After that, all properties will be contrasted based on their results in a full-scale comparison. Finally, the results of management responses analysis will be exposed, although with less detail than consumers' feedback investigation, due to the amount of information the first research will display, so to make the dissertation easily understood, only the overall findings will be revealed. In the end, results will be presented in the section of conclusions, by comparing consumer reviews and management responses' researches, alongside theoretical contributions, managerial implications, research's limitations and recommendations for future research.

Figure 1 – Dissertation Structure



Source: Own Elaboration

2. Literature Review

2.1. Relationship Marketing

In the last decades, there have been significant changes in marketing's research area, both in theory and practice. One of the most important was the redefinition of marketing as a transactional process, which had an impact on many other conceptualizations and models, widely accepted in the literature. This primary vision of marketing considered that attracting new consumers was the most relevant procedure for organizations, as they established transactional processes with customers, so they used most of their resources in their formal programs with that purpose (Berry, 1983)

However, Berry (1983) realized this was a limited view of marketing, as attracting new customers only could be costlier and less beneficial for firms. So, the author found out that it was equally crucial for firms to retain actual consumers and transform them into loyal ones. This understanding made him define a new approach for marketing named relationship marketing. This notion characterizes a new paradigm by conceptualizing marketing as a relational process between companies and customers. This means that, for achieving long-term marketing success, companies should not only appeal for new relationships, as to preserve and improve those relationships, especially in multi-service organizations, or when there are various alternative products in the market, and consumers have a higher power of choice. Attracting new customers would be considered as an inbetween stage in the marketing process, as the other two steps - improve and preserve customer relationships - would also be relevant, as they would transform normal customers into loyal ones, and establish lasting relationships with those clients (Berry, 1983).

Buttler and Ahmad (2001) went further in this conceptualization and stated that consumer retention should not only be included in marketing plans, but it also should be considered as one of its fundamental strategies. That is, contrary to the classical marketing parading, in which consumer retention was the outcome of the established process between companies and consumers, and it represented the end of the relationship, on the new approach, consumer retention might be seen as a longstanding strategy for businesses to deal with current customers and achieve long-term advantages. This is due to the fact that long-term consumers typically invest more money on products/services, are not so susceptible to price fluctuations, and cost businesses fewer resources when serving them (Hui and Au, 2001). As consumers became the target of crucial relationships for companies,

the concept of Customer Relationship Management (CRM) arose within this new approach, to conceptualize a specific business method centered in the consumer (Butlle, 2004).

However, throughout the research's area growing, other important stakeholders for companies (suppliers, lateral organizations and employees) started to be considered as similarly important when managing relationships, since the benefits established in every interaction, would contribute to the overall performance of businesses (Morgan and Hunt, 1994).

The shift from transactional to relational marketing occurred due to an important process that transcended all areas – globalization. In this new era, firms operate within a network, composed by their stakeholders, and when competing, the process is established between networks of firms. This phenomenon is known as the network paradigm. (Thorelli, 1986 *in Morgan and Hunt, 1994*). For a firm to be an actual competitor, it needs to be a trusted copartner in some network. Therefore, trust is one of the main drivers for a successful relationship, alongside with commitment. However, other important elements should also be considered for determining a positive relationship with the desired outcomes, including, cooperation, agreement, low tendency to leave the relationship, functional conflicts and a little uncertainty (Morgan & Hunt, 1994).

The new millennium has brought important technological innovations, that have been responsible for the development of relationship marketing's field. Today, firms easier establish, maintain and promote relationships with their stakeholders, due to a range of technological factors, including, higher computing power, big data, less costly data warehouses, and internet's infrastructure expansion. Customer Relationship Management (CRM) has also been evolving significantly, as technology provides businesses with important customer insights that would be, otherwise, more difficult, expensive and time-consuming to have access to (Payne & Frow, 2017).

Nonetheless, this new technological environment transformed the perception of consumers, as they became more powerful. They are no longer considered passive addressees, that only receive positive messages, previously prepared by companies, within a specific period. Today, consumers are dynamic players, as technology gave them tools to establish bilateral relationships with firms, in real-time (Prahalad and Ramaswamy, 2000).

2.2. Customer Engagement

Relationship 's marketing approach states that for a company to be successful for the longterm, by sustaining its competitive advantage, needs to hold, maintain and foster its customer base (Berry, 1983). For this to be achievable, companies need to look beyond the mere act of purchasing by consumers. This was the reason that led many academics to start exploring other variables based on consumer activity with firms, to determine businesses' performance, including, trust and commitment, service quality consciousness, customer equity, brand-consumer relationship, brand experience, consumer identification and some others (Doorn et al., 2010). These variables as a whole contributed to a more comprehensive view of relationship marketing's paradigm, defining a new type of interaction established between consumers and companies, translated in the concept of Consumer Engagement (CE). This new conceptualization defines an excelling perspective of relationships, as it "recognizes that specific consumer behavior outcomes are generated by customers' particular interactive, value-conscious experiences with organizations and/or other stakeholders (Brodie et al., 2011:253). This new approach is part of the so-called servicedominant (SD) logic proposed by Vargo and Lusch (2004), which opposes to the traditional goods-dominant logic, that considered the relational process as a mere transaction of goods (Brodie et al., 2011). Therefore, within the SD approach, the value creation is not achieved by exchange, but through consumer's usage, as they experience for themselves (Payne and Frow, 2017).

Several authors and models theorized customer engagement in different ways. Van Doorn et al. (2010) conceived it as a behavioral construct, expressed in different behavioral manifestations, beyond transactions, directed to brands or companies (customer-to-customer (C2C) interactions, word-of-mouth, and blogging), with several motivational factors behind. These behaviors can be positive or negative for businesses. By contrast, Bowden (2009) theorized CE as a psychological state, responsible for customer loyalty. On a broader view, some authors do not consider the relationship established between firms and consumers as merely behavioral or physiological, and acknowledge CE as a cognitive, emotional and behavioral process. This approach recognizes customer engagement as a multidimensional term, that is subjected to a context, and a type of stakeholder (Brodie et al., 2011).

Consumers are no longer passive and play now an important role in the relationship established with the organizations, due to information and communication technologies that have broadened their power. Thus, they can be a part of the value creation process alongside firms, as they can suggest ideas and improvements. This is the reason for value in use in recent times being recognized as co-created (Vargo and Lusch, 2008). Therefore, customer engagement processes' are being enhanced due to technology, more precisely through social media platforms, that are creating a new type of interaction between customers and companies.

2.3. Social Media Marketing

Technology has been evolving very rapidly and significantly in the last decades. The emergence of Information and Communication Technologies symbolized the beginning of a new era, that undertook major changes, especially in the marketing field.

Social Media Platforms are one of those technologies, a consequence of Web's evolution, imbued in Web 2.0, as they represent online spaces of interaction, in which users can produce their own content (user-generated content) and share among other users, within the network, in real-time (Filo et al., 2014). The tools can be diverse, including, consumer reviews websites, social networking websites (SNSs) Wikipedia's, online forums, among others (Zeng and Gerritsen, 2014).

For instance, all these tools establish online communities, that have been responsible for creating a new cultural dimension named cyberculture, by allowing such diverse groups with different points of view to come together (Tavakoli and Wijesinghe, 2019). As issues related to the decision making and purchasing processes are discussed on these communities, it is important that marketing investigators use the right methods to collect and analyse that data in such a demanding background (Konizet, 2002)

For companies, social media platforms can enhance their customers 'relationships, as they establish powerful, effective, effortless and less costly interactions. Thus, their potentialities contribute to marketing's objectives achievement. Engagement and interaction are two very important variables for these new ways of connectivity, alongside with communication and customer relationship management (Saxena and Khanna, 2013). The alignment between social media's capacities and marketing goals, as well as with companies' overall performance, originated a new concept within the marketing's research area known as "social media marketing". According to Alalwan et al. (2017), based on the

definition proposed by Tuten and Solomon (2015), Social Media Marketing comprehends "(...) the utilization of social media technologies, channels, and software, to create, communicate, deliver and exchange offerings that have value for an organization's stakeholders. (Tuten and Solomon, 2015 in *Alalwan et al.*, 2017:1178).

However, social media implemented disruptive changes in the existing communication paradigm (Mangold and Faulds, 2009), which caused significant shifts on relationship marketing and customer engagement perceptions, influencing firms very meaningfully. The traditional Integrated Marketing Communications model established a one-way interaction, from companies to consumers. However, social media platforms launched a two-way interaction, as it made possible for users to produce and share their own content if they belong to the network. With web 2.0, every user can produce and share information, so companies no longer detain the exclusivity power of control every marketing mix element, and establish how, when, and where they may interact with their potential customers. Consequently, firms lost the power of supervising what is being said about their products and services, at a larger scale, since customers can do it directly online, so social media became a hybrid component of the marketing mix. Thus, the content, timing, and frequency of the social media-based conversations occurring between consumers are outside managers' direct control (Mangold and Faulds, 2009). Therefore, social media channels are being responsible for the creation of new touchpoints (the moments in which consumers are more predisposal to be influenced by organizations) (Court et al., 2009), between consumers and firms, so they are altering the decision-making process (Hudson and Thal, 2013).

In the traditional model, at the begging, consumers had a set of brands in mind, and they would eliminate the options over time, in a systematic way, until they select a specific one. This was known as "the funnel", a metaphor that defined the type of process. After the purchase phase, their relationship with brands would be only extended to their experience with their products and services. Yet, due to social networks, this concept no longer characterizes the decision-making process. Presently, there are many more channels to communicate, and a higher number of products to choose, which is translated into a larger number of touchpoints. In addition, because consumers have access to much more information, they become more critical and exogenous, which further complicates the decision-making process (Court et al., 2009).

Taking this into account, Court et al. (2009) proposed a new concept to define the complex decision-making process in a digital environment, dominated by social media, the so-called customer journey. The authors understood through a study done to 20, 000 consumers, from different continents, and in different industries, that marketers must find new ways to reach consumers, and be included in their initial set of brands, due to the proliferation of products and platforms. Thus, they elaborated a new model for representing the customer journey, composed of four distinct phases: consider; evaluate, buy and enjoy/advocate/ bond. As social media created new touchpoints and a large knowledge base, consumers have a much longer evaluation period, as they include and remove brands, based on the continuous flow of information they have access to. After the purchase, by their own initiative, they establish a relationship with brands, by sharing their consumption experience on social media, evaluating based on what they perceived.

So, applying these functionalities to the concept of relationship marketing, stakeholders may interact in real-time with companies, within various networks, contributing to the value's creation process, in a co-creation process. Therefore, very complex marketing relationships are established, and through which there could exist stronger outcomes. Two of them are a higher connection from consumers with a brand, product/service or company, (Alalwan et al. 2017) and a larger number of sales in the end (Valls et al., 2013 *in Zeng and Gerritsen, 2014*).

Yet, social media can also be toxic for brands and customer relationships (Leeflang et al., 2013). This dangerous potential can be resumed in the following statement: "Brands are more and more defined by customers than by the marketer's positioning statement" (Leeflang et al., 2013:10). Consequently, managers must learn to shape consumers 'discussions in a manner that is consistent with the organization's mission and performance goals (Mangold & Faulds, 2009) Given this, in this digital era, two of the greatest challenges for companies are to manage customer insights to perform successfully and to develop customer relationship approaches that could increase engagement levels on social networks (Leeflang et al., 2013).

2.3.1- Electronic Word-of-Mouth

Social media not only allow consumers to connect with businesses, but also to interact with each other about brand/companies- related information, in the form of positive or negative statements, based on their experiences, influencing the decision-making process (Chu and

Kim, 2011). The data shared between them is perceived as richer in terms of extent and variety (Hung and Li, 2007), and is also considered as more credible, updated and pleasurable (Gretzel and Yo, 2008), when comparing with commercial messages that have marketing goals (Zheng et al., 2009).

Nevertheless, this process has been existing for a long time, prior to the appearance of social media, and crucial for the marketing field, known as "Word-of-mouth" (WOM). This concept defines the "(...) the act of exchanging marketing information among consumers and plays an essential role in changing consumer attitudes and behavior towards products and services (Katz and Lazarsfeld, 1955 *in Chu and Kim, 2011:48*). WOM was mostly carried out within consumers 'social circles, their peers, who could be relatives, friends, colleagues or acquaintances. Therefore, marketers have always perceived the importance of WOM in the post-purchase phase, due to its impact on the information diffusion, product evaluation, consumer satisfaction, consumers' lifetime value, and consumer repurchase plans (Hung and Li, 2004).

Nowadays, because of the high level of social media penetration among societies, WOM has reached proportions never achieved before in the classical human interactions. This happens because consumers can reach and impact a larger number of people, a consequence of the number of users within the network, and due to social media's interactive capabilities (Hudson et al., 2015), so the data can be transmitted to numerous geographical places, with the possibility of anonymity, and for an undetermined duration (Hennig-Thurau et al., 2004). Therefore, a new type of word-of-mouth aroused, the electronic word of mouth (e-WOM), that is based on a two-way exchange pattern between strangers in the cyberspace, that provide important information for both consumers and companies, creating many possibilities and challenges.

According to Mangold & Faulds (2009), consumers are more predisposal to interact through WOM when they are engaged with the product or company. Also, when they engage via social media platforms with their preferred brands, they establish stronger relationships, compared to those customers that don't interact virtually (Hudson et al., 2015). Yet, a negative WOM can have a very harmful effect on consumers' purchase intentions, so companies should promote positive communication processes, as they may not control them. When mentioning the characteristics of relationship marketing, it was referred that hold satisfied consumers were more financially beneficial to firms instead of

looking for new ones. Because e-WOM might have a negative impact on potential consumers, firms should constantly monitor what is being written online, and also compensate their less satisfied consumers, to avoid losing them (Harrison-Walker, 2001).

2.4. Hospitality Sector

The hospitality sector has been the target of theoretical research for a long time, due to its large predominance in the most advanced economies in the world (Langviniene and Daunoraviciute, 2015). Intangible experiences are the essence behind all products and services delivered by hospitality companies (Yuan and Yo, 2008), so, because of their nature, consumers are unable to access them before consumption. Their evaluation only happens at one moment, the service encounter, when there is a direct interaction between consumers and organizations (Bitner, 1990). According to Kandampully et al. (2018), these experiences are co-created between consumers and the staff. By carrying out experiential marketing strategies, companies can offer attractive and exclusive experiences, that might boost consumer satisfaction, by the emotional or functional value they create, perceived by guests from sensorial and mental interpretations, and by the quality of service (Yuan and Yo, 2008).

Due to its importance for the accommodation sector, the concept of perceived value has been greatly studied, leading to many distinct considerations regarding the different dimensions and features that influence consumers 'evaluations. Through the appropriate tools, managers can determine which areas they should prioritize (Jamal et al., 2011). However, before pointing out the contributions that vast years of research have been proven on this domain, it is important to mention the new possibilities that the emergence of the Internet had provided to the hospitality sector, and for tourism in general, for both consumers and businesses, to understand the growing of the research area.

2.4.1- Online Reviews

Tourism market was a pioneer on Internet's adoption, to allocate its products and bridge markets, translated into the concept of "eTourism". Nowadays, the Internet is the primary source of information for the activity, but other traditional channels remain relevant, which indicates that consumers are more aware, and therefore look for diverse sources of information, to evaluate more impartially tourism products and services. According to Xianga et al. (2014), based on a survey conducted on American travelers, younger generations are more involved in travel planning online, but Internet usage is spread among

the various travellers' groups. Social Media, specifically, is one of the main digital sources of information for the tourism sector. Consequently, e-WOM assumes great importance in this industry, as beforehand pointed out, consumers could only try the product when they consume it (Litvin, Goldsmith, & Pan, 2008), so they look for more credible and unbiased information online, to make a decision on tourism products and services.

In particular, the online reviews system, an information and communication technology has a great importance for the accommodation sector (Lui et al., 2018). Through it, consumers can find the type of information they are looking for, represented in the innumerable sets of experiences shared by travellers from all over the world, on the format of a review. This system has a larger scope (Overby, 2008), so it can be recognized as a broadcast communication channel. It also promotes customer service, as consumers share important insights about tourism products, and companies may use that relevant data in their favor, (Lui and Piccoli, 2016), as well as respond to those consumer comments (Lui et al., 2018). All of these positions online reviews as an important marketing data source (Kang and Schuett, 2013). The platforms can be divided into community-based sites (such as TripAdvisor) and transaction-based online travel agencies (for instance, booking, in which online reviews are integrated as e-WOM). They are being used throughout the customer journey, changing the way consumers plan, purchase and experience their travels (Fotis et al., 2012).

Gretzel and Yo (2008) found out that online reviews are quite crucial in a trip's planning stage, since they provide ideas, facilitate the decision-making process, and reduce the risk associated with the unknown, by the fact that consumers cannot experience previously, so it gives them higher trust as they can imagine the places easier. Therefore, consumers start planning the trip by searching for information on the multiple sources available online, especially on community-based sites, that may influence their choice, as they rely highly upon that information than the one provided by touristic operators. Cox et al. (2009) also recognized that social media are mostly used in the information-seeking phase, by studying Australian consumers. However, Fotis et al. (2012) produced a more comprehensive approach, by exploring the impact of social media before, during and after the travel experience, for consumers living in F.S.U Republics. Their goal was to determine whether cultural differences have an influence on social media's impact on the various phases of the customer journey. They found out that in this specific market, social media was mostly important for sharing the experience during and in a posterior phase, with friends and other

travellers. In the same line of thought, Xianga et al. (2014) acknowledged that nowadays travellers do not need to plan everything previously, so many bookings and purchases are made during the trip. After the experience, if travellers are highly satisfied, they will be more predisposal to post positive comments about it. Engaged customers tend to recommend firms' products and services. However, if the opposite happens, which means that if consumers feel that the organization has failed, they will hardly give it another chance (Bilro et al., 2018).

The use of this type of technology by consumers to plan and consume tourist products depends on multiple factors, such as individual predisposition, credibility perceived on other customers ' reviews, selflessness, and accessibility (Yoo et al., 2011). For the post-experience sharing, the variables that influence it are the perceived levels of pleasure, usefulness and consumers' assimilation and identification, based on their individual goals (Kang and Schuett, 2013). Also, travellers' nationalities will also influence their predisposition to produce content, and even the type of information they will share (Wilson et al., 2012).

Given what has been exposing, it's undeniable the importance that online reviews have for the hospitality sector. The reason for them to be mentioned, before presenting the dimensions and attributes that consumers value most in an accommodation experience, was to clarify that they materialize those elements that companies and marketing investigators desire to know. Thus, the emergence of online reviews, a dimension of e-WOM, has opened a new path for tourism researchers in methodological terms, as the access to valuable insights became very wide, so it created opportunities that by the traditional means would be difficult to reach. Thus, online reviews have been largely contributing to the hospitality sector research, particularly regarding consumers' needs during accommodation experiences, that will be addressed next.

2.4.2 - The importance of different dimensions in an accommodation experience

There are several and distinct theoretical considerations regarding this thematic. Kandampully et al. (2018) stated that effective management of consumer experiences is only achieved when employees are recognized as the most important element, capable of creating meaningful experiences. The authors proposed the concept of people innovations to designate the ability workers must have to continuously adapt and change services to meet consumers 'expected and unexpected needs. Ariffin and Maghzi (2012) also

considered that in order to create a unique experience, a close and true relationship must be established between the hotel and guests. Furthermore, their study has shown that hotels' classification significantly influences consumers' expectations levels regarding hospitality. The confidence consumers may feel about hotel employees is very important, likewise the service they provide, as guests don't want to fear any mistake. In 2017, Herjanto and Gaur attested this result in their study to the top ten 5-star hotels worldwide, as most consumers considered staff's conduct to be the most crucial element in a truly positive experience. Therefore, features such as generosity, rigor, safety, personalization, and quickness are very important for guests to ensure service quality (Dražen et al., 2016). However, accomplishing a high level of service is difficult, considering that staff members differ in their attitudes, leading to a disparity in the service delivered. Because of that, it is recommended for hotels to train and monitor constantly their employees on the aspects that might augment their expertise levels, especially on hotels of higher categories (Ntimane et al., 2017; Herjanto and Gaur, 2017; Mohsina et al., 2019).

However, not all researchers have proven that factors related to customer service are the most meaningful in a very satisfactory experience, as there might be others equally important. Walls et al. (2011) verified that consumer experiences should be looked at the light of a holistic mindset, by taking into account that there are several factors influencing a special experience on luxury hotel customers (Herjanto and Gaud, 2017). The inquired guests settled that both physical surroundings and human relationships are crucial to a pleasing experience. The physical environment refers to a set of components including furniture, equipment and objects characteristics and conditions, design, color scheme, temperature, lighting, among others (Bitner, 2002). A few years earlier Zemke and Pullman (2008) had already shown that the physical context is a critical element for the accommodation industry in general, as they analysed several hotels from the same brand, in the USA. Features linked to the internal atmosphere of hotels are very significant for guests, including capacity, accessibility, and functionality, as they satisfy consumers' desires, and promotes their return. Furthermore, their study showed that there is a positive correlation between guests' judgment of property's design and contentment and two performance indicators: average daily rate (ADR) and revenue per available room (RevPAR). The authors noted that the service provided by staff is also in its essence functional, however the benefits are more related to pleasure, unlike the physical surrounding. In their study, Walls et al. (2011) conceived physical surroundings as consisting of ambience, multisensory, space and functions and signs symbols and artefacts. All of these dimensions evidenced purposeful importance for 5-star hotel guests, but multisensory and ambience were the most preferred, as consumers felt that luxury hotels can provide them the comfort they feel at home, so they estimate this feeling. They also reported that these kinds of properties are expected to have high requirements in terms of cleanliness and conservation. Herjanto and Gaur (2017) similarly found out that proper lighting, cleanliness, sophistication, coziness, safety and good conditions are the features that characterize an attractive physical surrounding for 5-star hotels 'guests. In a more extensive study of London's multi-rating hotel customers, Lockwood and Pyung (2019) found out that "spaciousness", out of other four elements that constitute the scope of hotels' servicescape - physiological conditionts, aesthetic quality; atmosphere and) had the greatest individual impact on consumers pleasure levels and on positive behavior intentions. On the other hand, aesthetic quality (interior and exterior) had the most influence on arousal and propensity to spend. Thus, a proper servicescape's administration can lead to positive emotional and behavioral responses, if consumers perceived not only an adequate design but also a convenient and coziness space, contributing to a unique experience. However, creating harmony between both dimensions can be difficult for hotels.

Regarding the scope of human interactions, Walls et al. (2011) distinguished between the look and attitudes of both employees and guests. Concerning the staff, luxury consumers desire efficient and amicable interactions with employees, but with the necessary boundaries, so they don't invade their personal space. About guests, respondents said they expect a certain image and presence of luxury hotel guests, and when that's not the case, it may influence negatively their stay. Guests look for homogeneity between the physical atmosphere and on their interaction's guests-staff and guests-guests, and whether they are consistent with the property category, to evaluate their experience. However, it is important to note that consumers' perceptions of those dimensions are influenced by two other factors: their individual characteristics and aspects linked to travel. The last one may be related to intrinsic values of the nature of products/services offered by a hotel, which positions the consumer on the control, but also to the context in which the travel takes place, such as for a particular purpose (birthday, e.g). Aleksandar et al. (2016) validated the finding concerning the circumstances in which a trip occurs naming situational factors (guests' state of mind, the people with whom they travel, the social context of the trip and the travel goal) to impact consumers' assessments on different attributes. On luxury properties,

leisure travellers are more likely to pay attention to the physical context than business travellers (Wall et al. 2011).

Langviniene and Daunoraviciute (2015) found out on their research through literature investigation and summarization, that the aspects of expanded marketing-mix (people, processes and physical evidence), the so-called non-verbal cues, are very important for greater consumer satisfaction. So, for hotels businesses to thrive, they must act upon their hospitality, as well as on their processes and services innovations and establish relationships with consumers and partners. Another wide-ranging investigation was conducted by Mohsina et al. (2019) to consumers on 3, 4, and 5-star hotels in Lisbon and led to important considerations. The first one is that guests recognize hotels' value as more significant than their effectiveness, and this distinction is larger expressed in the price of most luxurious facilities that customers are willing to make use of 4 and 5-star entities. So, these kinds of properties should enhance customer loyalty, as the probability of devoted guests choosing a competitor brand, if there is a price's growth, is lower than in other hotels 'categories. Likewise, such hotels should increase the set of services that generate the most financial return, as well as boost their customer service. Another important implication is that service quality must be ensured throughout the overall experience, in all its dimensions, including at a pre-trip stage - quick booking confirmation process; arrival/ check-in (reception) and even room conditions and features, to boost hotel's efficiency. Regarding the differences between properties in distinct categories, Mohsina et al. (2019) verified that cleansed bathrooms are a requirement for every. The importance of Food and Beverage was also complementary to all, regarding food quality and beverage variety, but also concerning restaurants in particular, and their food quality. The number of desired features expected by guests increments as the number of stars increases as well. In the case of 4-star hotels, the elements that positively differentiate them are speedy booking confirmation; the primary impression that guests have based on the interaction with the hotel staff; caring and amicable employees and rooms' hygiene levels. Regarding 5-star properties they are the spectrum of complementary services, price-quality relationship on restaurants; the pattern on equipment and objects, service quality, bed's level of coziness and the way complaints are managed. This proves that tourists' expectations increase based on hotel classification, so higher properties should pay attention to exclusive services to cope with the rising competition. They should also implement efficient processes to deal with

consumers' criticism, as mentioned before, in order to achieve a satisfactory service, and also to prevent potential complaints.

Important contributions for this theoretical research were also collected on the results of a large-scale study done by the Irish Authority for Tourism Development (Fãilte Ireland), that defined in detail the elements that consumers value in an accommodation experience, through a survey of about 4000 consumers in 2016 and 2017 from 5 countries - Ireland, USA, Germany, United Kingdom, France – which stayed in 2,3, 4 and 5 star hotels. The results were compiled in the table below:

FACILITIES	CONSUMERS' EXPECTATIONS
ROOM	• Great bed quality (coziness) - for all types of segments, star classifications and consumers – and size (meaningful for couples and US citizens).
	• Natural light and only the necessary furniture to increase the sense of space, and facilitate locomotion;
	• Internet's availability – consumers desire it to be free (its importance grows alongside the hotel's category, and it's especially significant for business consumers and US citizens);
	• Plug sockets – they are required 3 per room, however, on 5-star hotels, they are expected 4, as well as for US citizens;
	• Coffee/tea facilities are awaited at 3, 4 and 5-star hotels (and especially for UK citizens);
	• The room service option is very significant, mostly for solo travellers, business consumers and 5-star guests.;
BATHROOM	• On average, half of the 5-star hotels' consumers demand a bathtub;
	• A stand-alone shower is crucial for 4 and 5-star hotels' guests, and above 65s;
FOOD & BEVERAGE	• Around half of 5-star consumers have dinner at their hotel;
	 Healthy choices are of utmost relevance for 5-star hotels 'guests, business consumers and German citizens.;
TOILETRIES	• 4 and 5-star hotels should supply products in a considerable quantity and quality;

Table 1 – What guests prioritize the most in a hotel?

Source: Fãilte Ireland (National Tourism Development Authority)

2.5. Management Response

2.5.1 - Service Recovery

To understand what integrates a firm's effective system for managing consumer complaints, one must investigate the theoretical constructs behind, for both consumers and firms. Since the hospitality industry belongs to the sector of services, they are mostly carried out through direct contact with the consumer, establishing each experience uniqueness, as addressed above. Given this, mistakes are unavoidable, no matter the

progressive technology, efficient measures or level of staff expertise on the organization's side (Hart et al., 1990). When consumers' expectations are not aligned with their experience, and they became dissatisfied with the product/service and the organization, a service failure occurs. Hirschman (1970) has determined that consumers' dissatisfaction (CS) may have two negative outcomes: voice and exit. The first one defines an attempt by the consumer to communicate and resolve the issue with the organization. This definition was later integrated into the conceptualization of Consumer Complaining Behaviour (CCB), that represents a range of behavioural and non-behavioural reactions, which involve interactions based on the negative perceptions consumers may had during their experience, and are influenced by the level of dissatisfaction consumers have towards the issues (Singh and Howell, 1984 in Yuksel et al., 2006). In opposition, exit designates consumers' retirement, without things being solved. Loyalty acts as a mediator because it can define the final outcome. Furthermore, Sparks and Fredline (2007) determined that unsatisfied consumers can express their reactions in different domains, among which, satisfaction, emotions (fury and disillusionment, e.g.) and behaviors (objecting and switching, e.g.). Min et al. (2010) determined four different strategies that consumers can undertake when unsatisfied, namely "inertia", "third-party-complaining", "negative WOM" and "voice". All of them will influence consumers' behaviors when challenged with a new decisionmaking process.

While it is impossible for companies to anticipate every failure, they must find out the best ways to solve them, as it is higher costly to get news customers, rather than retaining them (Hart et al., 1990). Hospitality's research area has confirmed that consumers expect a justification when things don't go as planned. If companies prove consumers their level of responsiveness regarding complaints, increasing also the expectation for a suitable complains handling system, there will be fewer occurrences of "exit" and "WOM", as firms can take some control over these two types of outcome (Singh, 1990). Hennig-Thurau et al. (2004) established a model that proved that unvoiced complaints represent an opportunity cost for business. This happens because there is a high probability, in a competitive background, for the consumer to leave the relationship with a firm when he is not appeased and doesn't express his unsatisfaction. This represents a revenue loss for companies. On the other hand, dealing and supporting consumers to complain, entails a cost for businesses, but when that cost is lower than revenue loss, and a large part of dissatisfied consumers can be convinced to stay in the relationship, it's more worthful for

organizations to incite complaints. Despite that, for consumers to be persuaded to express their negative questions, they have to recognize their usefulness. Companies can potentialize this by facilitating the complaining process via reducing bureaucracy, creating multiple channels, and training employees that delegate in this domain (Singh, 1990).

Thus, service recovery is the concept that designates the process organizations may undertake after consumers express their dissatisfaction, regarding its products or services (Sparks and Fredline, 2007). Once the problematic issues are identified, the company should act quickly (Hart et al., 1990) and respectfully, thereby showing its level of receptivity to handle complaints (Singh, 1990). Blodgett et al. (1997) found out that consumers who were exposed to larger degrees of distributive justice - replacements, refunds, or discounts and interactional justice - good manners and consideration - after complained, were more likely to keep valuing the organization, and not take on negative WOM. Yet, higher levels of interactional justice might make up for smaller classifications in terms of distributive justice, meaning that consumers are willing to give the organization a second chance if they are rewarded, but also if they are treated properly. If the approach is deeply disrespectful, the reward turns out insignificant (even it's 100%), and consumers may choose to leave the relationship (picking up another company), or speaking negatively about the firm's products or services (negative WOM). Just when negative issues expressed by consumers are handled with respect, does distributive justice have a beneficial impact on post complaint behavior. On behalf of this, the role of staff is critical. All employees must be trained to deal with consumer complaints, acknowledging extensively the justice dimensions involved in service recovery, specifically interactional justice and the desired attitudes they should present, as this is the main component that will establish if a consumer stays, or exits and engages on negative WOM. Hence, this might contribute to long-term efficiency for the company. In this domain, Hart et al. (1990) proved that organizations should make sure every employee has the required competences, a high degree of motivation and a certain level of power to take actions when needed. Besides that, they should also develop a creative ability to deal with unexpected situations. Service recovery procedures may also include an apology and appreciation of consumers 'feedback by the staff, giving consumers at the same time the opportunity to justify themselves.

If outraged consumers can have a disastrous impact on a company's performance, on the other hand, every negative issue presented by consumers might be turned into possibilities for businesses to show their level of responsibility to the service, even if there's not its

fault. Onward "service" recovery is very important to achieve high-quality service and should be included in the firm's service strategy (Hart et al., 1990).

2.5.2- Service Recovery and Management Response

In light of these considerations, the notion of management response is acknowledge in a broader extent, as a procedure that may be used to conduct a service recovery process, by comprising the interaction and response from hotels to consumers 'feedback (Gu and Ye, 2014).

Considering online reviews platforms, nowadays complaints are not voiced privately, and may reach many other consumers, who also expect an adequate response from hotels, so management response might affect both actual and future consumers (Karen et al., 2016). On particular, future consumers might assess whether hotels 'responses and solutions were convenient to solve the problems presented by actual consumers (Lee and Song, 2010). Also, when they have access to others experiences that address negative aspects, recognized later on management response, their own expectations tend to be lower, as they are more realistic respecting service quality, so the misalignment be expectancies and reality will be lower (Karen et., 2016).

Thus, when companies respond to online reviews in a satisfactory way, regardless their polarity, consumers recognize this effort and perceiving it as a management attempt of consumer listening, concern and support (Gu and Ye, 2014; Li et al., 2017), increasing consumers' engagement levels (Li et al., 2017). Also, at the same time, hotels prove a commitment to enhance their products/services (Li et al., 2017), and validate their levels of popularity, as guests merit their procedures (Karen et., 2016). Consequently, they tend to write even more reviews, expanding the volume of e-WOM, as stated by Karen et al. (2016). The authors developed an integrated management response approach, considering positive and negative consumer reviews and management responses on online platforms. They found that the number of consumer reviews increases by 17.3% for one unit grow in the management response ratio, so management response positively influences reviews volume, which enhances firms 'performance. Besides, management response might also reduce the potential negative impact e-WOM may cause, by neutralizing it, and influencing subsequent consumers 'perceptions. Hence, an increase of one unit on the management response ratio corresponds to an increase of 0.235 units in the average rating, so the impact of consumer ratings on hotels' performance is boosted by an increase in management

response. Likewise, Proserpio and Zervas (2014) verified that management responses increases 0,12 star on hotels 'ratings, as consumers write subsequently fewer negative reviews. Nevertheless, the posted reviews become lengthiest, because consumers feel the need to write a more in-depth feedback, knowing that hotels will look at attentively.

Moreover, there are some factors that influence the effectiveness of management responses, such as the length, frequency and speediness of responses. Higher levels of these features will increase the degree of consumers 'engagement, that will be translated in larger number of reviews, more positive feelings and higher rankings (Li et al., 2017). Therefore, management response will cause dissatisfied consumers to realign with the brand value and brand belief (Lee and Song, 2010). Furthermore, the repetition of topics in comparison to the original review and the position of the one who writes the response (executive positions vs functional staff/ departments) also influences the effectiveness of management responses Wei, Miao and Huang (2013).

Despite management response being more interconnected to service recovery, as a result of negative reviews, some authors consider that hospitality companies must respond to all types of reviews, instantaneously and in a spontaneous way (Zheng et al., 2009). Nonetheless, several studies have demonstrated how negative reviews are perceived as more credible, so having a greater influence on consumers 'decisions, so their research is been much higher (Lu et al., 2018). This a consequence of the so-called "negativity bias", which designates the consumer's pre-disposition to handle and discover more from negative information than positive (Vaish et al., 2008). This is why several researchers consider that companies should allocate their resources to handle negative reviews, and that this is one aspect of quality practice in an online review system, as responding to negative responses has a very significant impact on performance, because reviews' ratings decrease (Lu et al, 2018).

Regarding positive reviews, management response might improve brand image and customer satisfaction (Proserpio and Zervas, 2014), as guests can evaluate whether properties are willing to maintain the quality of products/services mentioned satisfactorily on reviews (Xie et al., 2014). In such case, they can affiliate stronger positive feelings towards the properties (Hennig-Thurau et al., 2010), such as assertiveness and trustworthiness.

Having this in consideration, management response is a very prominent concept in light of today's communication paradigm, being considered one component of the online reviews system (Lu et al., 2018). Properties that do not consider management response of greatest importance, will be less competitive than others who have as a priority (Karen et al., 2016) Hence, management response can be considered as a significant CRM tool (Lee and Song, 2010).

2.5.3 - Management Response strategies

Given the conceptualization of management response, one must explore the types of management response strategies companies can carry, out. Wei, Miao and Huang (2013) found out that different types of management response contribute to distinct impressions and assessments made by consumers. By the fact that negative reviews have been much investigated, response strategies have been mainly observed regarding negative opinions. The following table compiles a range of management responses' strategies to negative reviews studied by different authors, in terms of their efficiency.

Strategies	Moves	Effectiveness
ACCEPTING	• The organization recognizes the explicit negative events stated by consumers, but does not undertake any action or change to solve the problem (Trevino and Castano, 2013)	
ACCOMODATIVE (confession/apology/ changing)	 Any act of apology, compensation or corrective action the company openly assumes its responsibility regarding negative issues and take preventive measures (Lee and Song, 2010) This type of response usually includes a verbalized appreciation to the consumer, for having written the review, and explicit the unsatisfactory situation, and also an apology and a precise commitment from the organization to change or improve in the future (Trevino and Castano, 2013) "Apologize for sources of problem", "acknowledge complaints/feedback" and "proof of action" (Zhang and Vásquez, 2014) "Acknowledging Problem – Apologize/ Admit or Indicate Awareness of Problem/ Rectify" – may include an apology, or explaining the reason for the problem, and proposing a future intervention or solution (Ho, 2018). 	 The superiority of a "narrative apology" (story format consisted of characters and causal events in a specific context and time) (Brener and Lichtenstein, 1982 <i>in Van Laer and Ruyter, 2010</i>) in comparison to a "narrative negation" is due to the fact that, through an attractive narrative, the company facilitates the restitution of opinions and desires from consumers, which leads to a decrease in consumer switching (Van Laer and Ruyter, 2010) If management recognizes its responsibility for the negative occurrences, it is promoting that consumers feel more confident about the organization, which will impact its overall evaluation (Lee and Song, 2010) as well as consumer's intention to repurchase products and services (Trevino and Castano, 2013) Although an apology strategy leads to a greater assignment of responsibility for the business, it has a positive impact on its posture, integrity, and empathy, and is seen as more convenient than an excuse strategy (Munzel, 2012) and a no response strategy (Lee and Song, 2010) A strategy of confession/ apology is more recommended when compared to a defensive/denying's (Lee & Song, 2010; Weiner, 2000), as the second materialize a defensive posture and don't encourage a "no crisis" behavior (Weiner, 2000) - this is especially observed when dealing with events that can be controlled by the company (eg. cleaning), in which a confession/apology strategy will have about twice as much impact as a denying strategy (Abramova et al., 2015); However, even if complaints are beyond the firm's control, it is better for the company to apologize and assume responsibility (Munzel, 2012), as it influences customers' trust (Abramova et al., 2015).

 Table 2 - A review on different types of strategies and moves regarding negative reviews

	• Effective responses are more associated with the "Acknowledging problem" move. This strategy aligns with
	consumers' desires, through receptiveness and comprehension, or it may also meet their interactive wishes (Victor,
	Но 2018).
• By using this strategy, the management adopts a	• When an organization tries to move away from responsibility, negative perceptions about the company tend
-	to be prompted (Lee, 2005)
	• When the negative circumstances are under the company's control, and consumers perceive it as such, a
even denyies the truthfulness of the negative review, directly	denial strategy has negative consequences (Abramova et al., 2015)
(by using "I do not agree or "It's not true") (Abramova et al.,	• However, even when they are out of business's domain, this type of strategy has also a negative impact
2015) or indirectly (by presenting counter-arguments to	(Abramova et al., 2015).
represent his own version), and may even confront the	• The less effective responses are the ones that use more frequently the move "Denying Problem" (Victor Ho,
accuser, or blame other factors or entities (Lee and Song,	2018)
2010)	By contrary
• Denying Problem - Frame Problem as Isolated	• When using analytical response formats – that follow a logic of arguments (Shellens and Dejong, 2004) -
Incident" (Victor Ho, 2018)	denial responses more prominently re-establish accused entities' principles than apologies', as consumers are more
	likely to admit human failures after this type of response, since the facts represent a lesser guilty for the company
	(Snyder and Stukes, 1999)
	• Management recur to this strategy a lot, as it can enhance the response, by explaining the misinterpretations,
	if any, which can promote the hotel when failures are not done intentionally (Victor Ho, 2018)
• This strategy attributes causes that are uncontrollable	• When the negative situation is perceived to be out of reach from management, an excuse strategy will have a
for the company, so that it can move away from	positive significant influence on trust levels perceived by consumers, as they easily accept company's explanations
responsibility and blame other factors or entities for the	and misconducts for other entities (Combs, 2006; Abramova et al., 2015).
negative events and which may or may not be true, or	
perceived or not as true (Weiner, 2000; Combs 2006)	
• When using an excuse strategy, a company cannot	
completely turn away from being responsible for the	
	 defensive posture (Trevino & Castano, 2013), so it does not recognizes any responsibility for the problem, and it may even denyies the truthfulness of the negative review, directly (by using "I do not agree or "It's not true") (Abramova et al., 2015) or indirectly (by presenting counter-arguments to represent his own version), and may even confront the accuser, or blame other factors or entities (Lee and Song, 2010) Denying Problem - Frame Problem as Isolated Incident" (Victor Ho, 2018) This strategy attributes causes that are uncontrollable for the company, so that it can move away from responsibility and blame other factors or entities for the negative events and which may or may not be true, or perceived or not as true (Weiner, 2000; Combs 2006) When using an excuse strategy, a company cannot

	negative occurrences, and this ultimately negatively	
	influences negatively the response's level of suitableness	
	(Munzel, 2012)	
	• Firms do not present any considerable comments or	• A no response policy may boost the diffusion of a negative word-of-mouth, as the unfavourable information
NO RESPONSE/	take any action on the voiced questions (Smith, 2002)	about the business stays undoubted, which may result in a loss on the company's profit in the future (Chan & Guillet,
NO ACTION	Organizations pretend to distance themselves from	2011)
	negative events, so they stay silent on online reviews	
	platforms (Lee, 2004)	

3. Methodology

3.1. Netnography

The Internet has been changing consumers' decision making processes, regarding products and brands, due to online communities (Kozinet, 2002), among which the information is much wider, diversified, and reliable. Tripadvisor is the most important community in terms of travel-related content, especially user-generated content, represented on its 315 million users that express their opinion on all kinds of tourism-related businesses, including, hotels, attractions, restaurants, tours, among many others.

As this research intends to ascertain the factors that weigh more for online consumers in an accommodation experience, and how does management response reflects consumers opinions, TripAdvisor is the most adequate platform. In addition, the best methodology to put this on practice is netnography. It was conceptualized for the first time by Konizets (1998), as a qualitative technique that allows marketers to study virtual communities and may provide them with some meaningful consumer insights. On Tripadvisor, consumers can produce their own content (user-generated content) and share their experiences freely, in the form of a review. On the other hand, hotels can have access to this information and reply, which may reach other consumers, in a dynamic system. Therefore, netnography will let the finding of consumer behavior patterns (Konizets, 2002), including their predictions, aspirations, and experiences (Tavakoli and Wijesinghe, 2019). The concept is an evolution of "ethnography" but as it was adapted to online groups, it is a faster and less costly method. It's also fewer invasive and more credible than interviews or focus groups (Konizet, 2002).

Most of the studies regard Web 1.0 and Web 2.0 platforms and explore tourists' points of view, rather than touristic operators', and much fewer platforms' producers. (Tavakoli and Mura, 2018)

3.2 Text-mining

Text-mining is considered as an interdisciplinary process, whose objective is to bring out knowledge from disorganized texts, dealing with a large number of words and morphologies in a natural language. As it reveals crucial implicit information, text mining fills imprecision and unpredictability (Hotho et al. 2005).

Therefore, it will be the procedure within this netnographic methodology, used to extract and analyze consumer reviews, as they have a massive amount of information, and computer programs are not able to give the necessary answers, as they only manage texts as single-character sequences (Hotho et al. 2005). Thus, through text-mining it will possible to find patterns, interpret them and make conclusions.

4. Netnographic Study

The accommodation sector was considered the object of study under this investigation, as mentioned above, and Tripadvisor the source to get the desired information. Nevertheless, before explaining how the extraction was performed, one must explicit the proprieties selected for the research.

Since the beginning, the goal was to pick two similar brands, for a possible comparison at the end. Because they are similarly positioned in the luxury segment, Hilton and Marriot were designated. After searching for both brands' presence worldwide, London was chosen as the city to designate them specifically, due to a considerable representation of both chains in the same geographical area. In end, they have elected 8 hotels, 4 Hilton's (two - 4 stars and two - 5 stars) and 4 Marriot's (with the same division as for Hilton). Six hotels (3 of each brand) were selected because of the geographical convergence they had among themselves, which means they were based in the same area. As there were no more hotels of both chains in the same zone, they were chosen the 2 with the smallest geographic distance between them (about 1.6 km). Therefore, the hotels selected under Hilton's brand were "Doubletree by Hilton London Marble Arch" (4 stars); "DoubleTree by Hilton London - Kensington Hotel" (4 stars); "London Hilton Park Lane" (5 stars); and "Hilton London Bankside" (5 stars). The hotels selected under Marriott's chain were "London Marriott Marble Arch Hotel" (4 stars); "London Marriott Hotel Kensington" (4 stars); "London Marriott Hotel Park Lane" (5 stars) and "London Marriott Hotel County Hall" (5 stars).

After this definition and having already a source of information to collect the data, the information was extracted through "data miner". This program is an extension of google chrome and allows the extraction of large amounts of information from websites. The researcher can choose the specific information for the program to scrap, and at the same time, previously produce a structure for that process, by creating several columns, which will organize the information in different domains. Two hundred consumer reviews were extracted on the pages of each hotel on Tripadvisor, on a total of 1600 reviews, alongside with management response, but since not all properties answered each review, 2864 online comments were extracted in the end. Thus, seven different columns were created to framework the data the same way in every hotel, entitled: (a) reviewer country; b) review date c) review title, d) review, e) management response date, f) management response.

The information was then scrapped into excel sheets, one for each property, as it's possible to see in figure 2.

Figure 2 – Example of how the scraped data was displayed on a excel sheet considering the 4 defined columns

	А	В	С	
1	REVIEWER COUNTRY	REVIEW DATE	REVIEW TITTLE	REVIEW
2		neil886 escreveu uma avaliação a Ontem	Amazing sevice	I have stayed at the
3	Manama, Bahrein	Laura Jane escreveu uma avaliação a 12/03	Desperately needs upgrading	Great location and
4	Orlando, Flórida	Jen B escreveu uma avaliação a 11/03	What a great way to celebrate my birthda	This hotel was in th
5	Seattle, Washington	Marc F escreveu uma avaliação a 11/03	So disappointed	Rooms are aging. W
6	Madrid, Espanha	Tour15440314042 escreveu uma avaliação a 11/03	Disappointing room for a Hilton hotel	Entrance and recept
7	Estados Unidos	AlexBuckFL escreveu uma avaliação a 4/03	Perfect location	Just finished three r
8	Colonial Beach, Virginia	Tedward1964 escreveu uma avaliação a fev de 2019	Great location	I've been to this ho
9	Belfast, Reino Unido	andrea G escreveu uma avaliação a fev de 2019	Exceptional. Highly recommend.	Stayed with my hus
10	Wembley, Reino Unido	Nidhi B escreveu uma avaliação a fev de 2019	Great placen	Highly recommend.
11	Rishon LeZiyon, Israel	Corina S escreveu uma avaliação a fev de 2019	very good location	The hotel style is In
12	Tel Aviv, Israel	Brett D escreveu uma avaliação a fev de 2019	Business and some pleasure	Stayed here on a bu
13		Diana R escreveu uma avaliação a jan de 2019	Ok, but not for long stays	I stayed here for 8 r
14	Londres, Reino Unido	Hoop Lady of London escreveu uma avaliação a jan de 201	Wonderful Memories	We arrived at the D
15	Dorset	tintin1971 escreveu uma avaliação a jan de 2019	Good location	Great location to ox
16	Istambul, Turquia	gurhan33 escreveu uma avaliação a jan de 2019	feeling like being at home	in recent years this
17	Nagova Japão SheetJS Text Classification	Tear dei ascreveu uma avaliação a ian de 2010 Text Classification (1) GLOBAL AGR OBJ IRONY Folha: ④	Good location	It is close to Oxford

Source: Own elaboration

After the data had been extracted to excel, "meaning cloud" was the tool used to analysed the scrapped information, as it can be directly added to excel. In order to find the sentiments consumers had towards the written feedback, as well as those that were expressed by management response, a "sentiment analysis" was carried out. This analysis comprises two specific investigations, first, a general one, named "global sentiment analysis" that investigates online comments as a whole, and the second, a "topic sentiment analysis", that studied the specific topics mentioned by consumers and hotels on their interactions.

The "global sentiment analysis" identified a specific polarity for each comment, representing the feeling linked to the interaction. The polarities were: NONE; N+ (Highly negative); N (Negative); NEU (Neutral); P (Positive); P+ (Highly Positive). However, to work statistically on these outcomes, it was necessary to substitute them by numbers, through a new numerical scale, that is showed on table 3.

 Table 3 – Polarity Scale Numerical Conversion

POLARITY	SENTIMENT	CONVERSION
P+	Highly Positive	5
Р	Positive	4
NEU	Neutral	3
N	Negative	2
N+	Highly Negative	1
NONE	None	0

Source: own elaboration

On "global sentiment analysis", there was also a differentiation of the comments based on 3 metrics: "irony" (ironic vs nonironic), "subjective" (subjective vs objective) and "agreement" (agreement vs disagreement). The last one compared consumers 'feedback and management response based on the similitude (or not) of the several topics' polarities inside a review, as each element had an associated feeling, and if they were aligned, there was a level of agreement.

Figure 3 – Example of how consumer reviews were displayed on a excel sheet based on the metrics of Agreement, Subjectivity, Confidence and Irony

Α	В	С	D	E	F	G
ID	Text	Polarity	Agreement	Subjectivity	Confidence	Irony
	I have stayed at the DoubleTree 3 times now and The service has always been amazing. From early check ins to room	4	AGREEMENT	SUBJECTIVE	100	NONIRONIC
1	changes. Always willing to go the extra mile.It's because of them that I became a HHOnours member.					
	Great location and the building is really cute from the outside, however, the interior decor of the rooms is pooralthough	4	DISAGREEMENT	SUBJECTIVE	86	NONIRONIC
	one can look past the decor but what isn't excusable is how creaky and noisy the rooms are which meant I had a terrible					
	sleep last night. To add to the noise was the incredibly hard bed which made it the worst sleep I had while in London. I					
	moved from the Hilton Park Lane to be closer to town, however, the extra 10 minute walk into town is a small price to pay					
1	when the hotel rooms there are soo much nicer and almost cost the same!					
	This hotel was in the perfect location for a week in London. It is a short 2 minute walk to the tube, and a stones throw	4	DISAGREEMENT	SUBJECTIVE	83	NONIRONIC
	from so many shops and restaurants. You are greeted with the wonderfully warm Doubletree chocolate chip cookie, and					
	the rooms were great! The beds comfy, rooms clean, and the staff were all super friendly and helpful. Their breakfast					
	buffet was top notch. I work in hospitality, so I tend to be a tough critic, but I could not have been more pleased with the					
	hotel. They even left me a birthday card and sweet treat on my birthday! I'm already planning another trip to London, and					
	this will be my go to hotel for my next visit! My only minor complaint is that the walls are pretty thin, so there were a few					
	times other patrons who were talking in the hall woke me up. I also heard a lot of traffic, as my room was at the front of					
	the hotel and had large windows. It wasn't a deal breaker though, but be aware that Londoners love using their horns!					
1	;)One other critique is that the bathtub is MEGA slippery, which gave me a scare a few times.					
	Rooms are aging. Weekend service is inexistant. Can't even provide food in Saturday lunch. This is below Hilton standards.	2	DISAGREEMENT	SUBJECTIVE	86	NONIRONIC
	And then came late checkout. I am Gold honor. The hotel is CLEARLY not busy. I requested late checkout but was provided					
	almost no additional Time. I left at 1:15 and was charged 25 Pounds late checkout. This is OBNOXIOUS. No need to say I					
1	won't come back. Marriott SPG provides better service.					

Source: own elaboration

Then, "meaning cloud" accessed the elements mentioned by consumers and management on the online comments and created several topics to designate different types of information, on the so-called "topic sentiment analysis". However, the topics were not fully the same for consumers feedback and management response's analysis. Regarding consumer reviews, on average, in the 8 hotels investigated, they were created around 130 topics, that could be represented by 12 large-scale groups: "Location", "Events", "Organization", "Product", "Units "," Process ","Person"," Living Thing ","ID", "Other entity "and "Timex". Yet, in order to ease the research process, by correlating the components that make part of an accommodation experience, and the elements of marketing-mix of services (product; pricing, placement; people; process and physical evidence), the topics were grouped into 15 clusters, some of which created originally by the program and others regrouped by the researcher. They were the following: Amenities; Competitors; Events; Facilities; Food & Beverage; Guests; Products/Services; Hotel/Brand; Location; Complementary Products/Services; Units; Staff; Price; Others. Respecting management response's investigation, some clusters remained the same, but other were created by the researcher, based on the topics extracted by the program, and

the strategies that management response might undertake, as mentioned on the literature review. They were the following: Products/Services; Facilities; Food & Beverage; Hotel/Brand; Location; Guests; Complementary Products/Services; Staff; Events; Others; Processes; "Acknowledgment", "Future Experience", "ID", "Reviewer" and "Subsequent Personalized Assistant". These clusters will be explained in detail throughout the netnographic study carried out to the eight hotels. The analysis to customer reviews will be explored first, and then the investigation of management response.

4.1 Consumer Reviews' Analysis

4.1.1 Hilton

a) Hilton Kensington

"Hilton London Kensington" is a 4-star hotel located next to Holland Park, Nothing Hill and the Westfield Shopping. It has a score of 3,5 on Tripadvisor and about 5067 evaluations. As mentioned on the methodology, after the data had been extracted, a "global sentiment analysis" was undertaken, to determine the polarity of each review about "Hilton London Kensigton". Comments with polarity none have been deleted in every analyse, as they don't have any related feeling, therefore, they are not useful for the investigation. Thus, for Hilton Kensington only 199 reviews were interpreted.

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	18	9,0%	71,8%
Р	4	125	62,8%	
NEU	3	23	11,6%	11,6%
N	2	32	16,1%	16,6%
N+	1	1	0,5%	
TOTAL		199	100%	100%

 Table 4 – Hilton Kensington Tripadvisor's reviews polarity levels

Source: own elaboration

Table 4 shows that the distribution of consumer reviews ´ polarities for Hilton Kensington on Tripadvisor was largely positive (71,8%). However, "Highly Positive" (P+) only accounted for 9% of the total of comments investigated, whereas "Positive" (P) had a percentage of 62,8%. Negative polarities represented 16,6% of consumers ´ feedback, but

only 0,5% were "Highly Negative" (N+). Reviews with negative polarities surpassed "neutral" polarities, that embodied 11,6% of the online comments.

Confidence Mean	Confidence Standard Deviation	Confidence Variance
91,08	6,19	38,35

Table 5 - Confidence Analysis of Hilton Kensington's Tripadvisor reviews polarities levels

Source: own elaboration

"Global Sentiment Analysis" also included the "test to the degree of confidence", related to consumer reviews' polarities. Therefore, values between 0 and 100 were assigned to the 199 comments. The results proved that the confidence linked to polarities 'outcomes was high, but not substantially, as the confidence mean was 91,08 and the standard deviation 6,16, which represented some dispersion of confidence values.

Table 6 – General Sentiment Analysis at Hilton Kensington's Tripadvise	or reviews

	SENTIMENT ANALYSIS							
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	61	30,7%	Objective	7	3,5%	Ironic	9	4,5%
Disagreement	138	69,3%	Subjective	192	96,5%	Nonironic	190	95,5%
Total	199	100	Total	100%	199	Total	199	100%

Source: Own elaboration

After measuring the polarities 'degree of confidence, it was possible to determine the levels of "irony", "agreement" and "objectiveness" of the reviews. The results determined that 69,3% of comments didn't hold a level of agreement. This might be explained by the large number of elements that are evaluated in a review about an accommodation experience, so, in most cases, there are positive and negative points to be mentioned, thus, it's difficult for the polarities to be similar. Also, 96,5% of the reviews were subjective, as they are based on the consumer own experience, and the vast majority were also nonironic (95,5%).

Then, a "topic sentiment analysis" was performed, to identify the main topics on the reviews, as well as their polarities. First, it was measured the frequency of clusters, as it is possible to see below.

Clusters	Sum	%
Amenities	0	0
Competitors	2	0,19
Events	4	0,38
Facilities	321	30,71
Food&Beverage	113	10,8
Guests	20	1,91
Products/ Services	42	4,02
Hotel/Brand	149	14,26
Location	141	13,49
Complementary Products/Services	22	2,11
Processes	11	1,05
Units	8	0,77
Staff	163	15,6
Price	9	0,86
Others	40	3,83
TOTAL	1045	100%

 Table 7 – Cluster's frequency of Hilton Kensington's Tripadvisor reviews

Once again, topics with polarity "none" were not included in the analysis. According to table 7, the cluster with the higher frequency was "Facilities". This cluster includes references to physical spaces and equipments, on a higher or smaller size, that make part of an hotel, among which, rooms (and all their elements, as carpets, windows, bed, e.g.), toilets (bathtub, sink, fan e.g), executive lounge, gym, the building itself, restaurants, reception, air conditioner, plugs, parking, atmosphere, among many other. Some people who mentioned these features didn't have experience them directly, but rather refer them because they want to try on another occasion or feel sorry for not have done it. Some guests also suggest some potential improvements or feel sorry for their non-existence (executive lounge lounge e.g).

The second most mentioned cluster was "Staff". This cluster integrates the hotel's human resources, and in most cases the employees who contact directly with guests. Therefore, it includes all staff members 'names, that influenced consumers experience, because of a certain positive/negative attitude or behaviour. Consumers mentioned staff in general, or linked to a specific facility or function (such as housekeeping or reception staff).

"Hotel/Brand" occupied the third position on clusters' frequency. This group consists on consumers' acknowledgement to the hotel in general or to Hilton's brand.

In the first case, it may refer to the general experience of consumers (as the most mentioned topic was "hotel"). Sometimes there were made comparisons to another hotel in London or worldwide. Concerning the brand, it incorporates the recognition of membership status (diamond member and goldon honors), and comparisons with other hotels under Hilton's umbrella, as well as the expectations that the brand creates on guests, through their positioning, that can be aligned or not with the real experience. This cluster also encompasses the references to an hotel's category (stars), that are also responsible for creating some anticipation on consumers and impact their final evaluation. In addition to frequency, clusters 'polarities were also investigated primarily in general, as represented on table 8. It can be concluded that most topics have positive polarities (74,35%), however "strongly positive" (P+) had only an expression of 24,78%. Negative polarities worthen 22,49% and although "strongly negative" (N+) had a small percentage of 3,83%, set by side to 18,66% of "Negative" (N), it was still higher than "neutral" polarities (3,16%). This can be justified by the "pros and cons" type of answer, that has already been mentioned, and as at this stage clusters are being researched in specific, polarities tend to have more extreme values, for the positive or negative side, when compared to the "global sentiment analysis".

CLUSTER'S POLARITY SCALE						
Polarity Levels	Scale	Sum	Percentage	P-N (%)		
P+	5	259	24,78			
Р	4	518	49,57	74,35		
NEU	3	33	3,16	3,16		
N	2	195	18,66			
N+	1	40	3,83	22,49		
ТОТ	AL	1045	100%	100%		

Table 8 - Hilton Kensington TripAdvisor's reviews Clusters Polarity Scale

Source: own elaboration

The last analysis outlined clusters' polarity overall distribution. However, to understand each cluster importance, it was required to make a detailed investigation of their polarities individually, through "topic sentiment analysis" (table 9), as the feelings they represent illustrate their importance.

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY						
Clusters	Polarity	Polarity Standard	Polarity Variance			
	Mean	Deviation (SD)	(VAR)			
Amenities						
Competitors	4,00	0,00	0,00			
Events	4,50	0,58	0,33			
Facilities	3,13	1,22	1,49			
Food&Beverage	4,13	0,82	0,67			
Guests	3,65	0,81	0,66			
Products/ Services	3,38	1,19	1,41			
Hotel/Brand	3,89	1,05	1,10			
Location	4,25	0,86	0,75			
Complementary	3,77	0,92	0,85			
Products/Services						
Processes	3,27	1,56	2,42			
Units	4,13	0,35	0,13			
Staff	4,17	0,90	0,81			
Price	2,67	1,32	1,75			
Others	3,70	1,11	1,24			
TOTAL	3,71	1,11	1,24			

Table 9 – Topic Sentiment Analysis Polarity for the Clusters defined

Regarding overall results, expressed on the polarity average among clusters' outcome (3,71), they represented more neutral feelings, according to the scale 1-5 created to designate polarities statistically (table 3). At an individual level, results showed that the cluster with the highest polarity mean was "Events" (4,50). This cluster comprises occasions that led consumers to choose Hilton Kensington for their stay in a specific period, so it includes anniversaries, vacations, city events, conferences, meetings, football games, and many other occurrences. They determine guests 'experiences, as they create a specific context for the accommodation. However, only 4 topics were extracted and analysed by "meaning cloud", and all of them were classified as positive (4 and 5 in the scale presented on table X) - "We were at an event at Olympia so this was an excellent location a small walk from there."; "Lovely afternoon tea for friends birthday (...)". Given this fact, only clusters with =/>10 topics will be considered in the final results to

avoid results' biasness. The second cluster with the largest polarity average score was "Location" (4,25). As 141 topics were evaluated within this group, it can be considered as the one that generated more positive feelings on Hilton Kensington 'consumers, in comparison to other groups. "Location" refers to all topics that are related to the hotel's location, which may include, streets, attractions, monuments, places, transports, areas, whatever that can be linked to the geographical position of the property - "Hilton Kensington is a great location for all sorts of things. for a start, there is a bus for the Open busses right outside the front door!; "The hotel is situated close to the Natural History museum and not far from the Albert Hall."; "The location is just too good. Very close to Westfield Shopping mall and also Shepherds Bush Tube Station. Bus just outside the hotel and the bus 94, takes you straight to Oxford Circus.". "Staff" was the second cluster with the bigger polarity mean (4,17). This means that the people with whom consumers interact, and the way it happens, influence their sentiments significantly, as the next reviews express: "(...) staff always lovely and helpful. Especially the lady in reception, I wish I could remember her name. was Italian if can be helpful. She is a star"; "Lady named Eleni served me and my friend Terry. We are happy with her hospitality (...) Its the small things that count to make trips like this relaxed so thank you". "Food & Beverage" was the third cluster with the highest average polarity (4,13), since "Units" (which had the same outcome) had less than 10 topics. "Food&Beverage" refers to all types of food and beverage provided by the property to its consumers. Breakfast is the most mentioned meal. Some examples are the following: "Incredible breakfast including continental fare and a full hot English breakfast (even black pudding!), an automatic pancake maker, automatic latte machines, lots of fresh bread and fruit and more."; "(...) One of the best breakfasts I have ever had. Every conceivable taste catered for. Fresh juices, smoothies and tea or coffee brought go your table. I opted for the regular full English which you choose yourself from the plentiful, regularly replenished array of items. The variety of pastries were warm and fresh and I had a few after the full English." ; "(...) the dinner in compact modern style restaurant is nice and the cook certainly knows how to prepare a good steak or sea bass.";

"Price" was the cluster with the lowest result in terms of average polarities, with a negative result (2,67), yet, only 9 topics were extracted. This cluster includes all consumers' manifestations that can be written based on price. Concerning Hilton Kensington, guests were discontent with the price of hotel rooms per night ("*A horrible*"

shower over a bath in a room charged at £ 165 a night;"), and the price of food and beverage ("£17 for 2 drinks at the bar Bloody joke (...)"). Following "Price", "Facilities" was the cluster with the lowest average polarity outcome (3,13), and because of its frequency number, it can be considered as the one who had the worst result. However, it was more correlated with neutral feelings than negatives. The following example is very illustrative of the kind of unfavourable thoughts that consumers may have, regarding hotel's facilities and their reason - "Our room looked over the busy road below and the window wouldn't shut properly and as such we heard the traffic all night, sirens, horns all the usual London noises all night. We could even hear people talking that's how useless the windows were. Second gripe was unless you are under 5'6 you would not be able to stand under the shower head! A horrible shower over a bath in a room charged at £165 a night. Just not acceptable in my opinion. A personal bugbare of mine is also no sockets by the bed, either side. In 2019 is this for real?!". Processes was the subsequent cluster with the lowest polarity mean (3,27). This cluster includes the moments that make part of an accommodation experience, as booking, arrival/check in and check out, as well as complaints and upgrades' requests (consumers evaluated hotel's reaction and consequent actions). On Hilton's Kensington, negative feedback was due to unfavourable situations perceived by consumers upon arrival/check-in - "Welcome at reception was not great, no acknowledgement as Hilton Honours member and wasn't even advised where the lifts were or offered any information etc-not great when you are travelling alone with a young child.;.". The last cluster within the ranking of lowest polarity averages is "products/services" (3,38). This group encompasses products and services that are inherent to an accommodation experience, especially customer service, which is largely related with "staff", and how the hotel deals with different customers 'requests. It also includes facilities' services, cleaning service, room service, maintenance, security hotel's app, among others. Concerning Hilton's Kensington, the factor that led to most unsatisfactory feelings was cleanliness, as the next comment illustrates - "The carpet was stained and the coffee table used to hide dropped food". They were also included negative references to how the hotel handled (or not) with complaints; "(...) advised hotel of this and no room move No resolution to complaint after stay, called hotel on numerous occasions and eventually got an email, after numerous emails back and forth was told that the reservation was valid and the full amount would be kept by the hotel even after photo evidence was sent (...)", likewise mentions to safety questions and the level of service at different facilities or meals – "Downside bar staff needed more training, four on duty but service was very slow even though the bar was not busy.

b) Hilton Marble Arch

"DoubleTree by Hilton London Marble Arch" is a 4-star hotel, placed next to Oxford Street, Marble Arch and Hyde Park. It has a rating of 4 on Tripadvisor and about 1822 comments. The analysis started by scraping consumer's feedback about Hilton Marble Arch on TripAdvisor. After this step, a "global sentiment analysis" was performed, to obtain the distribution of polarities among the extracted reviews (table 10). Comments without any polarity associated (none) would be erased, but as in this case there were any, 200 comments were considered to the investigation.

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	19	9,5%	67%
Р	4	115	57,5%	
NEU	3	32	16,0%	16,0%
N	2	32	16,0%	
N+	1	2	1,0%	17%
TOTAL		200	100%	100%

 Table 10 – Hilton Marble Arch Tripadvisor's reviews Polarity levels

Source: own elaboration

67% of the comments were classified as having positive polarities, although "highly positive" (P+) ones only represented 9,5%, compared to 57,5% of the "positive" (P) results. Negative polarities accounted for 17% of the total sample, but only 1% was "highly negative" (N+). If this value is not accounted for, reviews classified as "neutral" have the same representation as those classified as "negative" (N) (16%).

Table 11 - Confidence Analysis of Hilton Marble Arch's Tripadvisor reviews polarity levels

Confidence Mean	Confidence Standard	Confidence Variance
	Deviation	
91	5,88	34,58
	0 11 d'	

Source: own elaboration

Afterwards, the "test to the degree of confidence" was undertook, by assigning values between 0 and 100 were to each comment (table 11). Results showed that the level of

confidence was substantial, although not the highest (91), and there was some dispersion of confidence values, as the standard deviation is 5,88.

Subsequently, reviews were analysed based on three metrics: "objectivity vs. subjectivity", "ironic vs. non-ironic" and "agreement vs disagreement", as illustrated on the following table (12).

SENTIMENT ANALYSIS								
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	61	30,5%	Objective	7	3,5%	Ironic	4	2,0%
Disagreement	139	69,5%	Subjective	193	96,5%	Nonironic	196	98,0%
Total	200	100	Total	100%	200	Total	200	100%

 Table 12 – General Sentiment Analysis at Hiton Marble Arch's Tripadvisor reviews

Source: own elaboration

69,5% of the comments were classified as having a level of disagreement. Also, 96,5% of the consumer's feedback was subjective, and 98% non-ironic.

After the "global sentiment analysis", a "topic sentiment analysis" was proceeded, to ascertain the topics mentioned by consumers on the reviews, as well as their importance. Topics classified with polarity "none" were deleted, so, before the elimination there were 1615 topics, and after this process, only 940.

Table 13 represents the frequency of each cluster among the total. Facilities was the most expressive, with 246 associated topics (26,17%), followed by Staff with 156 (16,6%), and Location with 154 (16,38%).

TOPIC SENTIMENT ANALYSIS – CLUSTERS POLARITY					
Clusters	Sum	%			
Amenities	3	0,32			
Competitors	1	0,11			
Events	4	0,43			
Facilities	246	26,17			
Food&Beverage	75	7,98			
Guests	17	1,81			
Products/ Services	51	5,43			
Hotel/Brand	127	13,51			
Location	154	16,38			
Complementary	16	1,7			
Products/Services					
Processes	43	4,57			
Units	10	1,06			
Staff	156	16,6			
Price	4	0,43			
Others	33	3,5			
TOTAL	940	100%			

Table 13 - Cluster's frequency of Hilton Marble Arch's Tripadvisor reviews

In addition to the frequency, "topic sentiment analysis" also bring out the polarity of each cluster, to identify the topics that generated more positive and negative feelings on consumers, about Hilton Marble Arch. First, the polarities 'distribution was obtained, as portrayed in the next table (14).

CLUSTER'S POLARITY SCALE					
Polarity Levels	Scale	Sum	Percentage	P-N (%)	
P+	5	244	25,96		
Р	4	407	43,3	69,26	
NEU	3	36	3,83	3,83	
Ν	2	206	21,9	26,9	
N+	1	47	5		
TO	ΓAL	940	100%	100%	

Table 14 – Hilton Marble Arch TripAdvisor's reviews Clusters Polarity Scale

Positive polarities accounted for 69,29% of the topics, and 25,96% were classified as "highly positive" (P+). Considering negative polarities, the percentage was 26,9%, whereas "highly negative" (N+) topics were 5 %. Neutral topics (NEU) accounted for 3,88%.

Once polarities' distribution was outlined within the total extracted topics, each cluster was classified in terms of polarity (mean), as it's possible to observe on table 15, to understand their importance individually.

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY						
Clusters	Polarity	Polarity Standard	Polarity Variance			
	Mean	Deviation (SD)	(VAR)			
Amenities	4	0,00	0,00			
Competitors	4	0,00	0,00			
Events	4	0,82	0,67			
Facilities	3,12	1,22	1,48			
Food&Beverage	3,63	1,16	1,35			
Guests	3,82	0,95	0,90			
Products/ Services	3,41	1,33	1,77			
Hotel/Brand	3,63	1,21	1,47			
Location	4,32	0,81	0,65			
Complementary	3,19	1,11	1,23			
Products/Services						
Processes	3,40	1,18	1,39			
Units	4	0,94	0,89			
Staff	3,92	1,28	1,63			
Price	2,75	1,26	1,58			
Others	3,58	1,15	1,31			
TOTAL	3,62	1,18	1,42			

Table 15 - Topic Sentiment Analysis for the Clusters defined

The result of the average polarity amid all clusters (3,62) showed that they were associated with a greater number of neutral feelings, according to the scale (table 3). However, "Location" was the cluster which stood out in terms of average polarities (4,41), so it engendered more positive sentiments on Hilton's Marble Arch consumers. Consumers showed a level of contentment when mentioning the area in which the hotel was situated, as well as its surroundings, in terms of attractions, restaurants, stores and transports - "This hotel was in the perfect location for a week in London. It is a short 2 minute walk to the tube, and a stones throw from so many shops and restaurants."; "This was the perfect location to see all of London's spots - only minutes from the Marble Arch and Bond Street underground ss."; "Area situated is good as there are local shops nearby and plenty of taxi's or other transport available e.g stations or bus ss". "Amenities", "Competitors", "Units" and "Events" occupied simultaneously the second

place in terms of polarities' averages (4). "Competitors" refers to consumers' mentions about hotels from other brands, or other indirectly competitors (Airbnb, e.g), in a positive or negative way. "Amenities" regards the set of toiletries and clothing/ cleaning products that the hotel might offers to its guests, including shampoos, creams, soaps, robes, slippers and towels. "Amenities", "Competitors" and "Events" had less than 10 topics analysed, and the majority were positive, so they will not be considered. Respecting "Units", the number of scrapped topics was equal to 10, so the outcome will be contemplated. This cluster includes all types of units mentioned by consumers, mostly in terms of distances ("Excellent location, less than 50 meters from oxford street. and marble arch station.. (...)"; (...) is well located on Marble Arch with short walking distances to Hyde Park or shopping on Oxford or enjoying Carnaby or Soho (...)". However, it may also include references for speediness, temperature, quantity and size. Regarding Hilton's Marble Arch consumers feedback, none of these remarks have been rated positively in terms of polarity. "Staff" was the third cluster with the highest average polarity (3,92), although its value is more associated with neutral than positive feelings. The following comments represent the positive feelings consumers felt about the hotel's human resources, either in general or personalized to a person or function – "(...)The staff were all super friendly and helpful."; "From my arrival with Stephanie, I felt welcomed and well taken care of. The entire staff was great as well."; "Staff were courteous-from the reception desk to the concierge, everyone was very polite."

"Price" was the cluster with the littlest polarity mean (2,75), but only 2 topics were identified by the program. Given this situation, "Facilities" was the lowest cluster regarding polarity means (3,12), although it was more associated with neutral rather than negative feelings. The subjacent topics classified as negative were mostly due to rooms' features in terms of space, lightning, furniture, temperature, décor, location and comfort. "Bed" and "Toilet" were the most mentioned elements. The next review represents negative perceptions concerning different elements inside a room: " (...) the interior decor of the rooms is poor...although one can look past the decor but what isn't excusable is how creaky and noisy the rooms are which meant I had a terrible sleep last night. To add to the noise was the incredibly hard bed which made it the worst sleep". However, the restaurant and bar were also target of unfavourable opinions -"The hotel bar/restaurant is not very good". The succeeding cluster with the lowest average polarity was "Complementary Products/Services" (3,19). This group is composed of all types of

products and services that the hotel has at consumers' disposal, which may enrich their experience. They can include Wi-fi, tea and coffee conveniences, TV channels, maps, newspapers, water bottles, alarm clock, telephone and printer. Surprises made by the hotel to celebrate events in guests' lives are also included (food and beverage, cards, decorations, e.g.). "Wi-fi" was the factor that caused the most negative comments, due to the difficulty of access or slowness, but other elements were also mentioned by their absence – "I only missed complimentary water bottles like most other hotels offer", or for not working properly – "(...) alarm clock was broken."

c) Hilton Bankside

"Hilton London Bankside" is a 5-star hotel located next to Tate Modern, Borough Market and London Bridge. On Tripadvisor it has a rating of 4,5 and 2568 reviews.

"Global Sentiment Analysis" determined polarities' allocation on the total of comments extracted. Reviews with "none" as outcome were deleted (1), so, only 199 comments. Table 16 evince that 94,5% of reviews about Hilton Bankside on TripAdvisor have positive polarities. "Highly positive" (P+) accounts for 23,6%, while Positive (P) is expressed by 70,9%. Negative polarities represent only 3% of the data, and "Highly Negative" (N+) only 0,5%. Neutral comments disclose 2,5%.

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	47	23,6%	94,5%
Р	4	141	70,9%	
NEU	3	5	2,5%	2,5%
N	2	5	2,5%	
N+	1	1	0,5%	3%
TOTAL	•	199	100%	100%

 Table 16 – Hilton Bankside Tripadvisor´s reviews polarity levels

Source: own elaboration

Table 17 - Confidence Analysis of Hilton Bankside's Tripadvisors Reviews

Confidence Mean	Confidence Standard Deviation	Confidence Variance
92,40	6,46	41,76

Source: own elaboration

The "test to the degree of confidence" determined that the level of trust on polarities 'results was not among the highest, by attributing values between 0 and 100 to the 199 reviews. Nevertheless, it was a reliable outcome, as the confidence mean was 92,40 and standard deviation 6,46 (representing some dispersion of confidence values).

After this, reviews were analysed based on "agreement vs disagreement", "irony vs nonironic" and "objective vs subjective" metrics, as represented on table 18.

SENTIMENT ANALYSIS								
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	101	50,8%	Objective	6	3,02%	Ironic	12	6,0%
Disagreement	98	49,2%	Subjective	193	96,98%	Nonironic	187	94,0%
Total	199	100%	Total	199	100%	Total	199	100%

 Table 18 – General Sentiment Analysis at Hilton Bankside's Tripadavisor Reviews

Source: own elaboration

50,8% of comments had a level of agreement, and even if this percentage was slightly (3 reviews) higher than the "disagreement" one, it showed that the sample was almost equally divided for both "agreement" and "disagreement" levels. Results also showed that subjective reviews represented 96,98% and nonironic 94%.

After inquiring consumers' feedback on general, a "topic sentiment analysis" was proceeded. At the beginning, the clusters' frequency was measured, as one can see on table 19. The comments evaluated with "none" were eliminated (620), so only 1247 were considered.

TOPIC SENTIMENT ANALYSIS – CLUSTERS POLARITY					
Clusters	Sum	%			
Amenities	7	0,56			
Competitors	0	0			
Events	16	1,28			
Facilities	411	32,85			
Food&Beverage	146	11,67			
Guests	23	1,84			
Products/ Services	85	6,79			
Hotel/Brand	165	13,19			
Location	137	10,95			
Complementary	6	0,48			
Products/Services					
Processes	23	1,84			
Units	11	0,88			
Staff	213	17,03			
Price	1	0,08			
Others	7	0,56			
TOTAL	1251	100%			

Table 19 – Hilton Bankside TripAdvisor's Reviews Cluster Polarity Scale

The cluster with the highest prevalence in terms of frequency was "Facilities", with 411 topics linked and a percentage of 32,85%. The second cluster with the largest frequency was "Staff" with a value of 17,03% and the third was "Hotel/Brand (13,19%). There is a significant difference between the percentage of "facilities" and those that occupy the second and third place in terms of frequency.

Then, meaning cloud accessed clusters' polarity levels (table 20) and it was verified that almost 89,74% of the 1247 topics analysed had higher polarity levels (based on the scale presented on table 3. Although the "positive" ones (P) were higher (49.32%) than "highly positive" (P+), the difference was not substantial. Negative polarities were only expressed in 8.58% of clusters, and only 0,96% represented "highly negative" (N+) polarities. Neutral topics accounted for 1,68%.

CLUSTER'S POLARITY SCALE					
Polarity Levels	Scale	SUM	PERCENTAGE	P-N (%)	
P+	5	506	40,45	89,77	
Р	4	617	49,32		
NEU	3	21	1,68	1,68	
Ν	2	95	7,6	8,56	
N+	1	12	0,96		
ΤΟΤΑ	AL	1251	100%	100%	

 Table 20 – Cluster's frequency on Hilton Kensington's TripAdvisor Reviews

To deepen the investigation, the average polarity score for each cluster was measured, in order to access their importance on consumer's feedback about Hilton Bankside (tabela 21).

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY					
Clusters	Polarity	Polarity Standard	Polarity Variance		
	Mean	Deviation (SD)	(VAR)		
Amenities	2,86	1,07	1,14		
Competitors					
Events	4,44	0,51	0,26		
Facilities	4,19	0,83	0,69		
Food&Beverage	4,25	0,93	0,87		
Guests	4,04	0,93	0,86		
Products/ Services	4,11	1,07	1,14		
Hotel/Brand	4,10	0,91	0,82		
Location	4,39	0,84	0,71		
Complementary	4,67	0,52	0,27		
Products/Services					
Processes	3,52	1,20	1,44		
Units	4,18	0,60	0,36		
Staff	4,32	0,75	0,56		
Price	4,00	0,00	0,00		
Others	4,29	0,49	0,24		
TOTAL	4,15	0,89	0,81		

Table 21 – Topic Sentiment	Analysis Polarity for the Clusters of	lefined

Every cluster, other than "Amenities" and "Processes" had polarities means scores equal to or higher than 4, so in general clusters expressed larger positive sentiments from consumers, rather than negatives or neutrals (4,15). Yet, the cluster with the highest polarity mean was "Complementary Products/Services" (4,67), so it had the greatest positive impact on Hilton Bankside consumers ´reviews. However, it is important to mention that only 6 topics within this group were analysed, so it will not be taking into account. "Events" was the cluster with the second highest polarity mean (4,44), and as it had more than 10 topics spotted, it will be considered as the first regarding polarities averages. Consumers mentioned specific periods or special events that caused the trip to be booked - "My father and I stayed with you over the Xmas and NYE holiday and we could not have been happier. "; "My daughter chose to visit London with me to jointly celebrate our birthdays.". The second cluster in terms of average polarities was

"Location" (4,39). It mostly comprised mentions to attractions/monuments (Tate Gallery was one of the most mentioned), but also, stores, restaurants and transports – *"The hotel is excellently located if you are interested in visiting the Tate Modern, National Portrait Gallery and National Gallery"; "Some really good places to eat nearby as well."* "Staff" was the third cluster regarding higher polarity averages (4,32). Consumers mentioned this group generally – *"The staff were great. I had accidentally dropped my oyster card and train tickets in the lobby, and on arriving back 20 minutes later panicking they had found them and put them to one side. I couldn't have been more relieved!", and also personalized to specific functions or employees* – *"The warm welcome from The Assistant Bar Manager Suman Poudel what an asset he is to the hotel. Throughout the evening Suman was very friendly and professional".*

"Amenities" was the cluster with the lowest average polarity (286), however, only 7 topics were determined, so the cluster with the lowest value was "Processes" (3,52) that had more than 10 topics. The ones classified with negative polarities were mostly due to fails at the check-in and check-out – "(...) as a normal practice the hotel blocked GBP 500 on my debit card and on my check out I settled GBP 900+ in invoice however we are now on 11th Feb 2019 and the hotel has not yet released my block. Repeated follow up from my office only receives a response "accounts is checking please give us some time", and there was also a review mentioning a mistake on a room's change request - "(...) A technician came up, acknowledging the sound saying it was the LED lights but could not solve the problem right then and there. So we had to pack all our stuff in the middle of the night and switch rooms again. Not much left of the night- but finally in bed in our new room, the sound was still there. At first I was afraid to say anything, thinking it was all in my head. But I started laughing and my husband instantly said he heard it too. We could not bear the thought of moving again (...) We went down to the reception expecting them to not charge us for that night, but they only knocked off 30 pounds and giving us a very small room service charge off the bill. So we still paid 100 pounds for no sleep at all."

d) Hilton Park Lane

"London Hilton on Park Lane" is a 5-star hotel based near Buckingham Palace and Harrods. It is classified as 4 stars on TripAdvisor and has about 3784 reviews. A "global sentiment analysis" was carried out primarily, to evaluate reviews in general, based on their polarities. Reviews that were labelled 0 (none) were not examined, thus only 199 comments were researched.

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	40	20,1%	81,4%
Р	4	122	61,3%	
NEU	3	18	9,0%	9,0%
N	2	17	8,5%	9,5%
N+	1	2	1,0%	
TOTAL		199	100%	100%

Table 22 – Hilton Park Lane TripAdvisor's reviews polarity levels

Source: own elaboration

Table 22 shows polarities 'allocation on the total of reviews. The great majority of comments were positive (81,4%), but only 20,1% were "highly positive" (P+). Comments classified as negative had an expression of 9,5%, and "highly negative" (N+) merely 1%. Neutral comments (NEU) had a percentage of 9%, an almost equivalent outcome as the percentage of negative comments.

Then, the "test to the degree of confidence" was executed, to measure the level of confidence on polarities ´classifications, by assigning values between 0 and 100 to each of the reviews.

Confidence Mean	Confidence Standard Deviation	Confidence Variance
91,93	6,37	40,52

 Table 23 – Confidence Analysis of Hilton Park Lane Tripadvisor Reviews polarity levels

Source: own elaboration

Although the achieved confidence degree was not among the highest (table 23), as the mean of confidence values was 91,93, it was still a meaningful outcome to prove data's authenticity. However, there was also some dispersion among confidence values, represented by the result of the standard deviation (6,37).

In addition to polarities 'assignment, reviews were also evaluated based on the metrics "agreement vs disagreement", "ironic vs non-ironic" and "objectivity vs subjectivity" (table 24).

SENTIMENT ANALYSIS								
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	44,2%	88	Objective	8	4,0%	Ironic	7	3,5%
Disagreement	55,8%	111	Subjective	191	96,0%	Nonironic	192	96,5%
Total	199	100	Total	199		Total	199	100%

 Table 24 – General Sentiment Analysis at Hilton Park Lane's TripAdvisor Reviews

Source: own elaboration

On the 199 comments, 55,8% had a level of disagreement, and only 4% of consumers' feedback was designed as objective, and 3,5% ironic.

After the "global sentiment analysis", the main topics disposed on reviews were investigated, in a "topic sentiment analysis". The program made possible to verify first the frequency of each topic on the total extracted, as the following table (25) represents.

TOPIC SENTIMENT ANALYSIS – CLUSTERS POLARITY				
Clusters	Sum	%		
Amenities	6	0,50		
Competitors	12	1,00		
Events	22	1,83		
Facilities	293	24,32		
Food&Beverage	169	14,02		
Guests	21	1,74		
Products/ Services	54	4,48		
Hotel/Brand	163	13,53		
Location	131	10,87		
Complementary	8	0,66		
Products/Services				
Processes	26	2,16		
Units	13	1,08		
Staff	230	19,09		
Price	3	0,25		
Others	54	4,48		
TOTAL	1205	100%		

Table 25 – Hilton Park Lane TripAdvisor's reviews Cluster Polarity Scale
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The cluster with the biggest frequency was "Facilities" (24,32%), followed by "Staff" (19,09%) and "Food & Beverage" (14,02%).

Next, the polarity of each cluster was measured in order to find out their dispersion as table 26 exhibits.

CLUSTER'S POLARITY SCALE					
Polarity Levels	Scale	SUM	PERCENTAGE	P-N (%)	
P+	5	430	35,68		
Р	4	556	46,14	81,82	
NEU	3	24	1,99	1,99	
Ν	2	157	13,03		
				16,18	
N+	1	38	3,15		
ТОТ	AL	1205	100%	100%	
		Company or alab			

Table 26 - Cluster's frequency of Hilton Park Lane's TripAdvisor Reviews

Most of the topics were positive (81,82%), and 35,68% were considered as "highly positive" (P+). Negative polarities accounted 18,18%, and "highly negative" (N+) only 3,15%. "Neutral" polarities were just expressed by 1,99% of the topics.

The last analysis inquired clusters' polarities, to perceive their importance, considering consumers'sentiments regarding each group.

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY					
Clusters	Polarity	Polarity Standard	Polarity Variance		
	Mean	Deviation (SD)	(VAR)		
Amenities	4,33	0,52	0,27		
Competitors	3,75	1,36	1,84		
Events	4,27	0,88	0,78		
Facilities	3,64	1,28	1,63		
Food&Beverage	4,12	1,05	1,11		
Guests	3,95	1,07	1,15		
Products/ Services	4,22	1,02	1,04		
Hotel/Brand	4,07	1,00	0,99		
Location	4,26	0,76	0,58		
Complementary	3,63	1,06	1,13		
Products/Services					
Processes	3,15	1,26	1,58		
Units	4,08	0,76	0,58		
Staff	4,17	0,93	0,86		
Price	1,67	0,58	0,33		
Others	3,87	1,05	1,10		
TOTAL	3,81	0,97	1,00		

Table 27 – Topic Sentiment Analysis for the clusters defined

The average polarity among clusters' value (3,81) showed that clusters were overall linked to neutral polarities, instead of positive or negative ones. Nevertheless, the cluster with the highest polarity mean was "Amenities" (4,33), but only 6 topics were researched within this group, and were classified as 4 or 5. The second cluster with the highest average polarity score was "Events" (4,27), and as it had 22 topics evaluated, it was the one that represented more favourable feelings. Under this cluster, consumers mentioned professional events (seminars and meetings), special occasions, such as, Valentine's Day, holidays – "AN ABSOLUTELY SUBLIME HOLIDAY AT OUR FAVOURITE HOTEL", birthdays – "We had a fabulous lunch here for my friends birthday.", and events inside (afternoon tea, awards' ceremonies – "Attended and award ceremony so took in all the sites of the hotel.") and outside the hotel (concerts, football matches, festivals). Afternoon tea is only considered an event when guests only look for the hotel for that

purpose - "Always have and always will love this hotel, made my birthdays one of the best ever, this is my go to hotel for anything special or a lovely afternoon tea.". "Location" occupies the third position in the ranking of those who had the highest polarities means. This group includes guests' references to Hilton's Park Lane location in general, as well as mentions to specific attractions, areas, transports and restaurants that are easily reachable – "(...) excellent location our new home in the heart of London close to everything (...)"; "The hotel is well situated and a stones throw away from some fantastic restaurants in Mayfair and only a 10-15 minute walk to Oxford Street."; We have stayed here a few times as it's so handy for London attractions and walks in Hyde park." "Price" was the cluster with the lowest polarity mean (1,67), so it had fewer positive feelings towards, yet only 3 topics were considered - "The ask of £90 to add breakfast and access to a bar for drinks did not feel like any form of value, we would not have time to use the bar, so a lot of money for breakfast (...)". "Processes" was the cluster with the lowest value (3,15) following "Price". As it had 26 constituent topics, it was the one with the lowest polarity average score, however, it represented more neutral feelings than negatives. This outcome was mostly due to errors on booking and arrival/check in processes (membership status was sometimes mentioned), and how they were solved -"I was most disappointed I had checked in on line when I arrived @ 3 pm. the receptionists whose comprehension of English was poor, asked for my surname name three times, I was then told my room was not ready. I had to wait until just before 5 pm before it was ready."; "I booked a Junior Suite (smoking) when I came there wasnt any available, since I am Diamond HH member, they usually upgrade me for free, here they upgraded to Park Lane suite with an extra of 400 pounds which in total became to 1000+ pounds per night."

4.1.2 Hiltons 'overall comparison

Comparing the four proprieties (table 28), and starting by reviews 'polarities, Hilton Bankside had the highest number of positive comments (94,5%), and the largest percentage of "highly positive" polarities (23,6%). On the other side, Hilton Marble Arch had the lowest percentage of positive reviews (67%), but it had a bigger number of "highly positive" comments (9,5%), than Hilton Kensington (9%), that had the smallest overall value. As expected, regarding negative comments, Hilton Marble Arch had also the highest percentage (17%), however, the number of "highly negative" comments were only 1%, as much as for Hilton Park Lane. The property that got the littlest number of

negative reviews was Hilton Bankside (3%), and "highly negative" were only 0,5%. Therefore, it's possible to note that 5-star hotels (Hilton Bankside and Hilton Park Lane) had larger positive and lower negative feedback on TripAdvisor, compared to 4-star properties (Hilton Marble Arch and Hilton Kensington), and that variation is more meaningful between Hilton Marble Arch and Hilton Bankside.

The last analysis within "global sentiment analysis" examined reviews considering 3 metrics (agreement vs disagreement; ironic vs non-ironic and objectivity vs subjectivity). Hilton Bankside was the only hotel that had a superior number of reviews (50,8%) with a level of agreement between topics' polarities. Nevertheless, the difference alongside reviews with a level of disagreement was very low (49,2%). In the other 3 hotels (Hilton Park Lane, Hilton Marble Arch and Hilton Kensington), the number of comments classified with a rate of disagreement was higher, and Hilton Marble Arch had the largest percentage (69,5%). Hilton Park Lane, despite having a higher number of reviews evaluated with disagreement level (55,8%), had less than 4-star hotels (Hilton Marble Arch and Hilton Kensington - 69.3%).

Hilton Park Lane was the property that had the biggest number of objective comments (4%) but the difference was not that much compared to the one who got less, Hilton Bankside (3,02%). Regarding ironic vs non-ironic comments, Hilton Bankside had the top percentage of irony (6%), despite being the one who had more positive comments, whereas Hilton Marble Arch was the one who got the least (2%), despite the largest number of negative polarities.

Respecting "topic sentiment analysis, "Facilities" was the cluster with the highest frequency on every hotel. "Amenities", "Price" and "Competitors" didn't had more than 10 topics associated in ever analyse, so they will be not taked into account in these final considerations, hence they are bold in the table. The same happened a few times with the cluster "Events", and that's the reason for being also bolt on table 28. About cluster's polarity, 5-star hotels also had higher percentages, and Hilton Bankside had the uppermost percentage (89,77%), as well as in topics with a "highly positive" (P+) polarity (40,45%). The 4-star propriety that had the smallest percentage of positive topics was Hilton Marble Arch (69, 26%), although it had more "highly positive" (N+) ones, (25,96%) than Hilton Kensigton (24,78%), which had the lowest percentage overall, as well as for "highly negative" topics (0,5%). This was also the case on the "global

sentiment analysis". As expected, in terms of negative polarities, Hilton Marble Arch had the highest number (26,9%), as well for "highly negative" (N+) topics (5%), and Hilton Bankside had the lowest number (3%). Again, 4-star hotels obtained a greater number of negative topics, so their average polarities were lower compared to 5-star hotels.

"Location" was acknowledged in every raking as one of the groups that caused more satisfactory feeling on consumers. This outcome may be correlated with its highest frequency recorded, but the same didn't happen with "Staff", as it was only important for "Hilton Kensington"'s guests. "Events" was also determined as a meaningful cluster for consumer's fulfilment in each propriety, however, only on 5-star hotels, this cluster had =/> 10 topics.

"Price" was the cluster with the lowest polarity average in Hilton Kensington, Hilton Marble Arch and Hilton Park Lane, and also made part of the "top 3 clusters with lowest polarity average" in Hilton Bankside. However, as this group had always less than 10 topics, it's not going to be contemplated. Thus, in the 4-star hotels (Hilton Kensington and Hilton Marble Arch), "Facilities" was the cluster with the least favourable feelings for consumers, despite being the most frequent, and "Processes" occupied the second or the third place. However, the reverse occurred in the 5-star hotels (Hilton Park Lane and Hilton Bankside), as "Processes" was the group that led to the slightest positive sentiments ("Amenities" was not considered), then followed by other clusters (as "Facilities" in one property). A possible explanation for this might be the largest expectations that consumers may have about 5-star hotels, especially regarding their processes (and highly correlated with membership status), when compared to 4-stars hotels, and if they are not fulfilled, it influences them negatively ("Hotel/Brand" that comprises references to membership status was one of the clusters with the lowest polarity mean on Hilton Bankside.

	ANALYSIS	Hilton Kensigton	Hilton Marble Arch	Hilton Park Lane	Hilton Bankside
	Stars	4	4	5	5
General	Number of evaluations on Tripadvisor	5097	1836	3291	2602
Analysis	Rating on Tripadvisor	3,5	4	4	4,5
	Number of reviews analysed	199	200	199	199
	Ironic	4,5%	2,0%	3,5%	6,0%
	Non-ironic	95,5%	98,0%	96,5%	94,0%
	Objective	3,5%	3,5%	4,0%	3,02%
	Subjective	96,5%	96,5%	96,0%	96,98%
	Agreement	30,7%	30,5%	44,2%	50,8%
	Disagreement	69,3%	69,5%	55,8%	49,2%
Global	Polarity Average	3,64	3,6	3,91	4,15
Sentiment	Polarity Scale 1	0,5%	1,0%	1,0%	0,5%
Analysis	Polarity Scale 2	16,1%	16,0%	8,5%	2,5%
	Polarity Scale 3	11,6%	16,0%	9,0%	2,5%
	Polarity Scale 4	62,8%	57,5%	61,3%	70,9%
	Polarity Scale 5	9,0%	9,5%	20,1%	23,6%
	Confidence Mean	91,08	91	91,93	92,40
	Topics Identified	1045	940	1205	1251
	Polarity Average among clusters	3,71	3,62	3,98	4,15
	Polarity Standard Deviation among clusters	1,11	1,18	1,06	0,89
	Polarity Variance among clusters	1,24	1,42	1,12	0,81

 Table 28 - Hilton's consumer reviews' overall comparison

	Polarity Scale 1	3,83%	5,0%	3,15%	0,96%
	Polarity Scale 2	18,66%	21,91%	13,03%	7,59%
	Polarity Scale 3	3,16%	3,83%	1,99%	1,68%
Торіс	Polarity Scale 4	49,57%	43,30%	46,14%	49,32%
Sentiment	Polarity Scale 5	24,78%	25,96%	35,68%	40,45%
Analysis	Top 3 clusters with largest frequency	Facilities; Staff; Hotel/Brand	Facilities; Staff; Location	Facilities; Staff; Food & Beverage	Facilities; Staff; Hotel/Brand
		Events; Location; Staff; Food	Location;	Amenities; Events; Location;	Complementary
	Top 3 clusters with largest polarity average	& Beverage/Units	Amenities/Competitors/Events	Products/Services	Products/Services; Events;
			/Units; Staff		Location; Staff
		Price; Facilities; Processes;	Price; Facilities;	Price; Processes: Complementry	Amenities; Processes; Price;
	Top 3 clusters with lowest polarity average	Products/Services	Complementary	Proucts/Services; Facilities;	Guests; Hotel/Brand
			Products/Services; Processes	Competitors	

4.1.3. Marriott

a) Marriott Kensigton

"London Marriot Hotel Kensington" is a 4-star hotel, nearby Hyde Park, Natural History Museum and Knightsbridge. It has 1886 online reviews on Tripadvisor, and a score of 4.

After extracting the data, a "global sentiment analysis" was performed, and it provided the investigation with useful insights. The polarities of the comments under analysis were checked first, table 29 illustrates.

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	46	23,0%	87,5%
Р	4	129	64,5%	
NEU	3	17	8,5%	8,5%
N	2	8	4,0%	
N+	1	0	0%	4,0%
ТОТА	L	200	100%	100%

 Table 29 – Marriott Kensington TripAdvisor's reviews polarity levels

Source: own elaboration

In this case, there were no reviews with no polarity (none), so 200 comments were examined. Results proved that 87,5% of consumers' feedback was positive. However, reviews evaluated as merely "positive" (P) had a percentage of 64,5%, while "highly positive" (P+) comments were 23%. "Neutral" reviews were higher (8,5%) than negative ones (4%), and there were no comments rated as "highly negative". (N+).

Polarities 'results were submitted to the "test to the degree of confidence" (tabela 30) by assigning values between 0 and 100 to the two hundred reviews. It was proven that, although reliability on results was not among the highest, it was still considerable. The standard deviation (5,90) illustrated some dispersion among the confidence values.

 Table 30 – Confidence Analysis of Marriott Kensington's Tripadvisor Reviews Polarity Levels

Confidence Mean	Confidence Standard Deviation	Confidence Variance
93,32	5,90	34,86

Source: own elaboration

Consumers' feedback regarding Marriott Kensington, on Tripadvisor, was then evaluated based on its levels of "agreement vs agreement", "irony vs non-irony" and "objectivity vs subjectivity".

As the table below embodies (table 31) 53% of the reviews presented a level of disagreement. Also, 93% of the reviews were subjective and 97,5% were non-ironic.

			SENTIMEN	T ANAL	YSIS			
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	94	47,0%	Objective	14	7,0%	Ironic	5	2,5%
Disagreement	106	53,0%	Subjective	186	93,0%	Nonironic	195	97,5%
Total	200	100%	Total	200	100%	Total	200	100%

 Table 31 – General Sentiment Analysis at Marriott Kensington's TripAdvisor Reviews

Source: own elaboration

After these analyses, the topics included on the reviews were determined, and after defining their respective clusters, it was measured their frequency, as table 32 displays. Topics classified as having no polarity (none) were not taking into account (854), so only 1090 topics were the source of investigation.

TOPIC SENTIMENT ANALYSIS – CLUSTERS POLARITY				
Clusters	Sum	%		
Amenities	1	0,09		
Competitors	2	0,18		
Events	9	0,79		
Facilities	269	23,64		
Food&Beverage	158	13,9		
Guests	15	1,32		
Products/ Services	41	3,6		
Hotel/Brand	168	14,76		
Location	200	17,57		
Complementary	14	1,23		
Products/Services				
Processes	14	1,23		
Units	15	1,32		
Staff	180	15,82		
Price	7	0,62		
Others	45	3,95		
TOTAL	1138	100%		

 Table 32 – Clusters´ frequency of Marriott Kensington´s Tripadvisor Reviews

The cluster with the larger frequency was "Facilities" (23,64%), followed by "Location" (17,57%) and "Staff" (15,82%).

Then, the polarities of the 1090 topics were assayed in general, to determine their disposal, as table 33 exposes.

	CLUST	ER'S POLARI	ΓY SCALE	
Polarity Levels	Scale	Sum	Percentage	P-N (%)
P+	5	418	36,73	
Р	4	546	47,98	84,71
NEU	3	38	3,34	3,34
Ν	2	114	10,02	
N+	1	22	1,93	11,95
ТОТ	AL	1138	100%	100%

 Table 33 – Marriott Kensington TripAdvisor's Reviews Cluster Polarity Scale

Thus, 84,71% percent of the topics were positive. Topics labelled with only "positive" polarities (P) had a percentage of 47,98%, and "highly positive" (P+) ones 36,73%, so this difference was not very meaningful. Topics with negative polarities accounted 11,95%, and "highly negative" (N+) were only expressed by 1,93%. 3,34% of the topics were considered as "neutral".

To perceive the importance of each topic individually, through their correspondent feelings, an analysis to the average polarity of each group was made (table 34).

TOPIC SI	ENTIMENT ANA	LYSIS – CLUSTERS FR	EQUENCY
Clusters	Polarity	Polarity Standard	Polarity Variance
	Mean	Deviation (SD)	(VAR)
Amenities	4,00	0,00	0,00
Competitors	1,50	0,71	0,50
Events	3,89	1,17	1,36
Facilities	3,88	1,07	1,15
Food&Beverage	3,91	1,04	1,08
Guests	3,73	1,03	1,07
Products/ Services	4,10	1,20	1,44
Hotel/Brand	4,24	0,92	0,85
Location	4,29	0,85	0,72
Complementary	3,64	1,34	1,79
Products/Services			
Processes	3,71	1,14	1,30
Units	4,00	0,93	0,86
Staff	4,31	0,74	0,55
Price	2,86	1,07	1,14
Others	4,04	0,82	0,68
TOTAL	3,74	1,08	1,04

Table 34 - Topic Sentiment Analysis Polarity for the Clusters defined

There were almost the same number of clusters with polarity means equal to 3 and 4, hence, the total score (3,74) was more correlated with neural sentiments, given the produced scale (table 3). Regarding the one-to-one analysis, "Staff" was the cluster with the greatest polarity mean (4,31). This result stands that more positive sentiments are affiliated to this group, thus, a positive experience with members of the staff will influence consumers more significantly than other factors (*"The staff treated us so kindly, and were very accommodating to my son's food allergies. The concierge staff were extremely helpful in planning our days (...)"; The staff went above and beyond in providing a truly special and memorable experience for all four of us! Special thanks to Grazina, Guest Relations, and Barbara, Front Desk Manager, and also to the everhelpful members of the Concierge team - Jamie and Alex - arranging our tour bookings and dinner reservations. You all made this a perfect stay.") The second cluster with the*

highest average polarity was "Location" (4,29). This represents that consumers give importance to the geographical area in which Marriott Kensington is placed. Therefore, the close distance to attractions, transports, restaurants and supermarkets are referred ("The Marriott is a good location in Kensington for business. Close to metro and walking distance to Earls Court for trade shows"; "Location, proximity to museums, close to public transport, with plenty of restaurants & cafe's. An added advantage is a big supermark in front of the hotel"; "Positives: location is great ! Hotel is in close proximity to central London areas. ""Hotel/Brand" occupied the third position on clusters' average polarities classifications (4,24) - This Marriott filled the bill nicely and we would stay here again; (...) it's our favourite hotel in London because it's perfect location for visiting museums and access to the Tube; I have stayed in plenty of Marriotts all over the world but the service here was probably the best ive experienced."). On the other hand, "Competitors" (1,50) and "Price" (2,86) had the lowest polarities' means scores. However, on "Competitors" only 2 topics were considered, and concerning "Price", only 7 topics were taking into account. "Complementary Products /services was the cluster with the following lowest score (3,64), but it was more related with neutral feelings than negatives. As it had 14 topics evaluated, it was the worst in terms of polarities' means. The most unfavourable consumers' opinions opinion referring to this group were due to the poor quality of the wi-fi – "The only bad thing was the wi-fi, the free one was terrible", broken printers and no coffee and few outlets in the rooms - "(...) however it is not ideal for CPAP users. You will need to bring an extension cord. All outlets close to the bed are specially wired for the lamps, so therefore unusable".

b) Marriott Marble Arch

"London Marriott Hotel Marble Arch" is a 4-star hotel, situated next to Marble Arch, Buckingham Palace and Chinatown. On TripAdvisor, this property has around 1883 evaluation and a rating of 4 stars.

The analysis of the extracted reviews on Tripadvisor for "London Marriott Marble Arch" started with a global sentiment analysis. As there were any review classified as having no polarity – "none", 200 comments were investigated for this hotel. First, polarities' distribution for the extracted sample was found, as it is possible to see in the following table (35).

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	39	19,5%	86%
Р	4	133	66,5%	
NEU	3	14	7,0%	7,0%
N	2	13	6,5%	
N+	1	1	0,5%	7,0%
TOTAL		200	100%	100%

 Table 35 – Marriott Marble Arch Tripadvisor's reviews polarity levels

The data expressed that 86% of consumers' feedback had positive polarities, however, "highly positive" (P+) were only represented by 19,5% of the reviews, compared to the 66,5% of "positive" (P) ones. Comments classified as having negative polarities were about 7%, and only 1% were labelled as "highly negative" (N+). Neutral polarities had a percentage of 7%, side by side with the overall percentage of negative polarities (7%).

Formerly, to verify the veracity of these results, values between 0 and 100 were attributed to each review, in order to perform the "test to the degree of confidence".

Table 36 – Confidence analysis of Marriott Marble Arch's TripAdvisor reviews polarity levels

Confidence Mean	Confidence Standard	Confidence Variance
	Deviation	
91,98	6,45	41,65

Source: own elaboration

Results demonstrated that, although confidence level was not among the highest, expressed in the 91,98 score of confidence mean, it was still considerable to prove data's reliability. There was also some dispersion of confidence values, as can be verified through standard deviation value (6,45).

Then, the last research performed within the "global sentiment analysis", to the 200 reviews, was based on 3 distinct metrics - "objectivity vs. subjectivity", "agreement vs. disagreement" and "ironic vs no-ironic".

		S	ENTIMEN	T ANAI	LYSIS			
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	85	42,5%	Objective	5	2,5%	Ironic	12	6,0%
Disagreement	115	57,5%	Subjective	195	97,5%	Nonironic	188	94,0%
Total	200	100%	Total	200	100%	Total	200	100%

 Table 37 – General Sentiment Analysis at Marriott Marble Arch's Tripadvisor Reviews

Table 37 reveals that 57,5% of the comments presented a level of disagreement. In addition, only 2,5% of the comments were considered as objective, and 6% showed irony.

After a "global sentiment analysis", the data was submitted to a "topic sentiment analysis". The frequency of each clusters within the total of extracted topics was first identified, as the table 38 displays.

Clusters	Sum	%
Amenities	2	0,16
Competitors	1	0,08
Events	10	0,81
Facilities	307	25
Food&Beverage	151	12,30
Guests	25	2,04
Products/ Services	67	5,46
Hotel/Brand	156	12,70
Location	190	15,47
Complementary	20	1,63
Products/Services		
Processes	12	0,98
Units	6	0,49
Staff	219	17,83
Price	7	0,57
Others	55	4,48
TOTAL	1228	100%

Table 38 – Clusters' frequency of Hilton Marble Arch's TripAdvisor Reviews

Source: Own elaboration

"Facilities" was the cluster with the top frequency (25%), followed by "Staff" (17,83%) and "Location" (15,47%). After this analysis, each topic's polarity was measured, in order to find their polarities' overall distribution, as represented in the table 39.

Polarity Levels	Scale	Sum	Percentage	P-N (%)
P+	5	437	35,59	
Р	4	607	49,43	85,02
NEU	3	39	3,18	3,18
Ν	2	117	9,53	
N+	1	28	2,28	11,81
ТОТ	AL	1228	100%	100%

Table 39 - Marriott Marble Arch TripAdvisor's Reviews Cluster Polarity scale

Source: Own elaboration

The obtained results showed that 85,02% of the topics were classified as positive, of which 35,59% were considered "highly positive" (P+). Negative topics had an expression of 11,81% and 2,28% were "highly negative" (N+). Neutral topics had a percentage of 3,18% in the total.

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY							
Clusters	Polarity	Polarity Standard	Polarity Variance				
	Mean	Deviation (SD)	(VAR)				
Amenities	3,00	1,41	2,00				
Competitors	4,00	0,00	0,00				
Events	3,80	1,25	1,56				
Facilities	3,90	1,06	1,13				
Food&Beverage	4,13	0,98	0,96				
Guests	3,68	1,18	1,39				
Products/ Services	4,06	1,17	1,36				
Hotel/Brand	4,01	1,00	0,99				
Location	4,22	0,77	0,59				
Complementary	3,95	0,76	0,58				
Products/Services							
Processes	3,25	1,14	1,30				
Units	4,00	1,55	2,40				
Staff	4,32	0,84	0,71				
Price	3,43	1,40	1,95				
Others	4,00	0,92	0,85				
TOTAL	3,85	1,10	1,27				

Table 40 – Topic Sentiment Analysis Polarity for the clusters defined

Lastly, regarding clusters 'polarities, the total value (3,85) was close to 4, which means that in general, clusters represented more neutral feelings, but very close to the positive spectrum, according to the scale presented above (table 3). The cluster with the highest polarity mean was "Staff" (4,32), so it expressed more positive feelings compared to others. Similarly, to other hotels' analysis, Marriott Marble Arch' consumers refer to staff in general – "Staff were polite and friendly.", to the staff of a specific facility or service – "The staff in the executive lounge were super attentive" and to explicit team members names– "We really want to give the best rating for service to Avnie, the night manager who just relocated, Hamid who was exceptional at the Pickled Hen, Richard the bellhop and Carlos the concierge." The second cluster with the highest average polarity was "Location" (4,22). Consumers mentioned nearby points of attraction, as well as restaurants, stores and transports – "It is close to Hyde Park, Oxford Street - 5 minutes"

walk."; "The hotel has a very good location for a weekend shopping in London. It is close to all the shops and there is a lot of A-list restaurants and cafes within walking distance."; "Location well placed for public transport and quick food off property and walking distance from Paddington (came via Heathrow Express)". "Food & Beverage" was the third cluster with the largest average polarity (4,13). This cluster refers to all types of food and beverage provided by the property to its consumers. Breakfast's food is the most mentioned element within this cluster. Some examples are the following - "Stayed for 6 nights.what a hotel..super food and drinks"; "We also had access to the executive lounge which had a couple of snacks like chicken wings and Mac and cheese and a few desserts in the evenings. This and the wine or beer was a welcome change to the pace after a hectic day of sightseeing."; What was fantastic was the The Pickled Hen, the hotel's pub restaurant, with super breakfast served and also delicious food at dinner.". "Amenities" was the cluster that got the lowest value in terms of average polarity (3,00), but only two comments were counted, and one was "positive" (P) and one "negative" (N). "Processes" was the second cluster with the lowest average score (3,25), for the same reason as for "Amenities", but 12 topics were accounted for. This cluster includes the moments that make part of an accommodation experience, including, booking, arrival/check in, check out, as well as complaints and consequent actions. Topics classified as negative were due to mistakes on booking, check-in, and rooms' changes requests and upgrades situations -"Had some issues at check-in as they did not have the correct details of my booking despite being booked on the Marriott website log in as a Rewards member! Check-in staff quick to assume my error which was not the case. On the plus side they did allow an early check-in which was most appreciated." ";"First room had broken aircon, then problems getting keys and moved."; "I booked two rooms from 2 months ago and when i arrived they gave me bad room connected with meeting room 1st floor .. and the other room they said will move you to anther hotel because our hotel is full !! What a joke .. i booked this and i want this location (...)".

c) Marriott County Hall

Marriott county hall is a 5-star historic hotel. It is located right in the centre of London on South Bank, by the river Thames.

The analysis to Marriott County Hall's reviews on Tripadvisor started by figuring out their polarities in a "global sentiment analysis".

Table 41 portrays polarities 'distribution in the total of extracted comments. Reviews that disclosed no polarities (none) were not considered, hence 199 comments investigated.

POLARITY	SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS			(%)	
P+	5	31	15,6%	84,9%
Р	4	138	69,3%	
NEU	3	16	8,0%	8,0%
N	2	14	7,0%	
N+	1	0	0%	7,0%
TOTAL		199	100%	100%

 Table 41 – Marriott County Hall Tripadvisor's reviews polarity levels

Source: Own elaboration

However, 84,9% of consumer's feedback had positive polarities, and 15,6% were "highly positive" (P+) (15,6%). Negative reviews had an expression of 7%, and there was not even one rated as "highly negative" (N+). The percentage of neutral comments (NEU) was 1% higher than negative ones (8%).

Afterwards, polarities' results were subjected to the "test to the degree of confidence" to prove their veracity. For this purpose, values between 0 and 100 were assigned to each review, and results are showed in the following table (42):

Table 42 – Confidence Analysis	of Marriott County Hall's	TripAdvisor Reviews	Polarity Levels
2			

Confidence Mean	Confidence Standard	Confidence Variance
	Deviation	
91,90	6,38	40,77

Source: Own elaboration

Confidence mean values were not the highest (91,90), but they prove a meaningful degree of confidence on polarities' outcomes. The value of the standard deviation (6,38) represented some dispersion amid confidence values.

After the investigation of reviews' polarities and their confidence levels, comments were studied based on their levels of objectivity, irony and agreement, as it possible to observe on table 43.

SENTIMENT ANALYSIS								
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	78	39,2%	Objective	2	1,0%	Ironic	8	4,0%
Disagreement	121	60,8%	Subjective	197	99,0%	Nonironic	191	96,0%
Total	199	100%	Total	199	100%	Total	199	100%

 Table 43 – General Sentiment Analysis at Marriott County Hall's TripAdvisor Reviews

It's possible to outline that 60,8% of reviews presented a level of disagreement between their constituent topics, mentioned by consumers. In addition, 99% were subjective and 4% ironic. After this analysis, the investigation's goal was to find these different topics and perceive the importance of the clusters they belong to, in a "topic sentiment analysis". First, the frequency of each cluster was checked, as table 44 demonstrates.

TOPIC SE	ENTIMENT ANALYSIS – CL	USTERS POLARITY
Clusters	Sum	%
Amenities	2	0,16
Competitors	0	0
Events	22	1,72
Facilities	299	23,36
Food&Beverage	176	13,75
Guests	27	2,11
Products/ Services	58	4,5
Hotel/Brand	181	14,14
Location	202	15,78
Complementary	18	1,41
Products/Services		
Processes	20	1,56
Units	11	0,86
Staff	210	16,41
Price	6	0,47
Others	48	3,75
TOTAL	1280	100%

Table 44 - Clusters 'frequency of Marriott County Hall's Tripadvisor Reviews

Source: Own elaboration

The cluster with the largest number of correspondent topics was "Facilities" (23,36%), followed by "Staff" (16,41%) and Location (15,78%). Soon after that analysis, clusters' polarities and their general distribution were investigated (table 45).

Polarity Levels	Scale	Sum	Percentage	P-N (%)
P+	5	453	35,39	
Р	4	630	49,23	84,62
NEU	3	43	3,36	3,36
N	2	121	9,45	
				12,03
N+	1	33	2,58	
ТОТ	AL	1280	100%	100%

Table 45 – Marriott County Hall TripAdvisor's Reviews Cluster Polarity Scale

Source: Own elaboration

Positive polarities were about 84,62% in the total of extracted topics, and "highly positive" (P+) 35,39\%. Negative topics had a percentage of 12,03\%, and "highly negative" (N+) 2,58\%. Neutral polarities were expressed by 3,36% of the topics.

To extend the investigation, the average polarity of each cluster was measure, to understand their importance, based on the consumers' sentiments they express (table 46).

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY							
Clusters	Polarity	Polarity Standard	Polarity Variance				
	Mean	Deviation (SD)	(VAR)				
Amenities	4,50	0,71	0,50				
Competitors							
Events	4,14	1,04	1,08				
Facilities	4,00	1,07	1,14				
Food&Beverage	3,76	1,24	1,53				
Guests	4,19	0,83	0,70				
Products/ Services	3,97	1,20	1,44				
Hotel/Brand	4,10	0,81	0,65				
Location	4,23	0,82	0,67				
Complementary	3,50	0,99	0,97				
Products/Services							
Processes	3,65	1,09	1,19				
Units	4,45	0,52	0,27				
Staff	4,24	0,88	0,77				
Price	3,83	0,98	0,97				
Others	4,04	0,92	0,85				
TOTAL	4,04	0,87	0,85				

Table 46 – Topic Sentiment Analysis Polarity for the clusters defined

The polarity average score amid clusters (4,04) showed a greater overall association with favourable feelings, from consumers, regarding Marriott Park Lane, based on the drawn scale (table 3). Amenities" was the cluster that had the highest polarity mean (4,50), so it was the group with the largest number of positive feelings towards, However, only two comments were pulled up by the program underneath this cluster. The second cluster with the highest average polarity outcome was "Units" (4,45), and having 11 topics underlying, it was the one that carried out more promising opinions. Most of the references concerned physical distances – "Location is perfect on the south bank of the Thames across from Big Ben and Parliment and within 1 mile of many West End Theaters, Covent Garden, Tate Modern and Shakespeare Globe.", and related to "Location".Yet, there were also two other topics about temperature – " (...) the room temperature was perfect for us." – and quantities – "Tons of restaurants, shops, the eye, Big Ben, Westminster Abbey all

right there (...)". "Staff" was the third cluster in terms of average polarities (4,24). Alongside with the other analyses, this group was mentioned in general, related to a particular service or facility, or in a specific way, through consumers 'references to employees 'names. Some examples are the following: "The staff were efficient, friendly and helpful."; "(...)staff at the reception very polite and professional"; When we arrived, Rita at the front desk was very helpful and attentive (...) and CASSIA looked after us so well for our stay and it shows how much she cares about her guests - she made our night away so special!!!! My girlfriend and I are very pleased, would 100% recommend this hotel. Service especially is amazing.". "Complementary Products/ Services" (3,50) and "Processes" (3,65) were the clusters with the littlest polarities means, however they embodied wider neutral sentiments rather than negative. Consumer's unfavourable evaluations were due to Wi-fi access - "(...) wifi which requires Marriott club membership to be free." - TV and available channels - "One odd thing was the placement of the TV and also how often the TV would automatically shut off when the satellite feed was weak. I think the hotel would be better served to offer Netflix and Hulu streaming other than just Spotify. Almost all the channels were standard definition, which was disappointing." – and membership status' expectations – "Just quite disappointing for a Marriott (and I have stayed in quite a few, as a Life Time Platinum member), but recognition as such from reception. The room was as expected with 2 double beds, but no desk!, no bath!, no welcome fruit or other amenity.". Regarding "Processes", the factors that led guests to have less positive attitudes were mistakes that happened at the arrival/check-in, mostly, but also at check-out. The following review exemplifies two uncomfortable situations for the host, that occurred during the check-in and check out -"At check in, as a Platinum guest, I was placed in the second to furthest room on the entire property (room 202). It is staggering that elite guests are given such poor room placements even within the room category for which they are entitled. The staff member who checked me in had a confrontational attitude and actually accused me of accusing him of lying about room availability. At one point he said, "Do you want me to show you we have no other rooms to put you in??" This was unprofessional. I ultimately agreed to accept whatever room they had available since I didn't feel it was worth the stress of any additional confrontation (...) At check out, we were fraudulently charged with an entire room service dinner. Instead of immediately removing the dinner from our folio, we were told it would be "investigated." However, finally, it was removed after I clearly indicated it was impossible for the charge to be associated with our room. No apologies were provided."

d) Marriott Park Lane

Marriott Park Lane is a 5-star property situated in Mayfair, with Hyde Park right outside. Its facilities are prepared to host big events, and its restaurants serves contemporary British meals, as well as the afternoon tea.

The research to Marriot Park Lane's consumer reviews started by a "global sentiment analysis", through which comments' polarities were extracted. There was any comment to have polarity 0 (none), thus, 200 comments were taken into account. Table 47 shows polarities' overall allocation.

POLARITY		SCALE	SUM	PERCENTAGE	P-N (%)
LEVELS				(%)	
P+		5	41	20,5%	92,5%
Р		4	144	72,0%	
NEU		3	7	3,5%	3,5%
N		2	8	4,0%	
N+		1	0	0%	4,0%
	TOTAL	•	200	100%	100%

 Table 47 – Marriott Park Lane TripAdvisor's Reviews Polarity Levels

Source: Own elaboration

92,5% of the reviews were positive, however, "highly positive" (P+) only accounted 20,5%, compared to 72% of "Positive" (P). Negative polarities had a percentage of 4%, and there was any review classified as "Highly Negative" (N+). Neutral comments were about 3,5%.

To verify this data, a "test to the degree of confidence" was performed, by designate values between 0 and 100 to each review.

Confidence Mean	Confidence Standard Deviation	Confidence Variance
92,23	6,64	44,08

Table 48 – Confidence Analysis of Marriott County Hall's Tripadvisor Reviews Polarity Levels

Table 48 proves that confidence mean was not the largest (92,23), but it was consistent to confirm polarities' accuracy. The standard deviation (6,64) represented some dispersion of confidence values compared to the mean score.

SENTIMENT ANALYSIS								
Metric	Value	%	Metric	Value	%	Metric	Value	%
Agreement	94	47,0%	Objective	4	2,0%	Ironic	10	5,0%
Disagreement	106	53,0%	Subjective	196	98,0%	Nonironic	190	95,0%
Total	200	100%	Total	200	100%	Total	200	100%

 Table 49 – General Sentiment Analysis at Marriott Park Lane's Tripadvisor Reviews

Source: Own elaboration

According to the table above (table 49), most of the data (53%) disclosed a level of disagreement. In addition, only 2% of the comments were evaluated as objective and 5% as ironic.

Subsequently, it was important to identify those topics, but due to their huge amount in the total of reviews, they were clustered into 15 groups. Table 50 shows their frequency.

TOPIC SENTIMENT ANALYSIS – CLUSTERS POLARITY							
Clusters	Sum	%					
Amenities	7	0,53					
Competitors	1	0,08					
Events	19	1,45					
Facilities	361	27,5					
Food&Beverage	146	11,12					
Guests	26	1,98					
Products/ Services	60	4,57					
Hotel/Brand	186	14,17					
Location	171	13,02					
Complementary	16	1,22					
Products/Services							
Processes	34	2,59					
Units	14	1,07					
Staff	212	16,15					
Price	4	0,31					
Others	56	4,26					
TOTAL	1313	100%					

Table 50 - Clusters 'frequency of Marriott Park Lane TripAdvisor Reviews

The most predominant topic in frequency terms was "Facilities" (27,5%). "Staff" occupied the second place with a percentage of 16,15%, followed by "Hotel/Brand (14,17%).

 Table 51 – Marriott Park Lane TripAdvisor's Reviews Cluster Polarity Scale

Polarity Levels	Scale	Sum	Percentage	P-N (%)
P+	5	519	39,53	
Р	4	622	47,37	86,9
NEU	3	49	3,73	3,73
Ν	2	107	8,15	9,37
N+	1	16	1,22	
ТОТ	AL	1313	100%	100%

Source: Own elaboration

Then, the program accessed clusters' polarities dispersion amongst the total of extracted topics, as exhibits on table 51. 86,9% of the topics were positive, and the difference between "Highly positive" (P+) and "Positive" (P) polarities was only 7,84%. However, topics evaluated as "Highly positive" (P+) had a lower percentage (39,53%). "Negative" (N) topics accounted for 9,37% and "Highly negative" (N+) were only 1,22%. "Neutral" polarities were expressed by 3,73%.

Finally, in order to understand each cluster importance, based on polarity, the program extracted their average polarity mean (Table 52).

TOPIC SENTIMENT ANALYSIS – CLUSTERS FREQUENCY								
Clusters	Polarity	Polarity Standard	Polarity Variance					
	Mean	Deviation (SD)	(VAR)					
Amenities	4,00	1,41	2,00					
Competitors	4,00	0,00	0,00					
Events	4,42	0,61	0,37					
Facilities	4,11	0,96	0,92					
Food&Beverage	4,05	0,97	0,93					
Guests	4,19	0,80	0,64					
Products/ Services	4,05	1,19	1,40					
Hotel/Brand	4,17	0,86	0,73					
Location	4,37	0,79	0,62					
Complementary	3,75	0,86	0,73					
Products/Services								
Processes	3,85	0,99	0,98					
Units	4,36	0,63	0,40					
Staff	4,29	0,81	0,66					
Price	3,75	1,26	1,58					
Others	3,91	1,05	1,10					
TOTAL	4,08	0,94	0,94					

Table 52 – Topic Sentiment Analysis for the defined topics

Source: Own polarity

The polarity's mean value of all clusters (4,08) expressed that they were more correlated with favourable feelings from consumers, according to the scale (table 3). "Events" was the group that had the largest polarity mean outcome (4,42). Consumers mentioned topics

regarding birthdays 'celebrations, holidays and specific time periods (Nye's, "fireworks weekend") and occasions ("meeting friends"). "Afternoon tea" and "Sunday Roast" were also considered as events when consumers mentioned them as the explicit situation for visiting the hotel. Some examples are: "Stayed here for 4 nights for a big birthday celebration."; "Awesome afternoon tea with bottomless gin, yes you read that right, bottomless gin." "We stayed at the Marriott County Hall for 3 nights as a part of our European vacation.". The second cluster with the highest polarity average was "Location" (4,37). The constituent topics included references to the property's location in general, as well as specific areas, attractions and transports – "This is a beautiful hotel situated on the River Thames with amazing views of Westminster, Big Ben and the London Eye."; Walking distance is very easy to reach Trafalgar Square and Soho area. "The hotel is beautiful and historic, within a mintue walk of all the attractions and a great base to explore london.". "Units" was the third cluster with the highest average polarity (4,36), and this result is related to "Location" 's polarity outcome, since most of the topics stated distance measures (meter, block) - "Location is the best, everything is easily accessible, subway station 400 meters from the hotel". However, some consumers also mentioned the temperature, the weight and the size of some facilities, as the next comment illustrates - "The 6-foot wide bed and amazing pillows were so incredibly comfortable.". The clusters with the lowest average polarities were simultaneously "Price" and the "Complementary Products/Services" (3,75). However, regarding "Price", only 4 topics were identified. In relation to "Complementary Products/Services", 16 topics were considered, and were larger affiliated with neutral feelings, as there was one topic classified as "highly negative" (N+) - "Biggest drawback, for being in a business city, are they not able to print or business center in the hotel ?? and other 2 as neutral -" The only complaint I had was that the writing on the name badges of the staff was too small to read - so many times I would have liked to have thanked them.".

4.1.4 Marriott's comparison

As table 53 shows, on global sentiment analysis, Marriott Park Lane (5-star) had the biggest number of positive comments (92,5%), as well as specific "highly positive" (P+) reviews (20,5%). Marriott County Hall (5-star) has the lowest number of positive consumer feedback (84,9%), and only 15,6% of the reviews were "highly positive" (P+). Concerning negative polarities, Marriott County Hall (5-star) and Marriott Marble Arch (4-star) had the highest percentages (7%), however, Marriott Marble Arch was the only

property that had comments classified as "highly negative" (N+) (0,5%). On the other hand, Marriott Kensington (4-star) and Marriott Park Lane (5-star) had the lowest outcome in terms of negative reviews (4%). According to these results, it's not possible to draw any conclusion that correlates the number of stars an hotel may have, and the number of positive and negative reviews on TripAdvisor.

Every hotel had a top percentage concerning reviews' disagreement levels, but Marriott County Hall (5-star) had the largest score (60,8%), which may be explained by the fact this property that had less positive comments compared to the others. Marriott Kensington (4-star) and Marriott Park Lane (5-star) had the lowest percentages (53%).

Regarding irony levels, Marriott Marble Arch (4-star) had the highest result (6,0%), and Marriott Kensington the lowest (2,5%). The last metric used to evaluate consumer reviews was objectivity vs subjectivity, and on Marriott County Hall (5-star) only 1% of the comments were rated as "objective", while on Marriott Kensington there were 7%.

Below the global sentiment analysis, table X exhibits the "topic sentiment analysis", in which the created clusters were submitted to 3 analysis. The first one was their frequency and "Facilities" occupied the first place in every hotel. "Staff" was ranked as second on 3 hotels and third on one, and finally "Location" was the second group in one hotel and the last on the other 3, so the results were aligned, regardless the hotel's category.

In terms of cluster's polarity overall distribution, Marriott Park lane (5-star) was also the hotel with more positive topics (86,9%), unlike Marriott County Hall (5-star) (84,62%), however the difference between both was not so meaningful as on "global sentiment analysis". Also, Marriott Kensington (4-star) had only more 0,09% of topics with positive polarities (84,71%) than Marriott County Hall (5-star). "Highly positive topics" (P+) were higher at Marriott Park Lane (5-star) and lower at Marriott County Hall (35,39%), as expected. These outcomes are also relatable with negative topics, as Marriott County Hall (5-star) had the biggest percentage (12,03%), with 2,58% being "highly negative" (N+), while Marriott Park Lane (5-star) had only 9,37% of topics classified as negative, and 1,22% as "highly negative" (N+).

At the two 4-star hotels (Marriott Kensington and Marriott Marble Arch), "Staff" was the cluster with the highest polarity average score (4,31 and 4,32), and "Location" the second (4,29 and 4,22). Location had also been ranked as second at Marriott Park Lane (4,37) and third on Marriott County Hall, so it generates positive feelings on consumers in both

hotels. "Staff" had also occupied the second place at Marriott County Hall, however, it had a higher impact on 4-star hotels.

"Units" integrated the "top 3 clusters with highest average polarity" at both 5-star hotels (Marriott Park Lane and Marriott County Hall). "Food & Beverage" was the third cluster in terms of polarity means on Marriott Marble Arch (4-star) (4,13), but the last one on Marriot County Hall (5-star) (3,76). Overall, "Complementary Products/Services and "Processes" were the clusters with the lowest polarity means on every hotel. "Guests" were also one of the clusters with less favourable feelings linked on both 4-star hotels (Marriott Kensigton and Marriott Marble Arch.) The comparison between Marriott hotels under investigation proved that there was some consistency on the results.

	ANALYSIS	Marriott Kensigton	Marriott Marble Arch	Marriott Park Lane	Marriott County Hall
General Analysis	Stars	4	4	5	5
	Number of evaluations on Tripadvisor	1886	1872	1460	3240
	Rating on Tripadvisor	4	4	4,5	4,5
	Number of reviews analyzed	200	200	200	199
	Ironic	2,5%	6,0%	5,0%	4,0%
	Non-ironic	97,5%	94,0%	95,0%	96,0%
	Objective	7,0%	2,5%	2,0%	1,0%
	Subjective	93,0%	97,5%	98,0%	99,0%
	Agreement	47,0%	42,5%	47,0%	39,2%
	Disagreement	53,0%	57,5%	53,0%	60,8%
	Polarity Average	4,1	3,98	4,09	3,94
	Polarity Scale 1	0%	0,5%	0%	0%
	Polarity Scale 2	4,0	6,5	4,0	7,0
Global Sentiment	Polarity Scale 3	8,5%	7,0%	3,5%	8,0%
Analysis	Polarity Scale 4	64,5%	66,5%	72,0%	69,3%
	Polarity Scale 5	23,0%	19,5%	20,5%	15,6%
	Confidence Mean	93,32	91,98	92,23	91,90
Topic Sentiment	Topics Identified	1138	1228	1313	1282
Analysis	Polarity Average among clusters	4,00	4,00	4,10	4,00
	Polarity Standard Deviation among clusters	1,00	1,01	0,94	1,00
	Polarity Variance among clusters	1,02	1,02	0,89	1,01
	Polarity Scale 1	1,93%	2,28%	1,22%	2,57%
	Polarity Scale 2	10,02%	9,53%	8,15%	9,59%

Table 53 – Marriott's overall analysis comparison

Polarity Scale 3	3,34%	3,18%	3,73%	3,35%
Polarity Scale 4	47,98%	49,43%	47,37%	49,14%
Polarity Scale 5	36,73%	35,59%	39,53%	35,34%
Top 3 clusters with largest frequency	Facilities; Location; Staff	Facilities; Staff; Location	Facilities; Staff; Hotel/Brand	Facilities; Staff; Location
Top 3 clusters with largest polarity average	Staff; Location;	Staff; Location; Food & Beverage	Events; Location; Units	Amenities; Units; Staff; Location
	Hotel/Brand			
Top 3 clusters with lowest polarity average	Competitors; Price;	Amenities; Processes; Price; Guests;	Price; Complementary	Competitors; Complementary
	Complementary	Events	Products/Services; Processes;	Products/Services; Processes;
	Products/Services;		Others	Food&Beverage
	Processes; Guests			

4.1.5 Hilton vs Marriott

Before expliciting the results when comparing every hotel, the properties' ratings on TripAdvisor and their average polarity outcome obtained in the study should be correlated, to understand if there is any link between them. In general, results proved that there were significant differences for each brand, between the average rating on Tripadvisor and the results of polarities' means in the analysis, as it's illustrated on table 56 (appendixes). Most of the investigation's outcomes were lower than TripAdvisor classifications, except for the average polarity of Marriot's 4-star hotels, which had 4 tenths

However, despite the differences in the two columns 'values, the disparity between Hilton and Marriott on Tripadvisor is also represented in a similar proportion to the investigation results. While on Tripadvisor the average ranking for Hilton and Marriott were 4 and 4,25 respectively, on the conducted study, the values were 3,83 and 4,03. This disparity is still significant, as it implies that Hilton's consumer feedback on the 8 hotels is more correlated to neutral feelings, rather than positive, by contrary to Marriott that remains positive. When specifically looking at each hotel, Marriott Kensington (4-star) and Hilton Kensington (4-star) had the closest outcomes to those of Tripadvisor, as one can see in table 54.

On the other hand, Marriott County Hall was the hotel that had the furthest result (3,94) compared to its Tripadvisor rating (4,5), followed by Hilton Marble Arch, that has a rating of 4 on Tripadvisor and got an average polarity of 3,62 in the analysis. These results are unsatisfactory for both hotels, as the values gathered in the investigation represent more neutral than positive sentiments, unlike their ratings on Tripadvisor, especially at Marriott County Hall (5-star).

When comparing the two hotel chains in general, the difference concerning polarity averages is what stands out in the first place (table 56 - appendixes). Hilton had a lower average mean (3,83) than Marriott (4,03), meaning that it's feedback was more correlated to neutral rather than positive feelings, in contrast to Marriott, according to the numerical scale created above (table 3). This result is the same when contrasting 4-star hotels of both brands. However, in the 5-star category, Hilton's hotels had a higher average polarity (4,03), but it was only a residual point above Marriott (4,02). Nevertheless, the majority of feelings associated to Hilton were positive in this category, unlike the others. It was also revealed that it is not possible to establish a correlation between hotels' categories

and polarities, as at Hilton 4-star hotels had lower polarities, but in Marriot, the same didn't happen, as Marriott County Hall (5-star) had even the lowest polarity. The hotels that had the top (Hilton Marble Arch - 4-star) and lowest levels of disagreement (Hilton Bankside - 5-star), had also smaller and higher polarity averages outcomes, respectively. However, this potential connection is not verified in the total sample, so a correlation between lower polarity averages and larger levels of disagreement can't be conceived.

Regarding "Topic Sentiment Analysis", in general, the most mentioned clusters by consumers were "Facilities", "Staff" and "Location". The ones with the biggest average polarities were "Staff" and "Location", while on the other side "Processes" and "Complementary Products/Services" were those with the littlest polarities ´ means. After trying to match the clusters mentioned in every 4-star hotel, or at least those mentioned on the majority, it turned out that "Staff" and "Location" were the groups with larger positive feelings linked. By contrary, "Processes" and "Guests" were the clusters with least favourable sentiments correlated.

By applying the same process to 5-star hotels, it was found that the highest average clusters were "Events", "Location" and "Units", while those with the lowest polarities were "Processes" and "Complementary Products"/Services"

CONSUMER REVIEWS'ANALYSIS		Marriott	Marriott Marble	Marriott Park	Marriott County	Hilton	Hilton Marble	Hilton Park	Hilton Bankside
		Kensigton	Arch	Lane	Hall	Kensigton	Arch	Lane	
	Star	4	4	5	5	4	4	5	5
	Number of evaluations on	1886	1872	1460	3240	5097	1836	3291	2602
General Analysis	Tripadvisor								
	Rating on Tripadvisor	4	4	4,5	4,5	3,5	4	4	4,5
	Number of reviews analysed	200	200	200	199	199	200	199	199
	Ironic	2,5%	6,0%	5,0%	4,0%	4,5%	2,0%	3,5%	6,0%
	Non-ironic	97,5%	94,0%	95,0%	96,0%	95,5%	98,0%	96,5%	94,0%
	Objective	7,0%	2,5%	2,0%	1,0%	3,5%	3,5%	4,0%	3,02%
	Subjective	93,0%	97,5%	98,0%	99,0%	96,5%	96,5%	96,0%	96,98%
	Agreement	47,0%	42,5%	47,0%	39,2%	30,7%	30,5%	44,2%	50,8%
Global Sentiment	Disagreement	53,0%	57,5%	53,0%	60,8%	69,3%	69,5%	55,8%	49,2%
Analysis	Polarity Average	4,1	3,98	4,09	3,94	3,64	3,6	3,91	4,15
	Polarity Scale 1	0%	0,5%	0%	0%	0,5%	1,0%	1,0%	0,5%
	Polarity Scale 2	4,0%	6,5%	4,0%	7,0%	16,1%	16,0%	8,5%	2,5%
	Polarity Scale 3	8,5%	7,0%	3,5%	8,0%	11,6%	16,0%	9,0%	2,5%
	Polarity Scale 4	64,5%	66,5%	72,0%	69,3%	62,8%	57,5%	61,3%	70,9%
	Polarity Scale 5	23,0%	19,5%	20,5%	15,6%	9,0%	9,5%	20,1%	23,6%
	Confidence Mean	93,32	91,98	92,23	91,90	91,08	91	91,93	92,40
	Topics Identified	1138	1228	1313	1282	1045	940	1205	1251
	Polarity Average among	4,00	4,00	4,10	4,00	3,71	3,62	3,98	4,15
	clusters								
	Polarity Standard Deviation among clusters	1,00	1,01	0,94	1,00	1,11	1,18	1,06	0,89

Figure 54 – Hilton vs Marriott overall Sentiment Analysis 'comparison

	Polarity Variance among	1,02	1,02	0,89	1,01	1,24	1,42	1,12	0,81
	clusters								
	Polarity Scale 1	1,93%	2,28%	1,22%	2,57%	3,83%	5,0%	3,15%	0,96%
	Polarity Scale 2	10,02%	9,53%	8,15%	9,59%	18,66%	21,91%	13,03%	7,59%
Topic Sentiment	Polarity Scale 3	3,34%	3,18%	3,73%	3,35%	3,16%	3,83%	1,99%	1,68%
Analysis	Polarity Scale 4	47,98%	49,43%	47,37%	49,14%	49,57%	43,30%	46,14%	49,32%
	Polarity Scale 5	36,73%	35,59%	39,53%	35,34%	24,78%	25,96%	35,68%	40,45%
	Top 3 clusters with largest	Facilities;	Facilities; Staff;	Facilities; Staff;	Facilities; Staff;	Facilities; Staff;	Facilities; Staff;	Facilities; Staff;	Facilities; Staff;
	frequency	Location; Staff	Location	Hotel/Brand	Location	Hotel/Brand	Location	Food & Beverage	Hotel/Brand
	Top 3 clusters with largest	Staff; Location;	Staff; Location; Food	Events; Location;	Amenities; Units; Staff;	Events; Location;	Location;	Amenities; Events;	Complementary
	polarity average	Hotel/Brand	& Beverage	Units	Location	Staff; Food &	Amenities/Competi	Location;	Products/Services;
						Beverage/ Units	tors/Events/Units;	Products/Services	Events; Location;
							Staff		Staff
	Top 3 clusters with lowest	Competitors;	Amenities; Processes;	Price; Complementary	Competitors;	Price; Facilities;	Price; Facilities;	Price; Processes:	Amenities;
	polarity average	Price;	Price; Guests; Events	Products/Services;	Complementary	Processes;	Complementary	Complementry	Processes; Price;
		Complementary		Processes; Others	Products/Services;	Products/Services	Products/Services;	Proucts/Services;	Guests; Hotel/Brand
		Products/Services;			Processes;		Processes	Facilities;	
		Processes; Guests			Food&Beverage			Competitors	

4.2 Management Response's Analysis

After studying in detail consumers' feedback, the management responses to those comments were also investigated trough the same methodology. No hotel had the total sample answered (200 reviews), however, on Hilton Kensington, 197 management responses were published on TripAdvisor. The property that had fewest answers was Marriott County Hall (39), responding only to negative reviews. Overall, Hilton was also the chain with a bigger number of management comments, as table 51 (appendix) illustrates.

Regarding polarities, the results are very similar between the two brands: 5-star hotels are more linked to positive feelings, in contrast to 4-star hotels that express larger neutral feelings in their responses, but very close to being mostly positive, though. The hotel with the highest average polarity (4,08) was Marriott Park Lane (5), while Marriott County Hall (5) had the lowest polarity mean (3,92) (only 39 answers). It is also not possible to inter-connect hotel categories to their polarities on management responses results.

Also, on global sentiment analysis, it was found that the hotel with the biggest level of irony (7,69%) on its answers was Marriott County Hall (5). Yet, this outcome can justify by its very small number of responses (39). On the other hand, Hilton Bankside (5) was the only hotel to have 0% of ironic comments. Regarding objectivity, another metric, Marriott Kensington (4) was the only hotel to have 100% subjective responses, while Marriott Park Lane (5) was the property with the largest percentage of objective responses (5,61%). Regarding disagreement levels, Marriott County Hall (5) had the highest percentage (76,92%), which can once again be justified by the small number of responses. On the other hand, Hilton Bankside (5) had the slightest level of disagreement (8,16%).

In the "topic sentiment analysis", as expected, the hotel with the lowest number of topics (196) was Marriott County Hall (5). Marriott Marble Arch (4) had the biggest number of topics (738), although it was not the property with higher management responses (Hilton Kensington).

Before presenting the results collected in this analysis, there should be mentioned the clusters created to represent the topics extracted by "meaning cloud" on management response. Some of them remained the same from consumer reviews ´ analysis: Products/Services; Facilities; Food & Beverage; Hotel/Brand; Location; Guests;

Complementary Products/Services; Staff; Events and Others. "Processes" were also integrated; however, in addition of including references to "booking", "arrival/ check-in" and "check-out", on management's response study, this group also embodies measures taken by the hotel to improve its processes, based on the feedback received, and mentioned on the answer itself ("We are very sorry that you were disappointed with the delay experienced while we were preparing your guest room. We try to be very vigilant in this area because we know how important it is for our guests. Based upon your review, we are actively working with our housekeeping staff so this situation doesn't happen again." – Hilton Marble Arch).

The new clusters formed to represent the unfamiliar topics retrieved by the program were: "Acknowledgment", "Future Experience", "ID", "Reviewer" and "Subsequent Personalized Assistant". "Acknowledgment", as its name implies, refers to the hotel's recognition for the given feedback, whether positive or negative and eventually any apology - "Your honest feedback is appreciated and I am very sorry for the shortfalls experienced and not meeting your expectations" (Marriott Marble Arch).". "Future Experience" represents an attempt by the property to get the customer back, by simply mentioning it would like this to happen, in the case of more positive reviews, or when the experience was less favorable, the hotel says it wants to compensate the guest on a future visit, and sometimes even asks him to contact previously the hotel, so that the experience runs the best possible way - "If you would like to contact me directly, I would very much like to have the opportunity to make it right for you on your next visit. My e-mail address is thais.zenti@hiltonbankside.co.uk I hope this experience will not deter you from visiting us again." (Hilton Bankside). "ID" integrates all the users 'names the hotel refers to ("Dear Omar" - Marriott Park Lane), while "Reviewer" represents management's side, which can be just a name, the name plus the job title, an email, or both ("Perpetua Kirschstein Guest Relations Manager perpetua.kirschstein@Marriott.com" - Marriott Park Lane). Finally, "Subsequent Personalized Assistance" expresses the cases in which the property asks customers to contact directly the entities in charge of the area that were less positive assessed by them, or to contact the hotel in general, by providing the necessary addresses, so that guests can report more detailed and personalized information - "I was disappointed to learn that the breakfast did not meet your expectations, and would like to have an opportunity to hear more. Please feel free to email our Restaurant Manager with any additional feedback you may have at Paolo.Martignago@marriott.com"(Marriott County Hall).

Likewise, on consumer reviews ´ analysis, some clusters had very few underlying topics. However, if it was considered that only clusters with = /> 10 topics would be counted on the first investigation, in the case of management response, by the smallest total number of topics, it was considered that only clusters with = /> 5 topics would be taken into account. This is the reason why they appear in bold on table 55, which presents the results of the study about hotel response in all chosen properties.

Most of all, the clusters that had the highest polarities 'averages were "Events", "Acknowledgment", "Products/Services" and "Hotel/Brand". Those with the less positive feelings related, according to the scale created before (table 3), were "Facilities", "Food & Beverage" and "ID". Contrary to what happened on consumer reviews' research, it was not possible to match the most and least rated clusters in 4- and 5-star hotels, to drawn general conclusions based on the hotel category. The exception is "Facilities" which was the cluster with the lowest polarity average on every 4-star hotel, as expressed in table 55. Nevertheless, considerations can be stated if one analyse each specific chain in each category. Whereas in 4-star hotels, "Acknowledgment" generated the most positive polarities on Hiltons' management comments, on Marriotts was "Events". On the other hand, the least ranked regarding polarities were on Hiltons "Food & Beverage" and "Processes", while on Marriott's were "Others". At 5-star hotels, the groups with the most positive sentiments associated were "Events" on Hiltons and "Products/Services" on Marriott's , while the one with least positive polarity averages were "Processes" and "Subsequent Personalized Assistance" at Hiltons and "ID" at Marriott's.

Manageme	ent Response Analysis	Marriott	Marriott Marble	Marriott Park	Marriott County	Hilton Kensigton	Hilton Marble	Hilton Park Lane	Hilton Bankside
		Kensigton	Arch	Lane	Hall		Arch		
	Stars	4	4	5	5	4	4	5	5
	Rating on Tripadvisor	4	4	4,5	4,5	3,5	4	4	4,5
General	Number of	101	179	196	39	197	160	196	196
Analysis	management								
	responses' analysed								
	Ironic	4,95%	2,79%	3,57%	7,69%	1,02%	2,50%	1,53%	0%
	Non-ironic	95,05%	97,21%	96,43%	92,31%	98,98%	97,50%	98,47%	100%
	Objective	0%	1,12%	5,61%	2,56%	4,06%	4,38%	0,51%	0,51%
	Subjective	100%	98,88%	94,39%	97,44%	95,94%	95,63%	99,49%	99,49%
	Agreement	56,44%	73,74%	80,61%	23,08%	55,84%	47,50%	70,92%	91,84%
	Disagreement	43,56%	26,26%	19,39%	76,92%	44,16%	52,50%	29,08%	8,16%
	Polarity Average	3,98	3,98	4,08	3,92	3,97	3,96	4,01	4,01
Global	Polarity Scale 1	0%	0%	0%	0%	0%	0%	0%	0%
Sentiment	Polarity Scale 2	0,99%	1,68%	0%	0%	1,02%	0%	0,51%	0%
Analysis	Polarity Scale 3	0,99%	3,35%	1,53%	7,69%	5,08%	6,88%	2,55%	0,51%
	Polarity Scale 4	97,03%	89,94%	89,29%	92,31%	89,85%	90%	92,86%	98,47%
	Polarity Scale 5	0,99%	5,03%	9,18%	0%	4,06%	3,13%	4,08%	1,02%
	Confidence Mean	94,55	96,94	97,54	91,77	96,25	94,73	96,92	99,04
	Topics Identified	522	738	614	196	672	503	566	485
	Polarity Average among clusters	4,03	4,11	4,18	3,88	4,13	4,06	4,06	4,40

Figure 55 – Management Response's Analysis Results for both Hilton and Marriott

	PolarityStandardDeviationamongclusters	0,77	0,73	0,59	0,79	0,66	0,75	0,75	0,52
	Polarity Variance among clusters	0,57	0,52	0,37	0,65	0,45	0,57	0,57	0,27
	Polarity Scale 1	0,57%	0,14%	0,49%	0,51%	0%	0,40%	1,24%	0%
	Polarity Scale 2	6,32%	5,15%	2,28%	10,71%	4,46%	5,57%	4,42%	0,41%
	Polarity Scale 3	3,45%	1,36%	0,65%	2,55%	1,49%	3,78%	2,83%	0,62%
Торіс	Polarity Scale 4	67,24%	68,83%	71,01%	72,45%	69,79%	65,41%	68,20%	59,38%
Sentiment	Polarity Scale 5	22,41%	24,53%	25,57%	13,78%	24,26%	24,85%	23,32%	39,59%
Analysis	Top 3 clusters with	Staff; Facilities;	Staff;	Acknowledgment;	Hotel/Brand;	Others;	Acknowledgment;	Acknowledgment;	Staff;
Analysis	largest frequency	Acknowledgment	Acknowledgment;	Hotel/Brand;	Acknowledgment;	Acknowledgment;	Staff; ID	Staff; Hotel/Brand	Acknowledgment;
			Hotels/Brand	Facilities	Staff	Reviewer			Facilities
	Top 3 clusters with	Events; Location;	Events; Processes;	Events; Others;	Products/Services;	Complementary	Location; Events;	Events; Travellers;	Complementary
	largest polarity	Acknowledgment	Staff	Products/Services	Acknowledgment;	Products/Services/	Products/Services;	Location	Products/Service;
	average		'	1	Hotel/Brand	Events;Staff;	Acknowledgment		Others;
			'	'		Hotel/Brand;			Acknowledgment;
			'	1		Acknowledgment			Events; Staff
	Top 3 clusters with	Price; Others;	Units/Price;	Food&Beverage	Others;	Facilities;	Processes; Facilities;	Complementary	Processes/
	lowest polarity	Facilities;	Travellers;	Subsequent	Food&Beverage	Processes;		Products/Services;	Reviewer/
	average	Food&Beverage	Facilities;	Personalized	Facilities; Staff; ID	Location;	Food&Beverage	Subsequent	Subsequent
			Complementary	Asssistance;ID		Food&Beverage		Personalized	Personalized
			Products/Service/	1				Assistance;	Assistance; ID;
			Others/ Reviewer;	'				Processes;	Food&Beverage
								Products/Services	Facilities

5. Conclusions

5.1. Theoretical Contributions

The hospitality sector has been studied for a few decades because of tourism's large importance for world economies (Langviniene and Daunoraviciute, 2015). The type of products/services delivered by a hotel to its guests is very particular since the essence behind are intangible experiences (Yuan and Yo, 2008), that depends not only on the organization but also on the consumer, in co-creation processes (Kandampully et al. (2018). Therefore, each "service encounter" (Bitner, 1990) may differ based on a multiplicity of factors, including, the circumstances in which the service is provided, it's level of perceived quality, the type of consumer, the hotel's category, and many others. Because of this intrinsic limitation, managers must know which factors are more important for consumers in an accommodation experience, so they can act upon them, maximizing future service encounters and consequent consumers 'evaluations.

Before web.2.0, post-experience assessments would be shared among consumers 'closed circles, in a process known as word-of-mouth (Hung and Li, 2004). However, web 2.0 was responsible for creating online review platforms (Lui et al., 2018), that nowadays are one of the main sources for consumers when traveling (Fotis, Buhalis & Rossides, 2012). On these platforms, consumers can share their experiences digitally, reaching and influencing potential ones on their decision-making (e-WOM), so they become empowered, as online reviews are out of direct business control (Vargo and Lusch 2008). Thus, companies must manage effectively their processes to deal with consumers' e-WOM, as negative word-of-mouth may have an adverse effect on achieving good longterm performance (Harrison-Walker, 2001). Management response is one of the procedures companies may apply to engage with existing and perspective customers, as well as satisfactorily state their online posture. Rather than just watch what's going on online, through management response hotels may turn inherent e-WOM into an ongoing and mutual communication process between companies, existing customers and perspective customers. Consequently, hotels may influence the production and spreading of e-WOM, by showing consumers how much they consider their feedback, as well as their products/services' improvement (Li et al., 2017).

Based on these considerations, this investigation intended to verify the potential of online reviews in gathering valuable insights regarding the most important dimensions for positive consumer experiences, through the associated feelings. At the same time, it aimed to understand how management responses were in line with the positive and negative dimensions mentioned by consumers on their comments. In order to draw generalized conclusions, the luxury sector was specifically elected, and two distinct brands were chosen to represent the segment – Hilton and Marriott. Both chains are very close regarding positioning, as they integrate a network of luxury hotels worldwide. Thus, it was possible to compare both, given that the properties selected were based on a geographical similarity.

"Netnography" was the chosen methodology to achieve research goals and "text-mining" the specific procedure to extract and interpret the data. First, 200 reviews were collected on each hotel on TripAdvisor's page, as well as the properties' answers to those consumer comments. "Data miner" was the chosen tool to scrape consumers' feedback. Regarding the process of understanding the collected information, a sentiment analysis was performed, to find the feelings linked to each review, as well as in the specific elements mentioned by consumers, to determine which ones generated the most positive and negative sentiments. The tool chosen to fulfil this aim was "Meaning Cloud".

Thus, the investigation allowed to gather very important considerations, given the research questions. However, it makes sense to stress one more time that the investigation of which dimensions contribute positively and negatively for an accommodation experience has been undertaken for some years. Yet, due to online review platforms, the required information regarding what consumers value the most in their experience is available in superior quantity and quality, so this domain has been growing in the literature. Thus, by considering the results in light of the theoretical considerations of vast years of research, one will be able to scale up the investigation results' value on a large scale, allowing for a more complex and in-depth interpretation of the findings.

Research has proven that consumer demand increase based on hotels' star classifications (Walls et al., 2011; Ariffin and Maghzi, 2012; Mohsina et al., 2019). Because of this, and a consequence of the increasingly competitive hospitality industry (new competitors with significant importance as Airbnb, e.g), higher-rated hotels must maintain a high level of service quality, and improve the range of services delivered, so they can distinguish themselves from other competitors, and be able to justify their prices and categories (Mohsina et al., 2019).

For this reason, the luxury sector was chosen as the specific segment to be investigated, regarding the essential elements for guests to have a great experience in luxury proprieties. Eight hotels were chosen in London, as this city assembles many properties from Hilton and Marriott in a similar location, so a reliable comparison could be made. In total, four hotels from each brand were selected – two of 4 stars and the other two of 5 stars – with equal distribution for both chains. Moreover, this division was made in order to identify if there were any differences between 4 and 5-star categories. As mentioned before, consumers' needs growth based on hotels' star categories so there is differences amid these two segments that have been already proved by several authors (Walls et al., 2011; Ariffin and Maghzi, 2012; Mohsina et al., 2019). However, it is noteworthy that Hilton and Marriot are positioned as luxury brands, so for both 4 and 5-star properties, consumers desire a top-level service, which was later proved on the analysis.

Regarding the results, the study of the 1600 consumer reviews proved that consumers had more positive feelings over Marriott, rather than Hilton, measured by their polarity averages (4,03 and 3,83 respectively). In addition, Hilton's feedback was more linked to neutral feelings instead of positive, according to the numerical scale produced to designate polarities statistically (table 3). This divergence is in line with TripAdvisor's average rankings for both brands (table 56 - appendix), yet, Hilton's result on TripAdvisor (4) represents positive polarities, and the same was not verified on the research. When comparing 4 and 5-star segments, while average polarities for 5-star properties were very similar between both brands (Hilton even managed to get an extra residual point compared to Marriott), on the 4-star segment, although the average rating between both chains was also different on TripAdvisor, the discrepancy was accentuated on the research (3,75 to 3,62 on Hilton and 4 to 4,04 on Marriott). This data witnessed that it is not possible to make any correlation between the number of stars a hotel has and its average polarity on the investigation – Marriott's average polarity for 4-star hotels was one-tenth above compared to 5-star properties but on Hilton the opposite was verified, and both segments had a considerable difference between each other. Furthermore, the global sentiment analysis also proved that it's either impossible to correlate average polarities with the three metrics used by "meaning cloud" to characterize each review – "irony vs non-irony", "objectivity vs subjectivity"; "agreement vs disagreement".

Regarding "topic sentiment analysis", in general, the clusters that represented most consumers' positive feelings were "Staff" and "Location". The importance of both

dimensions has been proven by many researchers, but "Staff" is ahead in the number of researchers who have proved its largest importance for a unique experience (Walls et al. 2011; Ariffin and Maghzi, 2012; Langviniene and Daunoraviciute, 2015; Dražen et al., 2016; Herjanto and Gaur, 2017; Kandampully et al., 2018; Mohsina et al., 2019). When establishing honest and close relationships with guests through their staff, hotels are contributing to remarkable consumer experiences (Ariffin and Maghzi, 2012). Professionalism, precision, customization, empathy, and safety are features that may foster service quality over staff (Dražen et al., 2016). Employees must have the ability to continuously suit to anticipated (and unanticipated) needs of customers (Kandampully et al. (2018). In view with staff´s importance for consumers, hotels should track their workers´ functions and provide adequate training when necessary, so they can strengthen their know-how, expressly hotels of higher categories (Ntimane et al., 2017; Herjanto and Gaur, 2017; Mohsina et al., 2019).

In reference to "Location", its preponderance for consumers has also been corroborated by several authors (Aleksandar et al., 2016), particularly on consumer decision-making processes (Chan and Wong, 2006; Zhang et al., 2011). Ntimane and Tichaawa (2017) in their investigation to 3 to 5-star hotels in South Africa proved that "Location" is the fifth most relevant factor in the scale of "consumer value predictors", as it impacts consumers' decisions, alongside with travel goals. By 2010, Curtin had already proven that the charisma of a particular place, as well as its physical elements, had a large impact on a great experience perception on consumers' minds. This is related to "Location" because if a hotel is well situated, that can boost the intrinsic properties of the chosen destination for the consumer experience. Nonetheless, some authors have also confirmed the lowest significance of "Location", as an attribute on consumers 'experiences (Rhee and Yand, 2015), which was not the case in the current investigation.

The clusters with the lowest beneficial consumers 'feelings associated were "Processes" and "Complementary Products/Services". As pointed out previously, service quality must be guaranteed during the whole consumer experience, including in the pre-trip stage – booking, confirmation, and arrival/check-in (Mohsina et al., 2019). In addition to failures during the check-out and on other processes undertaken during the stay, most consumers mentioned arrival/check-in as the moments where they felt disappointed, either by the staff's attitude, a long wait time, failures, lack of expected services, among other circumstances. Langviene and Daunoraviciute (2015) through an academic research,

evidenced the importance of processes as an element of the extended marketing mix, for larger levels of consumer pleasure, which supports the results accomplished on this paper, because if "Processes" are meaningful for guests, if miscarries take place, consumers may feel disappointed and express their discontent on reviews. This may justify the tendency verified of consumers to feel negative when mentioning processes.

The other cluster that represented the bottom auspicious feelings in the total of hotels investigated was "Complementary Products/Services". The concept of "complementary" denotes that these services might be or not part of the range of services offered by hotels to their guests, and when consumers expect them and they are not available (or free), they become disappointed or frustrated. Thereby, "Tea/coffee facilities" that were considered as "Complementary Products/Services" on the analysis when included (or not) in the room, were revealed to be desired at 3, 4 and 5-star hotels, and especially for guests from UK, by an investigation carried out by Failté Ireland (Irish National Tourism Development Authority). "Internet" was also included in this cluster, and its availability is valuable by consumers, especially on higher categories (its weight grows alongside hotel star classifications). Also, guests expect access to be free, and US guests and business travellers prioritize more this service.

Moreover, one must look individually at the 4 and 5-star segments to explore if there were differences in the elements mentioned by consumers, that led to higher and lower positive feelings. On the 4-star class, "Staff and "Location" driven more satisfactory feelings, similarly to overall results presented before. Moshina (2019) stated that 4-star hotels have as differential factors the first impression that guests perceive, based on direct contact with employees, and a friendly and attentive staff, which the investigation validate. By contrary, the cluster that represented the utmost unsatisfactory feelings was "Processes". Likewise, on the general analysis' results, "Processes" included the ranking of groups with the littlest polarity averages, as it expressed negative feelings connected to service failures. However, a singular observation was identified when searching for the clusters with lowest polarities on the 4-star segment. Because "Processes" was the only group with a large expression on this category, results were looked based on the brand hotels belonged to, in order to verify if there were similarities within properties under the same brand. Thus, a singular observation was identified - "Guests" was the cluster that embodied the least supportive topics on Marriott's hotels, and "Facilities" on Hilton's. To interpret these results, one looked at the data extracted on "Topic sentiment analysis"

on each hotel excel sheet. About "Guests", the number of retrieved topics was similar on both chains, although "Marriott Marble Arch" had the largest number (25), and "Marriott Kensington" the smallest (15), meaning that it is not possible to explain the findings based on the number of topics. The difference between average polarities obtained in each hotel (Marriott Kensington - 3.73; Marriott Marble Arch - 3.68; Hilton Kensington - 3.65; Hilton Marble Arch - 3.82), was not substantial, although Hilton had the higher result. So, when looking for the overall clusters' polarities on every hotel, one identified that Hilton had lower polarities' means on other groups, rather than "Guests", so it was not considered one of the lowest, as it was for Marriott's results. With reference to "Facilities", both Hilton Kensignton and Hilton Marble Arch's average polarities results were very close to the negative spectrum of feelings (3,13 and 3,12, correspondingly), based on the scale created (table 3), unlike Marriott Kensington and Marriott Marble Arch's outcomes, that were significantly higher (3,88 and 3,90, accordingly), and much closer to the positive scope of sentiments (table 3). Notwithstanding, the number of topics was almost the same amongst the four hotels, meaning that Hilton's consumers showed more negative feelings respecting "Facilities", rather than Marriotts's. This explains to some extent why "Guests" were included on the "top 3 clusters with lowest average polarities" on Marriott's hotels, and not on Hilton's. It is prominent to keep in mind that Marriott's polarities means were considerably bigger than Hilton's, and that fact supports these observations.

On 5-star hotels, the clusters that embodied the most positive sentiments were "Events", "Location", and "Units". As far as "Events" are concerned, this result may be supported due to the evidence showed on consumers 'feedback that these types of properties organize some ceremonies during the year, such as awards and galas. In addition, some consumers choose this kind of hotel when they want to have more exclusives experience, going to the afternoon tea, for instance, or to celebrate something. This is confirmed by the broader number of topics underlying this group, both in Marriott and Hilton 5-star hotels, concerning the topic "Events. About "Location", as in the 4-star category, it was also one of the groups with the highest polarity averages. In every hotel, consumers revealed joy when talking about "Location", as all properties had good a geographical position, surrounded by transports, restaurants, and attractions. Like recognized before, both brands integrate the luxury hospitality sector, so guest not only expect a certain type of service, but also a proper location, in order to be willing to pay such high rates. Concerning "Units", as most consumers' references were related to location, they also impersonated more praiseful feelings. In opposition, "Complementary Products/Services" and "Processes" were the groups that generated the least sentiments feelings on guests. Although "Complementary Products/Services" comprehended the top clusters with lowest polarity averages in general, including 4-star hotels also, their negative representation was not as large as on 5-star properties. Mohsina et al. (2019) stated that the scope of complementary services is one of the features that distinguish this category from the others. If consumers' expectation rise based on hotel classifications, it's not surprising that the sentiments associated with this group have been less positive, as 5-star consumers desire a higher number of complementary products/services, and with a larger quality. Thus, these properties must diversify their range of exclusive services, in order to handle the increased competition.

There is another important consideration to mention, which is that "Facilities" was the cluster referred most often in all analyzes. Nevertheless, it was one of the groups with the lowest polarity means in 3 hotels. This proves that "Facilities" were above all very relevant to consumers (especially "rooms"). This is in position with several studies that proved that the physical environment is a critical factor for the sector (Zemke and Pullman, 2008), for consumer satisfaction (Langviniene and Daunoraviciute, 2015; Walls et al., 2011), and that in particular the quality of the bed is very important for all types of consumers and categories (Failré). However, "Facilities" 'frequency was not reflected on consumers 'feelings, unlike "Staff' and "Location", that were also the most commented groups, and had higher average polarities on the majority of properties. This denotes that "Staff' and "Location" were relevant to overall guests, but also contributed positively to their experience, as their expectations were accomplished. In terms of "Facilities", despite being the most pertinent topic by the number of mentions it had, guests 'expectations were not entirely met during their experience, which explains the group polarities 'results.

With these considerations in mind, one must discuss the results gathered from the analysis of management response to consumers 'feedback, to verify if there is any correlation between them. Overall, Hilton had a higher average number of responses (187.25), compared to Marriott (128.75), as table 61 (appendix) illustrates, but respect to the general average polarities, both chains had the same outcome (3.99). Likewise, on the 4 and 5-star categories, the results between Hilton and Marriott's polarities were very close (only 1 tenth away), and between the categories themselves too. These values differ

greatly from those obtained on consumer reviews' investigation, concerning the discrepancies between each category and inside them, as there weren't major discrepancies between the 4 and 5-star segments, and overall polarity averages (3,99) were one point below the positive values on the scale (table 3). Also, Marriott's consumer reviews polarity means were even higher (as well as on Hilton's 5-star category) than management responses' results. Moreover, there were significant differences between the percentages of scales 1 and 5 between consumer reviews' analysis and management responses 'investigation, as the outcomes were higher for consumer reviews. When hotels respond to consumer reviews, they must personify the roles of mediator and conflict solver, so the feelings their comments express should reflect a moderate stance. They must think carefully before writing their reply, as it will influence consumers' consequent assessments and decisions (Xie et al., 2016). Hence, if they pretend to restore guests' levels of trust after possible service failures, they should pay close attention to what they write, and how they do it, so they can perform a successful service recovery. On the other hand, when guests share their experiences, they have no boundaries to balance them, so the feelings they express may more extreme. This allowed that consumer reviews polarity averages were larger, despite having higher percentages of negative polarities, as there was a counterbalance on the results. On management response, as the majority of percentages were on scale 4, there was no possible balance to increase average polarities outcomes.

By the same token, with the exception of the Marriott County Hall (due to the very small number of management replies - 39), it was found that there was a positive correlation between hotels 'star classifications and average polarities, which was not verified on consumer reviews' study. Despite the difference between the hotel with lowest polarity average (apart from Marriott County Hall) and the property with the largest being only 0,12 tenths, every 5-star hotel had positive polarities (positive feelings associated), while 4-star hotels, although very close to the positive spectrum (table 3), represented more neutral feelings in the total. Further, it was not possible to relate the percentages gathered in each metric (objectivity vs subjectivity; irony vs nonironic; agreement vs disagreement) with polarities means' findings, nor the number of responses of each hotel with their average polarity on the investigation, and their rating on TripAdvisor.

Regarding the "Topic Sentiment Analysis" on management responses, in general, the clusters with the most positive polarities were "Events", Acknowledgment",

"Products/Services" and "Hotel/Brand". First, in terms of "Events", one must clarify that the number of topics was not substantially high on both 4 and 5-star segments (13 was the maximum), but the 5-star category had a higher number of topics (except Marriott County Hally, that had no topics in this cluster), compared to 4-star hotels (inclusive, 3 hotels on this group didn't have a minimum number of topics =>5), which is line with the results obtained from consumer review' analysis, that 5-star properties organize more events or are chosen to celebrate events in guests' lives. Concerning "Acknowledgment", this cluster was meaningful for some hotels in both segments, so it was not plausible to determine the linkage between properties' categories and the relevance or polarity average of "Acknowledgment" cluster. As mentioned in the literature review, this is considered a very efficient move (accommodative strategy) for being in line with consumers' desires (Ho, 2018), as it may include a recognition of the feedback/ problem, accompanied by an apology as well as a justification (Lee & Song, 2010; Zhang and Vásquez, 2014; Ho, 2018). Although future interventions in response to consumer reviews are also included on accommodative strategies by several researchers (Lee & Song, 2010; Zhang and Vásquez, 2014; Ho, 2018), those aspects have either been included on "Subsequent Personalized Assistance"; "Processes" or "Future Experience", like explained before on the methodology chapter, to clearly distinguish between one another. About "Products/Services", hotels referred to the products or services mentioned by guests, and when in a negative way, they showed their gratitude for the feedback, as it enhances their future services, and also apologized for the failures. Besides that, they also mentioned their goals based on their products/services. These are the reasons that might explain the positive polarities this group expressed. Based on the literature, the actions undertook on this cluster may fit into an "accommodative strategy", so this is also a good indicator that hotels had an adequate response to the received feedback on the investigation. Finally, regarding "Hotel/Brand", whether speaking on behalf of the hotel or the brand itself, the person who addressed the consumer wrote the response to either positive or negative feedback. Once more, there are also features of this group that may be part of an "acknowledgment strategy", meaning that even if reviews were less positive and hotels notice the inconveniences, when they respond taking into account this strategy, their reply is considered positive by the "sentiment analysis". This may advocate the ability that management response has in diminishing negative word-of-mouth (Willemsen et al., 2013) or even neutralize it (Proserpio and Zervas, 2014).

On the other hand, the clusters with the lowest polarities were "Facilities", "Food & Beverage" and "ID". Regarding "Facilities", the results are in agreement with those of consumers' feedback investigation, in which "Facilities" proved to be very relevant to consumers, but engendered the most unfavorable feelings in some properties. Therefore, it's understandable that hotels mention this dimension on their answers, and that "sentiment analysis" evaluated the topics as having bottom polarities. In the case of "Food & Beverage", as the outcomes didn't match the findings of consumer reviews' research, a more detailed assessment was performed, yet, the results were so different between properties, that no major conclusions could be taken about the number of withdrawn topics with hotels' categories and polarities 'means. However, it can be said that three hotels had less than 9 topics on this group (a little expression), and those who had more topics, as some were rated negative, due to unfavorable perceptions that consumers had about food and beverage, and that hotels pointed out on their responses, so it caused "Food & Beverage" to have the lowest polarity averages in every hotel, except Marriott Marble Arch (4-star) and Hilton Park Lane (5-star). Yet, concerning Hilton Bankside (5-star), the polarity was 4,04, but as it was a low outcome compared to the rest of clusters, "Food &Beverage" had one of the smallest polarity means. And lastly, concerning "ID", as this group only included consumers' usernames, the majority of topics were grouped in the scale 4, so average polarities were positive in most hotels, but shorter compared to other clusters with a higher number of topics or more positive associated sentiments.

It was difficult to find a parallel between 4 and 5-star categories, respecting clusters' polarities, as carried out on the first investigation. Hence, the alternative was to check the common clusters within the same brand, on the different segments. Some findings may be correlated with consumer reviews' study, and these will be explained. For instance, in the 4-star segment, "Facilities" was the only cluster that integrated all rankings for the larger and lowest polarity averages. As mentioned above, "Facilities" was the group with less favorable feelings on Hilton's 4-star properties. Tough, on Marriott's 4-star entities, "Facilities"' polarity means were also low, compared to other groups, given the number of topics gathered on this cluster (greater relevance). Thus, these justify why every hotel on this category had included "Facilities" on their response and why they were linked with less satisfactory feelings, by the references to failures perceived by consumers on this dimension. Also, "Acknowledgment" was the cluster with the highest polarity on Hilton's 4-star hotels. On this segment, Hilton had an average polarity of 3,62,

significantly smaller compared to Marriott (4,04), and that expressed more neutral rather than positive feelings, meaning that there was a greater need for acknowledging consumers 'feedback, and apologize. It is also important to mention that "Processes" were one of the clusters with the smallest polarities 'means for Hilton's at both categories, which is in accordance with consumers' feedback. Events" was also one of the groups representing the most favorable feelings on 5-star Hilton's, in the same way it was one of the most valued dimensions for the 5-star segment on consumer reviews' study. Concerning Marriott, "Products/Services" was one of the groups with the largest polarities 'means for 5-star hotels, as the brand referred to the products/services it offers (or intend to, when they are not fully satisfactory for guests), to increase/maintain consumers positive feelings about the hotel/brand.

5.2 Managerial Implications

The ongoing dissertation provides practical considerations for marketing managers on the hospitality sector, especially on the luxury segment, in terms of what consumers appreciate the most in their experience, on the 4- and 5-star segments. In addition, by exploring and comparing two different chains, analysing each hotel's online reviews concerning guests' feelings, managers from both brands can make use of the findings verified on this research, to enhance their products/ services. Also, because proprieties were picked up based on a geographical similarity, Hilton and Marriott's managers may assess competitor performance and gather valuable insights. Moreover, the analysis to management response and the subsequently comparison with consumer reviews 'analysis, not only provide the sector relevant data concerning the kind of response managers should undertake, and particular for Hilton and Marriot's managers.

Before mentioning the practical managerial implications, it should be pointed out the importance of online reviews platforms due to their major influence on consumers. Hospitality organizations must keep this in mind, and in addition to monitoring what is being said on these platforms, to gain worthwhile insights about consumer experiences, they must also respond to consumer reviews, so that they can lessening the impact negative e-WOM may have or enhancing positive e-WOM.

Moreover, this research proved that hotels' star classifications do not ensure consumer satisfaction. Instead, consumers get more demanding as the number of stars increase, so higher category hotels must prove consumers why they have such classification, as well as their bigger rates. Thus, luxury hotels must boost their (complementary) products/services, otherwise they might be more criticized. Nevertheless, both Hilton and Marriott are considered luxury brands, and consumers immediately attach some features when think/experience them, so the remarks pointed before are also apply to both categories.

The research also demonstrated the great relevance of "Facilities" (especially the "room") for guests in both categories, as it caused the largest number of topics, which corroborated the importance of this attribute for the luxury sector. However, this was not expressed in higher positive feelings, which means that both brands should invest on this attribute, by understanding in detail what consumers are looking for, and then operationalizing those features. Thus, given its number of topics, if consumers had had more positive feelings about this cluster, the increase in average polarities could be very significant. On the other hand, "Staff" proved its importance for both 4 and 5-star segment, as well as "Location". Unlike "Facilities", these clusters had a upper number of topics, and also represented greatest favourable consumers 'feelings. These findings proved the importance of both groups for the luxury sector. Respecting "Staff", it's crucial that training processes are carried out frequently, so that employees may respond competently to consumers 'needs and proceed successfully in case of "service failures", as consumers highly appreciate positive interactions with employees during their experience. In the case of "Location", as consumers value a good location, hotels have to use it to their advantage, and make sure guest are aware of everything that involves it (monuments, restaurants, transports, distances), since it is a fundamental element for a satisfactory experience. It was also found that the "Processes" were the cluster that led to the lowest unsatisfactory feelings on both categories, yet, the number of topics was not as significant as for "Facilities". The most discussed process was the check-in, which revealed that consumers' first contact with the hotel has a great influence on their final assessment. Hence, hotels should acknowledge what consumers expect at this particular moment, as well as prevent "service failures", and when they occur, handle them efficiently. This is closely correlated with employees' training, as staff can be the key element to not only avoiding "service failures", but also to undertake successfully "service recoveries".

With regard to the specific segment of 5-star hotels, it was found that the variety of "Complementary Products/Services" is meaningful as it promotes differentiation. The same is applied to "events", as they were more purposeful for 5-star hotels guests than 4-

star's, so 5-star properties should foster "exclusive experiences", in order to attract and retain customers. This is in conformity with consumers' larger expectations upon higher star classifications, so managers must guarantee a differentiated service, and "exclusive experiences" may be a key attribute in that regard.

Concerning the management's response analysis, the investigation displayed that the responses of 5-star hotels were positive, and the ones from 4-star properties were very close to the positive spectrum. This signifies that even if consumer reviews have been less positive, and hotels mentioned the negative issues on their replies, through "Acknowledging", "Hotel/Brand" and "Products/Services" (clusters that can be grouped into accommodative strategies), sentiment analysis evaluated management responses positively, nonetheless, not excessively. Therefore, the higher integration of "Acknowledging", "Hotel/Brand" and "Products/Services" ' clusters on management responses, the higher the expressed polarities, so replies may become more positive, which can impact consequent e-WOM.

5.3. Limitations

This paper has several limitations that should be taken into account. In the first place, there were only chosen two brands, and particularly, luxury brands – Hilton and Marriott – to compare the different attributes valued by consumers on an accommodation experience, as well as management responses to them, on eight hotels' TripAdvisor pages. Hence, the study was performed in a specific segment inside the hospitality sector – luxury hospitality, under two specific brands, and London being the geographical background for the research, limiting its scope.

Also, the extraction period lasted one month (February – March 2019), so only two hundred reviews were extracted on each hotel's TripAdvisor page, lessening the study's longevity. It is also important to note that only English reviews were scrapped, and as TripAdvisor allows consumers to write on their mother language, few consumers write on English if they were not from official English speaking countries. This restricted the investigation, as it was not possible to evaluate cultural differences concerning consumers 'evaluations on different attributes in an accommodation experience, and also potential variations on management responses. In addition to these factors, "text-mining" was the only procedure selected to bring out meaning from the extracted reviews and management responses, so the research was constrained to the intrinsic characteristics of this tool.

5.4. Future Research

Given the above limitations, future research would require conducting investigations with the same or different brands, in different cities, to prove whether the results would be the same as on this research, increasing the study's scale. For instance, by comparing Hilton and Marriott, but regarding hotels on different parts of the globe, it would be possible to assess the impact of the destination on consumers 'evaluations and management responses.

Furthermore, the extraction period could be extended to increase the number of reviews scraped on total (and respective replies from the properties), to analyse more consumers' experiences, and rise the longevity of the research. Other data extraction and interpretation's techniques could also be used alongside text-mining.

Besides these possibilities, upcoming investigations could be conducted based on this research, but one different hospitality sectors, other than the luxury one, to verify the differences between hotels of distinct categories, establishing a more complete comparison about consumers' needs on different segments and on multiple parts of the globe.

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Apendixes

CONSUMER REVIEWS				
Hilton's average polarity	3,83			
Marriott's average polarity	4,03			
Marriott's 5-star polarity	4,02			
Hilton's 5-star polarity	4,03			
Marriott's 4-star polarity	4,04			
Hilton's 4-star polarity	3,62			

Table 56 – Consumer Reviews´ analysis average polarities

С	onsumer Reviews Analysis	Marriott Kensigton	Hilton Kensigton
	Stars	4	4
	Number of evaluations on Tripadvisor	1886	5097
General Analysis	Rating on Tripadvisor	4	3,5
	Number of reviews analysed	200	199
	Ironic	2,5%	4,5%
	Non-ironic	97,5%	95,5%
	Objective	7,0%	3,5%
	Subjective	93,0%	96,5%
	Agreement	47,0%	30,7%
	Disagreement	53,0%	69,3%
	Polarity Average	4,1	3,64
	Polarity Scale 1	0%	0,5%
	Polarity Scale 2	4,0%	16,1%
Global Sentiment	Polarity Scale 3	8,5%	11,6%
Analysis	Polarity Scale 4	64,5%	62,8%
	Polarity Scale 5	23,0%	9,0%
	Confidence Mean	93,32	91,08
	Topics Identified	1138	1045
	Polarity Average among clusters	4,00	3,71
	Polarity Standard Deviation among clusters	1,00	1,11
	Polarity Variance among clusters	1,02	1,24
	Polarity Scale 1	1,93%	3,83
	Polarity Scale 2	10,02%	18,66
	Polarity Scale 3	3,34%	3,16
Topic Sentiment	Polarity Scale 4	47,98%	49,57
Analysis	Polarity Scale 5	36,73%	24,78
	Top 3 clusters with largest frequency	Facilities; Location; Staff	Facilities; Staff;
			Hotel/Brand
	Top 3 clusters with largest polarity average	Staff; Location; Hotel/Brand	Events; Location; Food &
			Beverage/Units
	Top 3 clusters with lowest polarity average	Competitors; Price;	Price; Facilities;
		Complementary	Processes;
		Products/Services; Processes;	Products/Services
		Guests	

Cons	sumer Reviews Analysis	Marriott Marble Arch	Hilton Marble Arch
	Stars	4	4
	Number of evaluations on	1872	1836
General	Tripadvisor		
Analysis	Rating on Tripadvisor	4	4
	Number of reviews analysed	200	200
	Ironic	6,0%	2,0%
	Non-ironic	94,0%	98,0%
	Objective	2,5%	3,5%
	Subjective	97,5%	96,5%
	Agreement	42,5%	30,5%
Global	Disagreement	57,5%	69,5%
Sentiment	Polarity Average	3,98	3,6
Analysis	Polarity Scale 1	0,5%	1,0%
	Polarity Scale 2	6,5%	16,0%
	Polarity Scale 3	7,0%	16,0%
	Polarity Scale 4	66,5%	57,5%
	Polarity Scale 5	19,5%	9,5%
	Confidence Mean	91,98	91
	Topics Identified	1228	940
	Polarity Average among clusters	4,00	3,62
	Polarity Standard Deviation among	1,01	1,18
	clusters		
	Polarity Variance among clusters	1,02	1,42
	Polarity Scale 1	2,28	5,0%
	Polarity Scale 2	9,53	21,91%
Topic Sentiment	Polarity Scale 3	3,18	3,83%
Analysis	Polarity Scale 4	49,43	43,30%
	Polarity Scale 5	35,59	25,96%
	Top 3 clusters with largest frequency	Facilities; Staff; Location	Facilities; Staff; Location
	Top 3 clusters with largest polarity	Staff; Location; Food &	Location;
	average	Beverage	Amenities/Competitors/Events /Units; Staff
	Top 3 clusters with lowest polarity	Amenities; Processes;	Price; Facilities; Complementary
	average	Price; Guests; Events	Products/Services; Processes

 Table 58 – Consumer Reviews 'Analysis Marriott Marble Arch vs Hilton Marble Arch

C	onsumer Reviews Analysis	Marriott Park Lane	Hilton Park Lane
	Stars	5	5
	Number of evaluations on Tripadvisor	1460	3291
General Analysis	Rating on Tripadvisor	4,5	4
	Number of reviews analysed	200	199
96,5%	Ironic	5,0%	3,5%
	Non-ironic	95,0%	96,5%
	Objective	2,0%	4,0%
	Subjective	98,0%	96,0%
	Agreement	47,0%	44,2%
	Disagreement	53,0%	55,8%
	Polarity Average	4,09	3,91
	Polarity Scale 1	0%	1,0%
	Polarity Scale 2	4,0%	8,5%
Global Sentiment	Polarity Scale 3	3,5%	9,0%
Analysis	Polarity Scale 4	72,0%	61,3%
	Polarity Scale 5	20,5%	20,1%
	Confidence Mean	92,23	91,93
	Topics Identified	1313	1205
	Polarity Average among clusters	4,10	3,98
	Polarity Standard Deviation among clusters	0,94	1,06
	Polarity Variance among clusters	0,89	1,12
	Polarity Scale 1	1,22%	3,15%
	Polarity Scale 2	8,15%	13,03%
	Polarity Scale 3	3,73%	1,99%
Topic Sentiment	Polarity Scale 4	47,37%	46,14%
Analysis	Polarity Scale 5	39,53%	35,68%
	Top 3 clusters with largest frequency	Facilities; Staff; Hotel/Brand	Facilities; Staff; Food &
			Beverage
	Top 3 clusters with largest polarity average	Events; Location; Units	Amenities; Events;
			Location;
			Products/Services
	Top 3 clusters with lowest polarity average	Price; Complementary	Price; Processes;
		Products/Services; Processes;	Complementary
		Others	Products/Services;
			Facilities; Competitors

Table 59 – Consumer Reviews 'Analysis Marriott Park Lane vs Hilton Park Lane

С	onsumer Reviews Analysis	Marriott County Hall	Hilton Bankside
	Stars	5	5
	Number of evaluations on Tripadvisor	3240	2602
General Analysis	Rating on Tripadvisor	4,5	4,5
	Number of reviews analysed	199	199
	Ironic	4,0%	6,0%
	Non-ironic	96,0%	94,0%
	Objective	1,0%	3,02%
	Subjective	99,0%	96,98%
	Agreement	39,2%	50,8%
	Disagreement	60,8%	49,2%
	Polarity Average	3,94	4,15
	Polarity Scale 1	0%	0,5%
Global Sentiment	Polarity Scale 2	7,0%	2,5%
Analysis	Polarity Scale 3	8,0%	2,5%
	Polarity Scale 4	69,3%	70,9%
	Polarity Scale 5	15,6%	23,6%
	Confidence Mean	91,90	92,40
	Topics Identified	1282	1251
	Polarity Average among clusters	4,00	4,15
	Polarity Standard Deviation among clusters	1,00	0,89
	Polarity Variance among clusters	1,01	0,81
	Polarity Scale 1	2,57%	0,96%
	Polarity Scale 2	9,59%	7,59%
-	Polarity Scale 3	3,35%	1,68%
Topic Sentiment	Polarity Scale 4	49,14%	49,32%
Analysis	Polarity Scale 5	35,34%	40,45%
	Top 3 clusters with largest frequency	Facilities; Staff; Location	Facilities; Staff;
			Hotel/Brand
	Top 3 clusters with largest polarity average	Amenities; Units; Staff;	Complementary
		Location	Products/Services;
			Events; Location; Staff
	Top 3 clusters with lowest polarity average	Complementary	Amenities; Processes;
		Products/Services; Processes;	Price; Guests;
		Food & Beverage	Hotel/Brand

Table 60 - Consumer Reviews 'Analysis Marriott County Hall vs Hiltom Bankside

MANAGEMENT RESPONSE				
Hilton's average number of responses	187,25			
Marriott's average number of responses	128,75			
Hilton's average polarity	3,99			
Marriott's average polarity	3,99			
Hilton's 5-star average polarity	4,01			
Marriott's 5-star average polarity	4			
Hilton's 4-star average polarity	3,97			
Marriott's 4-star average polarity	3,98			

Table 61 – Management Response's analysis average polarities

Source: Own elaboration

Table 62 – Clusters 'average polarities of Management Response's analysis

Management Response's Clusters: Hotels			
+ Polarity Average: Events; Acknowledgment; Services; Hotel/Brand			
- Polarity Average: Facilities; Food&Beverage ID			

Management Response's Clusters: 4-star hotels

+ **Polarity Averages:** Acknowledgment (Hilton's); Events (Marriott's)

- Polarity Averages: Facilities (the only similar in every hotel analysis)

Processes; Food&Beverage (Hilton's); Others (Marriott's)

Management Response's Clusters: 5-star hotels

+ **Polarity Averages:** Events (Hilton's); Products/Services (Marriott's)

- Polarity Averages Processes; Subsequent Personalized Assistance; ID (Marriott's)

Table 63 - Clusters 'average polarities of Consumer Reviews and Management Responses 'analysis

	Clusters					
Consum	Consumer Reviews		Response			
+ Polarity Averages	- Polarity Averages	+ Polarity Averages	- Polarity Averages			
Staff	Processes	Events	Facilities			
Location	Complementary	Acknowledgment	Food&Beverage			
	Products/Services	Products/Services	ID			

	4-star Clusters					
Consume	· Reviews	Management Response				
+ Polarity Averages	- Polarity Averages	+ Polarity Averages	- Polarity Averages			
Staff Location	Processes	Acknowledgment (Hilton's); Events (Marriott's)	Facilities; (único similar em todos) Processes; Food&Beverage (Hilton's); Others (Marriott's)			

	5-star Clusters				
Consume	r Reviews	Management Response			
+ Polarity Averages	- Polarity Averages	+ Polarity Averages	- Polarity Averages		
Events Location	Processes	Events (Hilton´s); Products/Services (Marriott´s)	Processes; Subsequent Personalized Assistance (<5 num dos hóteis – Hilton's); ID (Marriott's)		