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Evolution of communication policies at luxury hotels and their influence on guest ratings

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ABSTRACT

Strategies for responding to online reviews, particularly their evolution over time, represent an important and scarcely analysed topic in hospitality research. To address this gap, we analysed the evolution of response policies over 2010–2018 and their impact on hotels' online ratings. We analysed 82,025 reviews and 57,164 responses on TripAdvisor for 5-star hotels in the Canary Islands (Spain). The results showed an upward trend in the volume of responses given by hotels, which seem to be increasingly concerned about communication with their guests. Second, based on their level of commitment to their online communications (low, moderate or high), the evidence showed that high and moderately involved hotels had relatively unchanged policies, whereas low-involvement hotels tended to improve their policies. Third, the findings showed some connectivity between communication policy level and affiliation to chains, the geographical span of the chain, guest traveller type and the reviewers' experience level. However, no significant correlation was found between hotel size and communication policies. Finally, the results indicated that a positive relationship exists between hotel communication policies and the ratings given by reviewers, suggesting that effort put into communication policies is not in vain, and that even low-involvement policies are positively evaluated by guests.

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Introduction

The advent of online travel platforms has given hotel managers a new communication channel with customers through which to learn about their opinions as well as to respond to them. The impact of guest online reviews and e-WOM have been widely analysed in recent literature. Studies have been undertaken into the link between social media and hotel strategic performance factors such as reputation (Proserpio & Zervas, 2017; Rose & Blodgett, 2016; Xie et al., 2014), RevPAR (Kim et al., 2015; Xie et al., 2014; Xie, Kwok, et al., 2017; Xie, So, et al., 2017), customer satisfaction (Gu & Ye, 2014; Min et al., 2015; Xiang et al., 2015; Xu, 2019), customer trust (Sparks et al., 2016; Wei et al., 2013), re-visit intentions (Xiang et al., 2015), booking intentions (Leung et al., 2015; Mauri & Minazzi, 2013; Tsao et al., 2015) and intention to spread e-WOM (Leung et al., 2015; Xie et al., 2016).

Hotels have been observed to have become more proactive on social media in terms of management responses (Xie, So, et al., 2017); however, there is little empirical evidence to support this

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evolution. To advance knowledge in this field, the present study analyses the evolution over almost a decade of management response policies to customer online reviews of luxury hotels. Luxury hotels were chosen as a study context as guests expect higher standards of service, given their differentiated offer (Chathoth et al., 2014).

The objectives are to identify the different response policies of hotels for managing online reviews, the evolution of the response policies over 2010–2018 and their impact on hotels' online ratings. Communication policies (onwards CPs) are analysed in terms of response rate, response delay, the management level of the responder, length of response and response frequency, considering the influence of hotel size, hotel chain affiliation, guest traveller type and reviewers' experience level.

This study contributes by extending previous analyses in several respects. The originality of the operational proposal is based on its measurement of CP using a set of indicators that provide comparable overall evaluations both within the sector itself, and over time, and allows an evaluation of their impact on hotels' online ratings. Empirically, the study analyses responses to all review types, regardless of the satisfaction levels expressed. Most previous works, such as Levy et al. (2013), Sparks and Bradley (2017) and Min et al. (2015), focused on clients who reported low satisfaction (negative reviews). Second, the analysis covered a long time period, from 2010 to 2018; very few empirical studies (Proserpio & Zervas, 2017; Xie et al., 2016; Xie, Kwok, et al., 2017; Xie, So, et al., 2017) have taken similar approaches. Third, most studies have used partial samples of hotels (Kim et al., 2015; Lee & Blum, 2015; Levy et al., 2013; Xie et al., 2016; Xie, Kwok, et al., 2017; Xie, So, et al., 2017), while we analysed all the luxury hotels in a top global destination, the Canary Islands (Spain), which counted 15.1 million international tourist arrivals in 2019.

Studying hotel response strategies to online customer reviews is one of the main research needs in the field of online hospitality-based communications due to their impact on product development, hotel–guest relationships, corporate reputation and economic performance (Vignal Lambret & Barki, 2018). Similarly, to generalize the results of previous empirical research to the global hotel industry, it is necessary to extend the search for evidence to diverse tourist destinations and products (Mariani et al., 2019). Thus, this study contributes to the literature on hotels' managerial response strategies in travel websites.

Literature review

Travel platforms that feature two-way communications between guests and hotel managers can be read by potential future guests. The information allows potential consumers to become aware of the weaknesses and strengths of hotels, which can help them form realistic expectations about future stays before they make their purchase decisions. It has been shown that the satisfaction of customers who posted reviews that received no responses, and who observed that others did receive responses, was significantly negatively impacted (*'peer-induced fairness'*) (Gu & Ye, 2014). On the other hand, Xu et al. (2020) found that when managers responded to online reviews this encouraged other customers to post reviews.

Hotel managers are progressively playing a more active role in online communications by managing responses to guests' reviews (Gu & Ye, 2014; Levy et al., 2013; Liu et al., 2021; Xie et al., 2014; Xie, Kwok, et al., 2017; Xie, So, et al., 2017). This two-way communication established through social media influences customer attitudes and hotel performance (Chen et al., 2019; Li et al., 2018; Proserpio & Zervas, 2017; Sparks et al., 2016; Xu et al., 2020; Zhang et al., 2019).

Scholars have analysed how managers have designed online management response strategies (Chevalier et al., 2018; Lee et al., 2017; Lee & Blum, 2015; Levy et al., 2013; Rose & Blodgett, 2016; Sparks & Bradley, 2017; Xie, Kwok, et al., 2017; Xie, So, et al., 2017). Their contradictory findings establish that, yet the research has not determined if there is any consistent response pattern, even among hotels with similar characteristics (brand, class, size).

Thus, in hospitality context, it will be important to obtain a clear and objective view of how response management policies are developing to determine their potential for improvement.

The review of the literature about managerial responses in hospitality shows that the key variables of hotel response strategies are delimited by their positive effects on hotel performance. Understanding these key factors in online communication strategies is basic for analysing the evolution of the management response strategies of upscale hotels in the context of travel sites.

Response rate

A key variable in the online communication strategies of hotels is the intensity with which managers address their customers' comments (volume of responses). The empirical evidence shows a positive relationship between response rates and hotels' online ratings and, consequently, hotel performance (Kwok & Xie, 2016; Xie, Kwok, et al., 2017).

The service recovery literature (Lee & Song, 2010) suggests that negative online reviews indicate customers' dissatisfaction with service; thus, it is critical to respond to negative online reviews to address service recovery issues, as well as to exert an impact on customer satisfaction and customer retention (Xie, So, et al., 2017). In addition, good response rates may prevent readers of negative reviews from drawing unfounded negative inferences (Sparks et al., 2016; Sparks & Bradley, 2017). The management of negative and biased online comments is particularly important to hotel managers due to their impact on image and sales (Xie, Kwok, et al., 2017).

Thus, in comparison to a defensive attitude (denying responsibility) or inaction, a more proactive strategy ('accommodative'), which involves some apology, compensation or corrective action, favours the creation of relationships of trust with customers and facilitates the restoration of the company's image (Lee & Song, 2010). Similarly, Leung et al. (2013) found that an agile and constructive response to negative comments can limit the impact of negative feedback on customer trust. Besides, the effectiveness of response strategies to online communication crises increases if the emotions of the stakeholders involved are considered (Vignal Lambret & Barki, 2018) and if an open, direct and friendly communication style is adopted (Sparks et al., 2016).

Furthermore, a quantitative analysis of management responses is not complete without considering the quality of the responses; this aspect will provide a better understanding of effective management response strategies that *co-create value with consumers* (Xie et al., 2014). It has been shown that the overall success of hotels' social media CPs depends on whether they adopt strategic response perspectives, rather than just providing unplanned responses (Lee et al., 2017). In fact, some empirical evidence has contradicted the general trend, founding that management responses can impact negatively on hotel performance (Lee et al., 2017; Xie et al., 2014). This could be because of the greater salience and visibility of responses to negative reviews and/or because the responses do not sufficiently satisfy the customers' concerns, which can reduce purchase intention (Xie et al., 2014). Moreover, the dynamism of the process may mean that managerial responses stimulate reviewing activity (Chen et al., 2019; Xu et al., 2020), particularly negative comments, because managers respond more and in more detail to negative reviews, and consumers become motivated to comment negatively because that is what really impacts on service quality (Chevalier et al., 2018).

In summary, hotels face a challenge in using online reviews, in conjunction with clients, to co-create value in the service experience. Hotels that frequently respond consider online reviews to be reliable indicators of customer sentiment, whereas infrequent responders believe that reviews represent only extreme views (positive or negative). While customers' reviews are considered useful to identify and solve problems, very few hotels integrate them into their strategic approaches towards building ongoing customer relationships and in co-creating the service experience (Park & Allen, 2013).

Response delay

Levy et al. (2013) and Xie, Kwok, et al. (2017) argued that a key factor is the speed of managerial response, particularly to negative reviews. Similarly, Leung et al. (2013) found that responding

promptly and constructively to negative comments can dispel rumours by restoring trust in the tourism company or destination.

In addition, the speed of the hotel response to satisfied guests' reviews affects guest trust and increases their loyalty (booking intention) and their willingness to pay (Xie, Kwok, et al., 2017). It was shown that *full-service hotels* and *above-average hotels* pay special attention to providing timely responses to guests' online comments. Xu et al. (2020) found that frequency and speed of response are associated with receiving more reviews and higher ratings.

Sparks et al. (2016) highlighted the importance of responding within a week, particularly to negative reviews. A delay in response of more than 30 days reduces the hotel's capacity to build or restore guests' trust. However, they found no significant differences in the effects of delays of between one or seven days. They suggested that future research might determine the period that most potential customers consider acceptable. Specifically, Xie, So, et al. (2017) found that when the average rating of online reviews increases, delayed responses that addressed repeated topics had a reduced impact on hotel performance.

Profile of the responder

Research into the role of the person who responds to online reviews is scarce and contradictory. However, it is anticipated that this factor can have a significant influence on hotels' communication strategies. (Lee & Blum, 2015; Levy et al., 2013; Sparks et al., 2016; Sparks & Bradley, 2017; Xie, Kwok, et al., 2017; Xie, So, et al., 2017).

Sparks et al. (2016) found that the source of the response did not make a significant difference in potential consumers' inferences about the hotel's trustworthiness. Potential customers might perceive the job position of the responder as a cue from which to draw favourable perceptions, such as to their credibility, empowerment and expertise. Nevertheless, these authors did not find a significant moderating effect of 'source of response' (general manager vs. guest service agent) on the relationship between hotel responses to negative reviews and customer inferences about trust and the extent to which hotels care about their customers.

In the case of unsatisfied customers, the responder's position or status in the organization might play an important role. Levy et al. (2013) analysed managerial responses to those online comments that contained the most frequent types of guest complaint. They found that several hotel response strategies were influenced by the level of management control over the complaint; thus, the responder's job position in the hierarchy was seen to be important for the hotel's ability to respond adequately to complaints.

In the same way, Xie, Kwok, et al. (2017) and Xie, So, et al. (2017) analysed the influence of two different levels of responder, executives vs. functional staff. They found that consumers do not necessarily appreciate responses from management in executive positions. Rather, consumers are more likely to perceive responses made by functional staff as more relevant, less generic and more helpful in their decision-making.

Xie, Kwok, et al. (2017) showed that hotel class influenced response strategies and their effect on hotel performance. Unexpectedly, their results showed that for lower-class hotels, executives' (e.g. general managers) responses were more effective, whereas for higher-class hotels, responses from the front-line managers were more effective.

The profile of the responder varies considerably between hotels based on their organizational structure. Lee and Blum (2015) analysed hotel response patterns and categorized eight positions based on speed and frequency of response.

Length of the response

There is no consensus about whether a shorter or longer online response positively influences customer satisfaction or hotel performance.

Xie, So, et al. (2017) found that the length of response was positively associated with hotels' future financial performance, which suggests that in making their booking decisions consumers are likely to positively evaluate the length of the online responses. Nonetheless, faced with a large volume of consumer reviews, managers might prefer not to provide lengthy responses. However, Xie, Kwok, et al. (2017) returned a contrary result, that is, longer responses were associated with a decrease in lower-class hotels' income. However, this negative effect turned positive for above-average and luxury hotels. This result suggests that, although providing lengthy responses may be important for high-class hotels, for lower category hotels concise responses may be more effective.

The length of the online review may influence the length of the response. Proserpio and Zervas (2017) argued that reviews only slightly longer than a tweet may evoke only a low rate of management responses. However, some consumers might prefer to read reviews/responses with shorter and simpler sentences (Kwok et al., 2017), that is, short and simple sentences in the hotel's online responses might increase the readability of the message and, in turn, influence consumer satisfaction and hotel image. Particularly in negative scenarios, it is reasonable to expect managers to prioritize lower ratings and longer textual reviews when responding to unsatisfied customers. Furthermore, it has been shown that managers write longer responses to longer reviews (Liu & Ji, 2019). Generally, the use of longer responses might suggest that the hotel's online communication managers take these consumers' feedback more seriously, and thus are seen to make greater efforts in responding to the review, which could have an impact on customer trust and satisfaction. Min et al. (2015) argued that being empathetic and paraphrasing the review (to maximize personalization) in a response to a negative comment can cause potential guests to evaluate the response more favourably than simply providing an impersonal and generic response.

Attendance frequency

In the hospitality sector, more frequent responses (e.g. daily) are seen to be more personal and less generic. On the contrary, establishments with low response frequency based on a cumulative policy (e.g. answering once a week/month) are more likely to be seen as providing more generic and impersonal responses, which could influence their image and customer satisfaction (Min et al., 2015). Liu et al. (2021) found that responses with standard content or repeated phrases discourage subsequent customers from posting reviews, specifically, positive reviews.

Park and Allen (2013) identified organizational characteristics that differentiate two opposing management responses strategies: managers who respond regularly to online reviews vs. those that respond infrequently (i.e. rarely, or never). The two different managerial approaches were associated with different communication styles. On the one hand, managers who respond frequently tend to accept the accuracy of the reviews, take advantage of the information posted on online reviews to solve problems and strategically coordinate with other operational and management staff (e.g. the use of internal vs external staff to handle social media). On the other hand, those who do not answer frequently do not accept the accuracy or honesty of the reviews and tend to assume that review accuracy is difficult to judge or is unknown due to the extremely positive or negative review sentiments expressed.

The literature establishes differences in managerial response frequency according to the platform used. For example, Proserpio and Zervas (2017) found that managerial response frequency on TripAdvisor is higher than on Expedia, where reviews are less salient.

Thus, response frequency may represent a key factor in online response policies because it determines the 'opportunity' for hotels to respond, that is, whether reviewers obtain timely or untimely responses.

Data and methodology

The sample consists of all the reviews for 5-star hotels in the Canary Islands over the period 2010–2018 published by TripAdvisor. Of these 82,025 reviews, 57,164 (69.7%) received feedback from hotel

managers. In addition to the review's text and the response of the hotel if any, we have collected the review's date, the response's date, the sort of traveller and the reviewer's level according to TripAdvisor classifications. Moreover, for each hotel, we get information about their number of rooms and their affiliation to a chain. The data collection was performed using a self-developed computer program to extract data from the TripAdvisor website. From this database, for each hotel and each year of the analysed period, we have calculated the five indicators used to evaluate the communication policy commitment level (onwards CPCL) of each establishment and the value of the control variables explained later.

Regarding the indicators which define the CP, the response rate is calculated as the frequency of reviews replied to over the total number of reviews received in a year; the response delay is calculated as the number of days between review and response; the profile of the responders is calculated as the frequency of responses signed by the hotel director or a high-level executive over the total number of responses done in a year; the length of the response ratio is calculated as the quotient between the length of the response versus the length of the review; the response frequency is calculated as the number of dates on which reviews are posted versus the number of days when responses are provided.

To assess social media CP and its evolution, a two-stage procedure is followed. In the first stage, a univariate descriptive analysis was performed; in this stage, the proposed indicators were grouped to measure the CPCL, that is, how committed the establishment was to its communications on online platforms, and it is analysed the evolution and consistency of the CP to identify if hotel features impacted on perceptions of the hotel's level of commitment.

Secondly, the analysis measures if CPs impacted on the overall average ratings of hotels, considering a set of control variables that previous literature suggests may influence rating: hotel size (Radojević et al., 2017), chain affiliation (Banerjee & Chua, 2016; Gao et al., 2018), reviewer profile (e.g. experience) (Gao et al., 2018; Radojević et al., 2017) and guest type (Banerjee & Chua, 2016; Radojević et al., 2017).

Regarding the first stage, most indicators of CP showed high dispersion; in addition, they were measured on a variety of scales with no obvious benchmarks to provide the most desired values. To aggregate this diverse information, we replaced the original values of the indicators by their corresponding quartiles by expressing each observation value in relation to the other observation values in the corresponding year. On the assumption that all the indicators are equally important, they were aggregated to arrive at a single value for each establishment, which achieved a minimum value of 5 when all the five indicators were in the first quartile (valued at one), and a maximum value of 20 when all the five indicators were in the fourth quartile (valued at four). This aggregation allowed a classification of the establishment into three levels of commitment: low (10 or less), moderate (between 11 and 15) and high (16 or more); a fourth category tagged as none/zero was assigned to hotels that did not respond to any reviews. Thus, the level of commitment is not defined by reaching a certain threshold in each variable but evaluated as a whole.

To achieve the second stage, a set of linear regression models are designed to evaluate the impact of the CP on the overall rating given by reviewers to the hotel. As the CPCL could seem somewhat arbitrary in terms of the regression analysis, we also used two other measures to evaluate the CPCL, named 'quartile ranking' and 'rank ranking'. In this way, two ordered list of hotels from best to worst are done, and this order is used, in the regression models, as an explanatory variable in substitution of the CPCL. To set the 'quartile ranking' variable, we use as order criteria the sum of quartiles of each indicator. Thus, the hotel which has the higher value in this sum is the first in the list and the rest are ordered so on. To set the 'rank ranking' variable, an ordered rank is done for each indicator and the sum of all those ranks is used as order criteria. In this case, the hotel which has the lower value in this sum is the first in the list and the rest are ordered so on. Once each ordered list is built, the corresponding variable takes value one for the first hotel in the list, two for the second and so on; a value of $n + 1$ (where n is the number of hotels operating CP) is assigned when the hotels have not CP.

Additionally, the regression models consider some control variables that previous literature suggests influence online ratings. Regarding the chain affiliation of the hotel, a categorical variable consisting of four levels (no affiliation, regional, national and international chain affiliation) is used. In relation to guest type, we use the categorization given by TripAdvisor, that distinguishes between solo, couples, with friends, with family and business, and build a categorical variable which classifies hotels based on the most frequent guest type in the hotel, for example, business traveller. As a proxy for traveller experience, we used the level of review experience that the reviewers had on TripAdvisor, the levels going from 1 (low experience) to 6 (high experience). In turn, the hotels were classified based on the predominant reviewer's experience level, for example, level-2 reviewer. Hotel size is the variable that generates more controversy, there is no consensus about how hotel should be classified by their size, measured as number of rooms. Considering that, Briggs et al. (2007) recognized the need to classify hotel size as a function of number of rooms, geographical region and the average size of the hotels in the region or country. And considering that the Canary Islands' tourism sector is mainly oriented towards beach-and-sun mass tourism and, accordingly, the hotels are generally large, specifically the average rooms per hotel in the sample is 284. Thus, in the analysis, we considered two alternatives: (1) the official UNWTO (2018) classification (small hotels: less than 25 rooms; medium size hotels: 25–99 rooms; large hotels: 100 or more rooms) and (2) a classification adjusted to the region which, moreover, is in line with the views of some practitioners (small hotels: 100 or fewer rooms; medium hotels: 101–300 rooms; large hotels: more than 300 rooms).

Results

A preliminary analysis of the data show that the number of hotels that responded to guest reviews increased from 18% in 2010 and 63% in 2011–98% in 2017 (see Table A in supplementary material). The response rate increased steadily mainly in the four first years analysed, growing from 20% in 2010–88% in 2018. There was also an improvement in the response delay statistic; in 2010 only 3% of the responses were posted the day after the review was posted, whereas in 2018 this percentage increased to 33%. Thus, as a first conclusion, it can be said that although the number of reviews has grown each year (going from an average of 44 reviews per hotel in 2010, to a maximum of 317 in 2016) and, therefore, the resources needed to address them were greater, the hotels made efforts to give feedback to most of the reviews and by responding quicker each year.

There were almost no significant changes in the responder profile during the period; the great majority of the responses were signed by a hotel director or communications manager. It is worthwhile to mention that except for the first year in the period, the average length ratio was close to one (slightly over in 2016 and 2017), thus, in general, the hotels tended to match the length of their responses to the length of the reviews. On the other hand, the trend of the response ratio was irregular, although a fall since 2015 can be detected; thus, for example, in 2018 for each day that hotels provided a response, consumers posted reviews on 2.3 days.

In summary, in general, in 2010, active CPs were operated by very few hotels, but more began to operate them over the period. Moreover, each year, the hotels responded to more reviews and faster. Moreover, preliminary descriptive analysis shows that most firms followed a moderate policy (see Table B in supplementary material)

The average values of the indicators for each CPCL are significantly different (see Table C in supplementary data). Thus, it can be concluded that the proposed classification into levels is robust and that the hotels are adequately differentiated. The best average values are achieved by the hotels classified as highly committed to their CPs, even at the end of the period, by which time most hotels had already introduced CPs and increased their CPCL. Thus, focusing on the data for the last year of the period, the policy of highly involved hotels was to respond within 3 days to 98% of the reviews posted, with a response length equal to that of the review, 92% being written by high-level managers who address the task every 1.3 days. Moderately involved hotels, in 2018, on average, responded within 8 days to the 92% of the reviews with slightly shorter answers; a high-

level representative answered 95% of reviews every 2 days. Finally, low-involvement hotels took about 11 days to respond to 72% of their reviews, at a proportionate length of 8 words to each 10 words posted by the customer; 80% of the answers were given by high-level managers, and the hotels dedicated one day in every four to answer the customers.

During the analysed period, on average, highly involved hotels took 1.7 days less to answer than did moderately involved hotels and responded 17% more than did moderately involved hotels.

To evaluate the consistency of the CPs over time, we calculated transition matrices for one-year and five-year periods. The one-year transition matrices indicate what percentage of hotels improved, maintained or worsened in the implementation of their policies compared to the previous year; the rows show the policy level achieved in the previous year and the columns the policy level achieved in the current year. Similarly, the five-year transition matrices analyse the change in a five-year period. Thus, 8 one-year transition matrices and 5 five-year transition matrices (overlapping subperiods) were calculated, and the results averaged to arrive at an overview of the entire period (see Table D in supplementary material).

On average, for the whole period, 27.6% of hotels improved their CPs in the following year, 56% of hotels maintained their policies in the following year and 16.4% of hotels worsened in the implementation their policies. In the medium-term (5 years) a large percentage of highly involved hotels deteriorated to moderate policies, perhaps because they followed the same operative strategies whereas their competitors improved their strategies, that is, doing the same was no longer enough, and they became left behind. On average, for the whole period, taking the 5-year ranges, 50% of hotels improved their policies, 33% of hotels maintained their policies and 17% worsened their policies.

At this point, it would be interesting to identify if CPCLs are affected by hotel features. A chi-square test indicated that there was some dependency between CPCL and (1) chain affiliation (p -value:0.01193), that is, hotels with no affiliations are more likely to operate high or medium-level CPs than are affiliated hotels; (2) the geographical span of the chain (p -value:0.02308), specifically, hotels belonging to international chains are less likely to operate CPs than are national chains or unaffiliated hotels; (3) guest traveller type (p -value: 0.002331), the differences identified between hotels mostly reviewed by business travellers and hotels mostly reviewed by families, the proportion of hotels with no policy being greater when the majority of their guests are travelling on business. And (4) reviewers' experience (p -value: 0.003686), a lesser proportion of hotels with level-3 guests operate CPs than do hotels with a majority of more experienced reviewers. There was no significant relation between hotel size and their CPCLs.

On the other hand, a Kruskal test found a relationship between the number of reviews per room and CPCL (p -value $< 2.2 \times 10^{-16}$), and a Dunn test showed differences between having no policy and having any level of CP (p -value:0.0000), with the reviews per room being lower for hotels with no CPs than for hotels with CPs.

Finally, to assess if the efforts made by hotels in their CPs are perceived by customers and, thus, reflected in terms of satisfaction as measured by the ratings reviewers gave the hotels, six regression models were estimated to evaluate accurately the impact of CPs on the overall ratings of the hotels.

Regarding the rating, results show that the more involved the hotel is, the higher, on average, is its rating both in the year in which the policy was implemented and the following year (columns (1) and (2), Table 1). To put these results in context, we calculated the variation with respect to the contemporary overall average rating (column (3), Table 1), and the results indicated that highly involved hotels show a rating 0.150 points above the average, whereas hotels with no policies at all had ratings 0.188 points below the average.

In relation to changes in CPs, the one-year ahead variation (Table 1, column (4)) strongly reflects when CPs improve, and the value is double that when the CP is only maintained; but when a policy worsens, against expectations this does not lower the rating, although the change is insignificant (0.001).

Kruskall and post-hoc Dunn tests showed significant statistical differences (p -value < 0.0003) in the average overall ratings between all the comparison pairs of CPCL, except for hotels with low-

Table 1. Impact of CPCL and changes in CPs on ratings.

	(1)	(2)	(3)		(4)
High	4.55	4.56	0.150	Improve	0.017
Moderate	4.42	4.44	0.013	Maintain	0.006
Low	4.39	4.37	-0.018	Worsen	0.001
None	4.12	4.22	-0.188		

(1) average contemporary rating; (2) average one-year ahead rating; (3) contemporary difference from overall annual average; (4) one-year ahead variation.

and moderate-involvement levels. The differences in ratings are always in favour of more involved against less-involved policies, as shown in Table 1. When the average ratings for one-year ahead are analysed, there was also no significant difference between operating no policies and operating low-level policies, and significant differences in the rest of the pairwise comparisons (p -value < 0.0003). With respect to contemporary differences over the annual averages, the pairwise comparisons were statistically significant (p -value < 0.0003), that is, there were differences between having no policy and having a low-level involvement policy, and between operating a moderate and low-level policy; thus, the only significant differences were between having high-level CPs and the other conditions. Finally, the one-year variations in ratings based on changes in CPs were significant in terms of improving and worsening policies (p -value:0.0089).

In summary, the results seem to indicate that there is a relationship between overall online ratings and online CPs, and that it changes over time. To assess to what extent the CPCL affects the rating, we define four regression models. The dependent variable is the current rating for models 1a and 1b to evaluate the immediate effect of CPCL on rating, and the one-year ahead rating for models 2a and 2b to evaluate the short-term effect of CPCL. The main independent variable is the CPCL and as control variables, the models consider: sort of chain affiliation (CHAIN), the predominant guest traveller type (GUEST), the predominant experience of the reviewers (EXPE) and the hotel size. The way in which hotel size is measured gives rise to the models named as 'a' (UNWTO's thresholds are used to classification) (SIZE_U) and 'b' (our proposed thresholds based on the average size of the hotels in the sample are used) (SIZE_S). Taking all this into consideration, the following regression models are analysed:

$$\text{Model 1.a: } Rating_{it} = \beta_0 + \sum_{p=2}^4 \beta_{1p} LCP_{itp} + \sum_{q=2}^4 \beta_{2q} CHAIN_{itq} + \sum_{r=2}^3 \beta_{3r} GUEST_{itr} + \sum_{s=3}^6 \beta_{4s} EXPE_{its} + \sum_{u=2}^3 \beta_{5u} SIZE_U_{itu} + \varepsilon_{it}$$

$$\text{Model 1.b: } Rating_{it} = \beta_0 + \sum_{p=2}^4 \beta_{1p} LCP_{itp} + \sum_{q=2}^4 \beta_{2q} CHAIN_{itq} + \sum_{r=2}^3 \beta_{3r} GUEST_{itr} + \sum_{s=2}^6 \beta_{4s} EXPE_{its} + \sum_{u=2}^3 \beta_{5u} SIZE_S_{itu} + \varepsilon_{it}$$

$$\text{Model 2.a: } Rating_{it+1} = \beta_0 + \sum_{p=2}^4 \beta_{1p} LCP_{itp} + \sum_{q=2}^4 \beta_{2q} CHAIN_{itq} + \sum_{r=2}^3 \beta_{3r} GUEST_{itr} + \sum_{s=3}^6 \beta_{4s} EXPE_{its} + \sum_{u=2}^3 \beta_{5u} SIZE_U_{itu} + \varepsilon_{it+1}$$

$$\text{Model 2.b: } Rating_{it+1} = \beta_0 + \sum_{p=2}^4 \beta_{1p} LCP_{itp} + \sum_{q=2}^4 \beta_{2q} CHAIN_{itq} + \sum_{r=2}^3 \beta_{3r} GUEST_{itr} + \sum_{s=3}^6 \beta_{4s} EXPE_{its} + \sum_{u=2}^3 \beta_{5u} SIZE_S_{itu} + \varepsilon_{it+1}$$

where i indicates the hotel; t indicates the analysed year and the subscript of the summation indicates the category of each qualitative explanatory variable. For each of the traits considered, dichotomous variables have been defined that take the value 1 if the hotel has the attribute and 0 otherwise. The reference categories in all the estimated models are, respectively: 'no policy at all', 'no affiliation at all', 'couple travellers', 'level-2 reviewer' and 'small'.

The results of the regression (Table 2) using a generalized lineal model suggest that the hotel CPCL is significant for both current and one-year ahead ratings, in that the greater the involvement of the hotel, the better the rating it achieves. Thus, adopting a high-level involvement CP increases ratings over hotels with no policy by about 0.3 points in-year, and by about 0.27 one-year ahead.

On other hand, it is also significant if the hotel belongs to a national chain; these receive poorer ratings than independent hotels by about 0.4 points. In relation to guest type, hotels where business guests are predominant received lower ratings than hotels where couples' guests are by about 0.8 points in the same year, and almost 1.1 points for the following year. However, the predominant experience level was not significant in explaining the ratings.

Finally, it was found that hotel size is more relevant when measured using thresholds adapted to the reality of the market than when the standard UNWTO classification is used. Taking the UNWTO size classification, medium-sized hotels had a significantly higher rating than small-sized hotels (0.26 for current rating, and 0.36 for one-year ahead rating). Using the adapted thresholds, the results suggested that medium-sized and large-sized hotels received significantly lower ratings than small-sized hotels and that larger hotels are more poorly rated than medium.

To reinforce the robustness of the results, a final analysis was performed; in a regression analysis, the proposed classifications were substituted by two rankings, as explained in the methodology section. In this case, the models with adapted size and contemporary ratings are shown; model 3 substitutes the rankings developed from the quartiles (QR), and model 4 the rankings developed from individual rankings (IR).

$$\text{Model 3: } Rating_{it} = \beta_0 + \beta_1 QR_{it} + \sum_{q=2}^4 \beta_{2q} CHAIN_{itq} + \sum_{r=2}^3 \beta_{3r} GUEST_{itr} + \sum_{s=3}^6 \beta_{4s} EXPE_{its} + \sum_{u=2}^3 \beta_{5u} SIZE_{itu} + \varepsilon_{it}$$

Table 2. Regression results.

	Current year				One-year ahead			
	Model 1a		Model 1b		Model 2a		Model 2b	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
Intercept	4.1898	0.0000	4.4222	0.0000	4.2459	0.0000	4.5587	0.0000
<i>CPCL</i>								
No policy (reference category)								
Low-level	0.1928	0.0000	0.1926	0.0000	0.1150	0.0162	0.1143	0.0192
Medium-level	0.2402	0.0000	0.2393	0.0000	0.1951	0.0000	0.2003	0.0000
High-level	0.3163	0.0000	0.3226	0.0000	0.2614	0.0000	0.2715	0.0000
<i>Chain affiliation</i>								
No affiliation (ref. category)								
International	-0.0597	0.1290	-0.0702	0.0755	-0.0492	0.2289	-0.0632	0.1279
National	-0.4129	0.0000	-0.4083	0.0000	-0.4717	0.0000	-0.4580	0.0000
Regional	-0.0708	0.1271	-0.0709	0.1295	-0.0809	0.0926	-0.0797	0.1035
<i>Predominant traveller</i>								
Couple traveller (ref. category)								
Business	-0.8532	0.0000	-0.8209	0.0000	-1.0948	0.0000	-1.0618	0.0000
Family	0.0331	0.3969	0.0387	0.3285	0.0198	0.6268	0.0244	0.5585
<i>Predominant experience</i>								
Level-2 reviewer (ref. category)								
Level-3	0.1007	0.0227	0.1071	0.0168	0.0224	0.6252	0.0294	0.5308
Level-4	0.0950	0.1228	0.0930	0.1336	0.0593	0.3461	0.0553	0.3881
Level-5	-0.1386	0.1238	-0.1678	0.0621	0.1643	0.1018	0.1402	0.1687
Level-6	0.1806	0.0832	0.1597	0.1281	0.0610	0.5719	0.0376	0.7318
<i>Hotel size</i>								
Small (reference category)								
Large (UNWTO)	-0.0747	0.4298			-0.0081	0.9335		
Medium (UNWTO)	0.2621	0.0087			0.3581	0.0005		
Large (sample)			-0.3233	0.0000			-0.3313	0.0000
Medium (sample)			-0.2906	0.0000			-0.3135	0.0000
Adjusted R-squared	0.3617		0.3526		0.3523		0.3300	

$$\text{Model 4: } Rating_{it} = \beta_0 + \beta_1 IR_{it} + \sum_{q=2}^4 \beta_{2q} CHAIN_{itq} + \sum_{r=2}^3 \beta_{3r} GUEST_{itr} + \sum_{s=3}^6 \beta_{4s} EXPE_{its} + \sum_{u=2}^3 \beta_{5u} SIZE_{itu} + \varepsilon_{it}$$

The results in Table 3 suggest that the proposed CPCL classification is supported and reliable. The estimated parameters of the control variables show similar values to those in Table 2 for the equivalent model 1b in the statistically significant variables.

Discussion, conclusions and implications

The CPCL measured through the responses to guest reviews has never previously been analysed in the present way. We identify the different response practices of hotels when managing online reviews, their evolution over the time, and the impact of CPs on the hotels' ratings.

Communication policy

Hotels in the sample are each year more concerned about their online communication with guests, making efforts to give feedback to most of the reviews and by responding quicker each year. They dedicate personnel with high profile, giving responses balanced in size to the reviews and, in general, devote on average one day a week to respond to the reviewers. Moreover, there is a significant change in the adoption of CPs by hotels. In 2010, very few hotels operated active CPs, but more began to operate them over that decade.

Likewise, a robust classification of CPs typologies is obtained, where hotels are adequately differentiated. Hotels classified as highly involved to their CPs achieve the best average values, even in 2018, by which time most hotels had already introduced CPs and increased their CPCL. Their CP is characterized by a high-level manager to respond to almost the totally of the reviews posted, within 3 days, with a response length equal to the length of the review and to address the task

Table 3. Alternative regression models.

	Model 3		Model 4	
	Estimate	p-value	Estimate	p-value
Intercept	4.7213	0.0000	4.7215	0.0000
<i>CP</i>				
Quartile Ranking	-0.0041	0.0001		
Rank Ranking			-0.0041	0.0001
<i>Chain affiliation</i>				
No affiliation (reference category)				
International	-0.0951	0.0205	-0.0939	0.0223
National	-0.4569	0.0000	-0.4520	0.0000
Regional	-0.0854	0.0787	-0.0840	0.0838
<i>Predominant traveller</i>				
Couple traveller (reference category)				
Business	-0.8987	0.0000	-0.8989	0.0000
Family	0.0511	0.2138	0.0541	0.1878
<i>Predominant experience</i>				
Level-2 reviewer (reference category)				
Level-3	0.1492	0.0014	0.1500	0.0013
Level-4	0.0759	0.2387	0.0771	0.2313
Level-5	-0.2134	0.0229	-0.2129	0.0232
Level-6	0.1463	0.1809	0.1437	0.1885
<i>Hotel size</i>				
Small (reference category)				
Large (sample)	-0.3485	0.0000	-0.3493	0.0000
Medium (sample)	-0.2935	0.0000	-0.2975	0.0000
Adjusted R-squared	0.2942		0.2943	

every 1.3 days. Such a response rate is considered by previous literature a key factor in the online CP, due to its direct impact on customer satisfaction and prevention of negative inferences on readers (Kwok & Xie, 2016; Sparks et al., 2016; Xie, Kwok, et al., 2017; Xie, So, et al., 2017). Likewise, the response speed (much less than a week) is optimal for hospitality, positively influencing guest loyalty, review volume and rating (Xie, Kwok, et al., 2017; Xu et al., 2020). Consistently with Liu and Ji (2019), the correspondence between the length of responses and reviews might suggest that the hotel seriously considers guests' interaction. Comparatively, on average, highly involved hotels took 1.7 days less to answer and responded 17% more than did moderately committed hotels.

Regarding the evolution of hotels' CPCL, short-term policies are relatively stable for high and moderately involved hotels, whereas low- and no-involvement hotels, on average, tended to improve their CPs. Hotels with no policies, on average for the overall period, mostly maintained their position. In the range of five-years ahead, most of moderate hotels maintained their levels and most no-policy and low-involvement hotels improved by developing moderate CPs.

Finally, we have delimited if CPCLs are affected by additional factors. In this sense, findings showed some connectivity between CPCL and chain affiliation, predominant guest traveller's type and reviewers' experience. However, no significant correlation was found between hotel size and CPs. Specifically, hotels with no chain affiliations are more likely to operate high or medium-level CPs than affiliated hotels. Moreover, hotels belonging to international chains are less likely to operate CPs than are national chains. With respect to traveller type, hotels with no CP have mostly business guests. Finally, hotels with the most of the more experienced reviewers show more advanced CPs.

Impact on hotel's online rating

To show the effectiveness of adopting and improving the online CP, we evaluate its impact on guests' satisfaction, measured by the score that reviewers give to the hotel on platforms. Results show a positive relationship between online CPs and ratings. Operating CPs has an immediate effect, given that reviews and responses are available on platforms without delay, and that there are also effects over time, at least in the short term. High-involved hotels should get better ratings than hotels with less-involved and no policies. Moreover, changes in CPs for the better will cause an increase in hotel ratings in the following year. Thus, from the rating point of view, it is worth dedicating effort to CPs.

As no previous study has examined how hotels' CPs and CPCL relate to their online ratings, the results of the present study can only be discussed in relation to model variables analysed by previous researchers. Banerjee and Chua (2016) and Gao et al. (2018) found that independent hotels receive higher ratings than chain hotels. Consistently, Ariffin and Maghzi (2012) concluded that expectation levels for hospitality are influenced by affiliation to a chain. Guests expect that hotels belonging to recognisable brands will offer better services, thus there is a greater propensity to experience discontent and give them lower ratings. Our analysis confirmed these results but suggested that rating differences are significant only in chains with a national geographical scope. In line with Liu et al. (2021), our results suggested that independent hotels are more concerned with developing high and moderate CPCLs than are affiliated hotels, especially those belonging to international chains. This is consistent with OECD (2008), which reported that Spanish small independent hotels try to differentiate themselves from affiliated hotels by increasing their levels of hospitality and avoiding the more impersonal environment of large chains.

Banerjee and Chua (2016) found that business travellers give, on average, lower ratings than other guest types, and couples and families give higher ratings. Radojević et al. (2017) and Gao et al. (2018) concluded that business travellers give lower overall ratings than holiday travellers. However, Ariffin and Maghzi (2012) found that expectation level of hotel hospitality is influenced by the purpose of the stay and that vacationers have higher expectations than those who stay for business. In this sense, it could be interpreted that it is easier to disappoint the former and, therefore, their ratings

will be lower than those of business guests. Our results are consistent with those of Banerjee and Chua (2016) and Radojević et al. (2017), that is, hotels with mostly business guests receive poorer ratings than hotels which mostly attract couples. These results, however, are not determinant as they also showed that hotels with mostly business guests mainly operate no CPs, so part of the impact on ratings could be due to the absence of a CP.

Radojević et al. (2017) and Gao et al. (2018) found that highly experienced reviewers give lower overall ratings; however, we cannot confirm this result, due to the reviewer's experience is not a significant variable in the proposed models in explaining rating.

With respect to hotel size, Radojević et al. (2017) found that a higher number of rooms was associated with poorer ratings; however, Martín-Fuentes (2016) found that a number of rooms were not related to customer satisfaction. Ariffin and Maghzi (2012) found that the smaller the hotel, the more it should focus on the level of its hospitality, given that there is a moderate association between hotel size and guests' expectations of hotel hospitality. Briggs et al. (2007) also found that hospitality is more important for small hotels. Thus, it could be argued that the smaller the hotel, the more efforts they should put into their CPs, although Ariffin and Maghzi (2012) suggested that the association between hotel size and hospitality is not strong, due to other factors such as chain affiliation. Our results confirm those of Radojević et al. (2017), but Briggs et al. (2007) and Ariffin and Maghzi (2012) suggested that increasing hospitality is a key factor for small hotels, whereas our results do not indicate that small hotels differ from medium and large in their CPs; as Ariffin and Maghzi (2012) suggested, it is likely that affiliation to a chain is the cause of that relation.

Summarizing, the findings show an upward trend in hotels' concern about online communication with guests. Dependency between CP and chain affiliation, geographical span, traveller type and reviewers' experience are contrasted. However, results do not indicate that hotels size influences their CPs. Also, a perspective of how CPs and the hotel's CPCL might be related to their online ratings is offered. Specifically, a positive relation between CP and both the contemporary and the next-year rating are shown.

Managerial implications

Evidence allows us to propose recommendations for hospitality managers in terms of CP. Results validate the proposed indicators, the methodology used to aggregate the information to provide a unique value and the thresholds used to define the three-level classification and provide useful information to hotel managers. Given the upward trend in responses to guest online comments last years, managers should dedicate senior-level human resources to this task, give quick responses, balanced in size with the comments received and formally schedule the responses. Specifically, hotels that show greater involvement with online CPs, measured by response rate, response delay, responder profile, response length and frequency, will obtain better ratings and more satisfied clients in the short term.

Limitations and future research

The present study has some limitations that further research could mitigate. First, CPs are analysed in terms of response rate, delay in response, who responds, length of response and frequency. Considering the heterogeneity of organizational management, it is likely that these indicators do not represent a full list. Researchers are encouraged to verify the set proposed and include other factors that might influence the success of hotel CPs. Second, this study focuses exclusively on 5-star hotels in the Canary archipelago, so future research could extend the analysis to other geographic regions and to more hotel categories. Finally, in addition to hotel size, chain affiliation, guest type and level of reviewer, researchers might employ other variables (e.g. gender, age, nationality) to analyse their influence on hotels' online ratings.

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References

- Ariffin, A. A. M., & Maghzi, A. (2012). A preliminary study on customer expectations of hotel hospitality: Influences of personal and hotel factors. *International Journal of Hospitality Management*, 31(1), 191–198. <https://doi.org/10.1016/j.ijhm.2011.04.012>
- Banerjee, S., & Chua, A. Y. K. (2016). In search of patterns among travellers' hotel ratings in TripAdvisor. *Tourism Management*, 53, 125–131. <https://doi.org/10.1016/j.tourman.2015.09.020>
- Briggs, S., Sutherland, J., & Drummond, S. (2007). Are hotels serving quality? An exploratory study of service quality in the Scottish hotel sector. *Tourism Management*, 28(4), 1006–1019. <https://doi.org/10.1016/j.tourman.2006.08.015>
- Chathoth, P. K., Ungson, G. R., Altinay, L., Chan, E. S. W., Harrington, R., & Okumus, R. (2014). Barriers affecting organisational adoption of higher order customer engagement in tourism service interactions. *Tourism Management*, 42, 181–193. <https://doi.org/10.1016/j.tourman.2013.12.002>
- Chen, W., Gu, B., Ye, Q., & Zhu, K. X. (2019). Measuring and managing the externality of managerial responses to online customer reviews. *Information Systems Research*, 30(1), 81–96. <https://doi.org/10.1287/isre.2018.0781>
- Chevalier, J. A., Dover, Y., & Mayzlin, D. (2018). Channels of impact: User reviews when quality is dynamic and managers respond. *Marketing Science*, 37(5), 688–709. <https://doi.org/10.1287/mksc.2018.1090>
- Gao, B., Li, X., Liu, S., & Fang, D. (2018). How power distance affects online hotel ratings: The positive moderating roles of hotel chain and reviewers' travel experience. *Tourism Management*, 65, 176–186. <https://doi.org/10.1016/j.tourman.2017.10.007>
- Gu, B., & Ye, Q. (2014). First step in social media: Measuring the influence of online management responses on customer satisfaction. *Production and Operations Management*, 23(4), 570–582. <https://doi.org/10.1111/poms.12043>
- Kim, W. G., Lim, H., & Brymer, R. A. (2015). The effectiveness of managing social media on hotel performance. *International Journal of Hospitality Management*, 44, 165–171. <https://doi.org/10.1016/j.ijhm.2014.10.014>
- Kwok, L., & Xie, K. L. (2016). Factors contributing to the helpfulness of online hotel reviews: Does manager response play a role? *International Journal of Contemporary Hospitality Management*, 28(10), 2156–2177. <https://doi.org/10.1108/IJCHM-03-2015-0107>
- Kwok, L., Xie, K. L., & Richards, T. (2017). Thematic framework of online review research A systematic analysis of contemporary literature on seven major hospitality and tourism journals. *International Journal of Contemporary Hospitality Management*, 29(1), 307–354. <https://doi.org/10.1108/IJCHM-11-2015-0664>
- Lee, H., & Blum, S. C. (2015). How hotel responses to online reviews differ by hotel rating: An exploratory study. *Worldwide Hospitality and Tourism Themes*, 7(3), 242–250. <https://doi.org/10.1108/WHATT-03-2015-0016>
- Lee, Y. J., Xie, K., Besharat, A., & Tan, Y. (2017). *Management responses to online reviews: Helpful or detrimental?* ICIS 2017: Transforming society with digital innovation (Seoul, December 10th- 13th). Proceedings. 3. <http://aisel.aisnet.org/icis2017/DataScience/Presentations/3>
- Lee, Y. L., & Song, S. (2010). An empirical investigation of electronic word-of-mouth: Informational motive and corporate response strategy. *Computers in Human Behavior*, 26(5), 1073–1080. <https://doi.org/10.1016/j.chb.2010.03.009>
- Leung, D., Law, R., van Hoof, H., & Buhalis, D. (2013). Social media in tourism and hospitality: A literature review. *Journal of Travel & Tourism Marketing*, 30(1-2), 3–22. <https://doi.org/10.1080/10548408.2013.750919>
- Leung, X. Y., Bai, B., & Stahura, K. A. (2015). The marketing effectiveness of social media in the hotel industry: A comparison of Facebook and Twitter. *Journal of Hospitality & Tourism Research*, 39(2), 147–169. <https://doi.org/10.1177/1096348012471381>
- Levy, S. E., Duan, W., & Boo, S. (2013). An analysis of one-star online reviews and responses in the Washington, DC, lodging market. *Cornell Hospitality Quarterly*, 54(1), 49–63. <https://doi.org/10.1177/1938965512464513>
- Li, C., Cui, G., & Peng, L. (2018). Tailoring management response to negative reviews: The effectiveness of accommodative versus defensive responses. *Computers in Human Behavior*, 84, 272–284. <https://doi.org/10.1016/j.chb.2018.03.009>
- Liu, S., Wang, N., Gao, B., & Gallivan, M. (2021). To be similar or to be different? The effect of hotel managers' rote response on subsequent reviews. *Tourism Management*, 86, 104346. <https://doi.org/10.1016/j.tourman.2021.104346>

- Liu, W., & Ji, R. (2019). Do hotel responses matter?: A comprehensive perspective on investigating online reviews. *Information Resources Management Journal*, 32(3), 70–89. <https://doi.org/10.4018/IRMJ.2019070104>
- Mariani, M. M., Borghia, M., & Gretzel, U. (2019). Online reviews: Differences by submission device. *Tourism Management*, 70, 295–298. <https://doi.org/10.1016/j.tourman.2018.08.022>
- Martin-Fuentes, E. (2016). Are guests of the same opinion as the hotel star-rate classification system? *Journal of Hospitality and Tourism Management*, 29, 126–134. <https://doi.org/10.1016/j.jhtm.2016.06.006>
- Mauri, A. G., & Minazzi, R. (2013). Web reviews influence on expectations and purchasing intentions of hotel potential customers. *International Journal of Hospitality Management*, 34, 99–107. <https://doi.org/10.1016/j.ijhm.2013.02.012>
- Min, H., Lim, Y., & Magnini, V. P. (2015). Factors affecting customer satisfaction in responses to negative online hotel reviews: The impact of empathy, paraphrasing, and speed. *Cornell Hospitality Quarterly*, 56(2), 223–231. <https://doi.org/10.1177/1938965514560014>
- OECD. (2008). *Tourism in OECD countries 2008: Trends and policies. Chapter 2: Globalisation, SMEs and Tourism Development*.
- Park, S.-Y., & Allen, J. P. (2013). Responding to online reviews: Problem solving and engagement in hotels. *Cornell Hospitality Quarterly*, 54(1), 64–73. <https://doi.org/10.1177/1938965512463118>
- Proserpio, D., & Zervas, G. (2017). Online reputation management: Estimating the impact of management responses on consumer reviews. *Marketing Science*, 36(5), 645–665. <https://doi.org/10.1287/mksc.2017.1043>
- Radojević, T., Stanisić, N., & Stanić, N. (2017). Inside the rating scores: A multilevel analysis of the factors influencing customer satisfaction in the hotel industry. *Cornell Hospitality Quarterly*, 58(2), 134–164. <https://doi.org/10.1177/1938965516686114>
- Rose, M., & Blodgett, J. G. (2016). Should hotels respond to negative online reviews? *Cornell Hospitality Quarterly*, 57(4), 396–410. <https://doi.org/10.1177/1938965516632610>
- Sparks, B. A., & Bradley, G. L. (2017). A “Triple A” typology of responding to negative consumer-generated online reviews. *Journal of Hospitality & Tourism Research*, 41(6), 719–745. <https://doi.org/10.1177/1096348014538052>
- Sparks, B. A., So, K. K. F., & Bradley, G. L. (2016). Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tourism Management*, 53, 74–85. <https://doi.org/10.1016/j.tourman.2015.09.011>
- Tsao, W.-C., Hsieh, M.-T., Shih, L.-W., & Lin, T. M. Y. (2015). Compliance with eWOM: The influence of hotel reviews on booking intention from the perspective of consumer conformity. *International Journal of Hospitality Management*, 46, 99–111. <https://doi.org/10.1016/j.ijhm.2015.01.008>
- UNWTO. (2018). *European Union tourism trends*. <https://www.e-unwto.org/doi/book/10.18111/19789284419470>.
- Vignal Lambret, C., & Barki, E. (2018). Social media crisis management: Aligning corporate response strategies with stakeholders’ emotions online. *Journal of Contingencies and Crisis Management*, 26(2), 295–305. <https://doi.org/10.1111/1468-5973.12198>
- Wei, W., Miao, L., & Huang, Z. J. (2013). Customer engagement behaviors and hotel responses. *International Journal of Hospitality Management*, 33(1), 316–330. <https://doi.org/10.1016/j.ijhm.2012.10.002>
- Xiang, Z., Schwartz, Z., Gerdes, J. H., & Uysal, M. (2015). What can big data and text analytics tell us about hotel guest experience and satisfaction? *International Journal of Hospitality Management*, 44, 120–130. <https://doi.org/10.1016/j.ijhm.2014.10.013>
- Xie, K., Kwok, L., & Wang, W. (2017). Monetizing managerial responses on TripAdvisor: Performance implications across hotel classes. *Cornell Hospitality Quarterly*, 58(3), 240–252. <https://doi.org/10.1177/1938965516686109>
- Xie, K. L., So, K. K. F., & Wang, W. (2017). Joint effects of management responses and online reviews on hotel financial performance: A data-analytics approach. *International Journal of Hospitality Management*, 62, 101–110. <https://doi.org/10.1016/j.ijhm.2016.12.004>
- Xie, K. L., Zhang, Z., & Zhang, Z. (2014). The business value of online consumer reviews and management response to hotel performance. *International Journal of Hospitality Management*, 43, 1–12. <https://doi.org/10.1016/j.ijhm.2014.07.007>
- Xie, K. L., Zhang, Z., Zhang, Z., Singh, A., & Lee, S. K. (2016). Effects of managerial response on consumer eWOM and hotel performance: Evidence from TripAdvisor. *International Journal of Contemporary Hospitality Management*, 28(9), 2013–2034. <https://doi.org/10.1108/IJCHM-06-2015-0290>
- Xu, X. (2019). Examining the relevance of online customer textual reviews on hotels’ product and service attributes. *Journal of Hospitality & Tourism Research*, 43(1), 141–163. <https://doi.org/10.1177/1096348018764573>
- Xu, Y., Li, H., Law, R., & Zhang, Z. (2020). Can receiving managerial responses induce more user reviewing effort? A mixed method investigation in hotel industry. *Tourism Management*, 77, 103982. <https://doi.org/10.1016/j.tourman.2019.103982>
- Zhang, Z., Li, H., Meng, F., & Li, Y. (2019). The effect of management response similarity on online hotel booking: Field evidence from Expedia. *International Journal of Contemporary Hospitality Management*, 31(7–8), 2739–2758. <https://doi.org/10.1108/IJCHM-09-2018-0740>