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Corporate Facebook and stakeholder engagement

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Abstract

Purpose – The purpose of this paper is to provide an initial assessment of corporate Facebook use by Spanish hotel chains. Two aspects are considered: communication activity and stakeholder engagement through this social media platform.

Design/methodology/approach – Based on a content analysis, data on 109 Spanish hotel chains are collected to describe current practices and identify significant relationships among different variables.

Findings – The main findings include that their Facebook presence, audiences and levels of activity are positively related to hotel size, while stakeholder engagement is higher in small hotel chains and seems to be influenced by content and media types.

Originality/value – This research contributes to previous research by providing an assessment of corporate Facebook in the hospitality industry (Spanish hotel chains). The paper considers two aspects: communication activity and stakeholder engagement through this social media platform.

Keywords Internet, Communications technologies, Management information systems, Information technology, Social networks

Paper type Research paper

Introduction

Social media are changing the communication strategies of companies (Lai and Li, 2005; Mangold and Faulds, 2009; Men and Tsai, 2013) because they facilitate a more dynamic and interactive way to communicate that is leading to larger stakeholder engagement (Avery *et al.*, 2010; Leung and Bai, 2013; Li and Shiu, 2012; Lim and Palacios-Marques, 2011; Mangold and Faulds, 2009; Men and Tsai, 2013). Among social media platforms, Facebook is the most widely used (Arenas-Gaitan *et al.*, 2013). It was founded in 2004 and as of March 2013 it had 1.11 billion users (15.82 percent of the world's 2012 population) with a 32.85 percent increase over March 2012 (Internet World Stats, 2011; Facebook.com, 2013). In the business field, 92 percent of companies use Facebook and 80 percent use Twitter (Stelzner, 2013) and according to Leung and Bai (2013), 75 percent of the world's hotels use social media (65 percent Facebook) for marketing purposes.

Companies may use social media platforms such as Facebook, Twitter and YouTube to interact with their stakeholders by establishing a two-way communication protocol (Bonsón and Flores, 2011; Hsu, 2012; Lee *et al.*, 2012). These communication protocols allow them to achieve greater stakeholder engagement and loyalty (Wang and Fesenmaier, 2004) and provide a better image of the company, which ultimately lead them to increase their

online reputations (de Moya and Jain, 2013) and consequently their revenues (Bonsón and Flores, 2011; Hsu, 2012). In addition, social media are tools to understand and better adapt to a customer's preferences (Dellarocas, 2003). In fact, it is estimated that the number of companies using social media to interact with customers will grow rapidly by 2015-2018 (Schniederjans et al., 2013).

The hospitality industry, and more concretely hotels, may benefit from such tools to build relationships, generate conversations by listening and answering customers and other stakeholders' opinions and stimulate dialogue and engagement (Drury, 2008; Chan and Guillet, 2011; Leung and Bai, 2013). This dynamic, equal to equal, interaction among stakeholders and companies can lead to more permanent relationships and larger participation for all interested parties (Botan, 1997; Brodie et al., 2011, 2013; de Moya and Jain, 2013). It also gives users the possibility to co-create content, which can affect how consumers choose products to buy and company reputation (de Moya and Jain, 2013; O'Connor, 2008; Owyang and Toll, 2007).

A number of researchers highlight the need to conduct more studies about social media in the tourism industry (Leung et al., 2013; Line and Runyan, 2012). More concretely, some of them indicate the need to analyze how the tourism sector is applying these tools (Williams et al., 2011; Dwivedi et al., 2012; Line and Runyan, 2012). Regarding Facebook, Kwok and Yu (2013) underline that in spite of its great interactive capability (Ellison et al., 2007), only a few studies analyze the posts that hospitality companies publish on their Facebook pages. Moreover, de Moya and Jain (2013) point out the need to analyze the type of communication taking place on Facebook within the tourism industry. Similarly, Leung and Bai (2013) also indicate the need for hotel companies to know how these social media are currently being used as a communication tool. These authors note that understanding user engagement in social media is of great importance to assess the effectiveness of social media communication.

By contributing to a better understanding of social media usage in the field of hospitality, in this study we focus on Facebook because, as stated above, it is the most widely used social media platform in the world, and we focus on Spanish hotel chains because Spain ranks second in international tourism destination rankings. This decision is also based on a previous study of Spanish hotels' corporate web sites in which it is reported that nearly 75 percent of them provide a link to their Facebook pages (Escobar-Rodríguez and Carvajal-Trujillo, 2013).

Beyond that data, nothing is known about how these pages are being used, their activity levels, audiences, the content types of posts, prevalent media types, if there is a real interaction on the stakeholder side, whether they are engaging through Facebook or not, the engagement levels or the factors influencing this, and this is precisely the gap we aim to fill herein. Consequently, the objectives of this research are: to assess the current use of Facebook by Spanish hotel chains as a communication and interaction engagement tool; and to identify the main factors influencing Facebook presence, audience, activity and engagement levels. In this way, we can gain more insights into whether social media are indeed increasing stakeholder participation and whether it is possible to predict future developments in corporate Facebook use in the hotel industry.

The remainder of the paper is organized as follows. In the next section, we provide an overview of the related literature. In the subsequent section, we set out the methodology followed in this study. We continue by presenting the data analysis, results and discussion sections. Finally, we draw our conclusions and discuss implications for future work.

Literature review

Social media are Web 2.0 tools that companies can use to interact with their stakeholders for engagement and relationship building (Waters *et al.*, 2009). Social media allow real time, multimedia, efficient communications at low cost through a variety of global platforms such as Facebook, Google+, Twitter, YouTube and blogs (Mangold and Faulds, 2009). Social media offer tourism and hospitality companies new channels to report about their brands, product updates and different news for customers and other stakeholders (Schmallegger and Carson, 2008). On the other hand, customers can express their feelings on these messages by means of attached comments or shares. Leung *et al.* (2013) review all social media-related research articles published in academic journals during 2007-2011, based on a content analysis in the tourism and hospitality fields, from both consumers' and suppliers' perspectives. They collect and identify these articles from three of the most popular and largest online databases and search engines: Science Direct (www.sciencedirect.com), EBSCOHost (http://search.ebscohost.com) and Google Scholar (http://scholar.google.com.hk). They report that supplier-related studies have concentrated closely on promotion, management and research functions, highlight the strategic importance of social media for tourism competitiveness and identify the need to develop metrics to analyze the effectiveness of social media communications.

The most widely used social media platforms by companies are Facebook and Twitter (Stelzner, 2013). This is also the case for the hospitality industry (Leung and Bai, 2013) and for Spanish hotel chains (Escobar-Rodríguez and Carvajal-Trujillo, 2013). More concretely, as reported by Leung and Bai (2013), Facebook is the platform with the highest number of studies conducted. The main focus of these papers has been the study of Facebook and Twitter in hotels (Chan and Guillet, 2011; Hsu, 2012; Leung and Bai, 2013; Leung *et al.*, 2015), restaurants (Dholakia and Durham, 2010; Gil-Or, 2010; Kwok and Yu, 2013), festivals (Lee *et al.*, 2012), countries (de Moya and Jain, 2013) and national tourism organizations (NTOs) (Stankov *et al.*, 2010). However, as noted by Kwok and Yu (2013), just a few of them have focussed on stakeholder communication and engagement, which according to Kumar *et al.* (2010) has to be measured.

As indicated above, the majority of the papers published are about Facebook (Hsu, 2012; Kwok and Yu, 2013; Dholakia and Durham, 2010; Gil-Or, 2010; Lee *et al.*, 2012; de Moya and Jain, 2013; Stankov *et al.*, 2010), while others analyze both Facebook and Twitter (Leung and Bai, 2013; Leung *et al.*, 2015) and just one includes additional social media platforms (Chan and Guillet, 2011). All these papers are discussed below.

Hsu (2012) conducts a qualitative investigation of the current use of Facebook, as an international e-marketing tool, based on its usage by six large luxury hotels in Taiwan. He analyzes the following aspects: antiquity of the Facebook account, Facebook presence, amount and quality of content, web site links, mission, aesthetics and visual quality, network scope and reach as number of fans, comments from foreign fans, interaction quality (hotel fans and among fans themselves) and finally the use of language. As a conclusion, the study highlights the Chinese language as a limiting factor in spreading the message virally to international leisure travelers and suggests that the use of other language support options can enhance hotels' international e-marketing via Facebook. Additionally the study remarks that the analyzed hotels need to focus on content and post generated engagement because this does not always happen.

Kwok and Yu (2013) analyze what types of social media messages work best for 12 restaurant brands. They find that conversational messages gain more likes and comments on Facebook than sales and marketing messages. Additionally, by dividing

the messages into four media types (status, URL link, video and photo), it was found that photo and status receive more likes and comments than the other two categories. Finally, they report that the cross-effects of media type and message type affect the number of comments a message receives. The number of shares is not considered because at the time of the study Facebook had not implemented this option, so they suggest this for further research.

Dholakia and Durham (2010) create a Facebook page to promote a bakery and coffee chain and find that once customers became Facebook fans they increase their visits to the facilities and generate more word-of-mouth than non-Facebook fans. Gil-Or (2010) reports that post virality on a restaurant Facebook page positively affects the number of fans. Lee *et al.* (2012) adopts an extended technology acceptance model to explain how social media marketing influences attitudes toward Facebook event pages. They find that stakeholders' emotions exhibited on Facebook have a significant impact on the perceived usefulness, perceived ease of use and perceived enjoyment of such social media marketing.

By adopting Aaker's (1997) framework, de Moya and Jain (2013) explore how popular tourist destinations, Mexico and Brazil, communicate their brand personalities through Facebook and which personality traits their fans associate with them. The results indicate that both countries emphasize distinct brand personality traits. However, Mexico's public relations efforts are more successful than Brazil's in transferring its projected brand personality to its Facebook fans.

Stankov *et al.* (2010) analyzes the official presence on Facebook of European NTOs and to what extent they use basic Facebook user-generated content (pages and groups). Besides the insignificant Facebook presence (about 50 percent), it was found that NTOs do not use all the advantages offered by user-generated content.

Leung and Bai (2013) apply motivation, opportunity and ability theory and the concept of involvement to explore travelers' behaviors on hotel social media pages. They conduct an online survey using the Facebook and Twitter pages of a hotel brand and find that traveler motivation and opportunity have positive relationships with their social media involvement, which positively affects their intention to revisit pages. Interestingly, these relationships were no different between Facebook and Twitter, suggesting that hotel managers can adopt the same marketing strategy in different social media channels.

The study of Leung *et al.* (2015) analyzes the marketing effectiveness of Facebook and Twitter in the hotel industry. The study proposes a theoretical model integrating the attitude-toward-the-ad model with the concepts of attitude-toward-social-media-pages. The results show that customers' social media experiences influence their attitudes toward social media sites, which in turn influences their attitudes toward hotel brand, booking intentions and electronic word-of-mouth. The study also indicated that both platforms demonstrate the same marketing effectiveness.

Finally, Chan and Guillet (2011) investigate the extent to which social media marketing is being utilized in the Hong Kong hotel industry. The marketing performance of 67 hotels in Hong Kong on 23 social media sites, including Facebook and Twitter, is evaluated according to 18 criteria adapted from past studies (Teo, 2005; Waters *et al.*, 2009). They also use the five phases of the digital marketing framework proposed by Kierzkowski *et al.* (1996): attracting, engaging, retaining, learning and relating. The results indicate that marketing efforts are focussed mainly on Facebook, that hotels generally do not use social media to learn about customers and that there is a lack of customer interaction or engagement.

From this literature review, it can be seen that further research about Facebook activities and stakeholder engagement in the hotel industry is needed. In fact, the

measurement of the engagement generated by social media is one of the most relevant topics as noted by de Moya and Jain (2013), Kumar *et al.* (2010) and Leung and Bai (2013). Engagement means interaction and participation and indicates that two-way communication is going on. It creates permanent links among companies and their customers (Kumar *et al.*, 2010; Men and Tsai, 2013). Kumar *et al.* (2010) define customer engagement as the interaction that customers keep with the company, and they note that such engagement must be understood from a strategic point of view by examining customers as well as stakeholders.

In this paper, we focus on two aspects that are not covered by previous studies: an in-depth analysis of communication activity in the hotel industry and stakeholder engagement through social media platforms. The other distinguishing features of our paper include the use of a set of engagement metrics specifically designed for Facebook (Bonsón and Ratkai, 2013), the largest hotel sample ever used and the representativeness of Spanish hotel chains because Spain ranks very high in international tourism destination rankings.

Methodology

Research objectives

Hotel chains seem to be integrating Facebook into their communication strategies (Leung and Bai, 2013). Its use is calling the attention of the academic community (Leung and Bai, 2013). Facebook allows two-way communication with stakeholders, which brings about interaction (Mangold and Faulds, 2009) and engagement (Avery *et al.*, 2010; Li and Shiu, 2012; Men and Tsai, 2013). Moreover, some of them have already integrated stakeholders' feedback into their organizational processes (Gorry and Westbrook, 2011). This highlights the need for the further study of existing practices as well as understanding the relationships between the different variables involved such as the size of the hotel, the level of activity that takes place, the number of fans and the degree of engagement given the managerial implications involved.

This leads us to the following research questions:

RQ1. Do Spanish hotel chains use Facebook as a communication and engagement channel?

RQ2. If so, how active are they and how large are their audiences?

RQ3. What kind of content is prevalent?

RQ4. What are the most frequently used media types?

RQ5. How are stakeholders engaging through this social media platform?

RQ6. What is the average stakeholder's mood?

RQ7. Is there a relationship between channel activity and stakeholder engagement?

RQ8. What factors influence activity and engagement levels?

Measurements

The audience of a Facebook page is measured through the number of fans and its activity by means of the number of posts. Bonsón and Ratkai (2013) propose a set of metrics to assess corporate Facebook pages as communication and user engagement tools. These metrics allow for the comparison of different companies with their competitors and the establishment of industry benchmarks. In the development of these metrics, the theories

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of dialogue and stakeholders were considered. According to them, the quantity of feedback from stakeholders on Facebook can be measured using three topics: popularity, commitment and virality. Popularity is measured by means of the number of "likes." Commitment refers to the number of "comments." Virality shows the effectiveness of viral messages, which is measured according to the number of "shares" (Table I).

Sampling and data collection

The empirical analysis is focussed on Spanish hotel chains. As mentioned previously, this research aims to analyze the level of Facebook development in principal Spanish hotel chains and to identify significant relationships among the size of the hotels, their Facebook presence, audience, activity and engagement levels.

The sample for this study was chosen from a list of hotel chains published by Hosteltur in 2012. There were 109 Spanish hotel chains ranked by the number of guestrooms, which was taken as a proxy for the size of the hotel chain (Schegg *et al.*, 2002; Bai *et al.*, 2007; Essawy, 2007; Garau-Vadell and Orfila-Sintes, 2008), based on the assumption that the larger the hotel chain, the more resources it could devote to running better Facebook pages. We analyzed the audience and activity of these hotel chains on Facebook during the final quarter of 2012. We counted the number of posts during this period as well as the number of likes, comments and shares per post. We also identified different categories of content and media types and classified the comments expressing positive, negative or neutral sentiments about the hotel.

Following Bai *et al.* (2007), we randomly chose 15 hotel chains from the list to conduct a pilot test. The results of the pilot test were compared and discussed among the authors to achieve consensus for the subsequent data collection. To ensure accuracy in the data collection process, three mutually exclusive random lists of hotel chains were generated and each of the three authors was assigned one of the lists. Each author visited their assigned hotel chain Facebook pages to collect the items of data. According to Lee and Morrison (2010), we used a fourth evaluator, a research assistant in charge of the whole data collection process, to compare the scores given by each author-evaluator. Next, the results obtained by the authors and the fourth evaluator were compared to identify possible discrepancies in the application of the criteria. Data were then collected by our research assistant from the existing Facebook pages (93.58 percent) of the hotel chains in the sample.

Popularity	
P1 Number of posts liked/total posts	Percentage of posts that have been liked
P2 Total likes/total number of posts	Average number of likes per post
P3 (P2/number of fans)×1,000	Average number of likes per post per 1,000 fans
Commitment	
C1 Number of posts commented on/total posts	Percentage of posts that have been commented on
C2 Total comments/total posts	Average number of comments per post
C3 (C2/number of fans)×1,000	Average number of comments per post per 1,000 fans
Virality	
V1 Number of posts shared/total posts	Percentage of posts that have been shared
V2 Total shares/total posts	Average number of shares per post
V3 (V2/number of fans)×1,000	Average number of shares per post per 1,000 fans
Engagement	
E P3+C3+V3	Stakeholder engagement index

Table I.
Metrics for stakeholder engagement

Results and discussion

Descriptive analysis

It was found that nearly 83 percent of Spanish hotel chains are using Facebook, at least as a one-way communication tool, although with different intensities in terms of their activity. This means that they are making greater use of Facebook than the average of hotels worldwide, 65 percent, reported by Leung and Bai (2013). It also indicates that there is a growing trend of Facebook usage in Spanish hotels compared with those of 2012 reported by Escobar-Rodríguez and Carvajal-Trujillo (2013). In Table II, the main descriptive statistics for the 90 hotels that were actively using Facebook are summarized.

As can be seen, the values that yield different variables vary widely. Therefore, we found hotels with very small audiences and others with more than 250,000 fans. The activity of the hotels is also very uneven. There are hotels that during the three months under review posted only one post, while others were very active and posted on a daily basis. The engagement levels achieved by the Spanish hotel chains were also very different ranging from 0 to 100 percent. On average, 89.5 percent (P1) of the wall posts were liked, 42.7 percent (C1) were discussed and 31 percent (V1) were shared. The average number of likes per post (P2) was nearly 32 and the average number of comments and shares per post (C2 and V2) was almost three. Expressed in relative terms, namely according to the number of fans, this result became 47 (P3), 2.5 (C3) and 3.9 (V3), thus generating an average engagement level as defined by Bonsón and Ratkai (2013) of 54 likes/comments/shares per post per 1,000 fans. The fact that the highest levels of participation were achieved in the dimension of popularity, above commitment and virality, may be because it is easier and faster to press the like button than writing a comment as well as it is more impersonal than a share, which is shown in the user's timeline.

Over the period considered, we analyzed 4,895 posts, spread among all 90 active hotels, according to the classification proposed by Bonsón and Ratkai (2013). Results are summarized in Table III.

It can be seen that marketing-related content constitutes the basis of the information provided by Spanish hotel chains through Facebook (55.4 percent). On the other hand, information about different aspects of corporate social responsibility (CSR) is scarce, just 12 percent of posts, even though the supply of this kind of information can increase stakeholders' confidence in the hotel chain (Theunissen and Noordin, 2012), which in turn contributes to creating value and competitive advantage for the company. This finding

	Min.	Max.	Average	SD
Size (rooms)	1,019.00	77,996.00	5,969.36	11,715.46
Audience	61.00	271,806.00	13,538.94	39,437.21
Activity	1.00	176.00	54.38	43.34
P1	0.20	1.00	0.89	0.17
P2	0.00	586.45	31.47	86.10
P3	0.33	2,350.00	47.62	283.87
C1	0.00	1.00	0.42	0.29
C2	0.00	25.47	2.82	4.82
C3	0.00	68.72	2.48	9.53
V1	0.00	0.99	0.30	0.27
V2	0.00	49.27	2.96	7.99
V3	0.00	216.18	3.89	24.48
Engagement	0.43	2,634.90	54.01	317.24

Table II.
Descriptive statistics

Content type	Photo	Photo album	Text	Video	Combined	Total (% of posts)
			Media type			
CSR1: environmental issues	81	3	1	4	34	123 (2.5)
CSR2: social/human resources/career issues	109	28	7	4	50	198 (4.0)
CSR3: financial reporting/ transparency issues	30	3	2	0	28	63 (1.3)
CSR4: governance	112	8	11	6	69	206 (4.2)
MKT: marketing/ selling/products	1,576	194	107	83	750	2,710 (55.4)
CS: customer support/customer service	182	0	24	1	142	349 (7.1)
Other	596	46	145	107	352	1,246 (25.5)
Total (% of posts)	2,686 (54.9)	282 (5.8)	297 (6.1)	205 (4.2)	1,425 (29.1)	4,895 (100)

Table III.
Content and media type analysis

clearly indicates that Spanish hotel chains are using Facebook mainly to communicate with current or potential customers. However, our findings show a more balanced content strategy than the one reported by Kwok and Yu (2013), 73 percent marketing vs 27 percent conversational. Finally, we have to recognize the difficulty of comparing the findings on post content because of the different categories used. Thus, it would be desirable for future studies to normalize and expand these categories (Kwok and Yu, 2013).

Regarding media types, photo is the most used by Spanish hotels on Facebook (54.9 percent). Sometimes, they post a sequence (album) of photographs instead (5.8 percent). It was striking to observe how the video and text formats are less frequently used. Finally, 29.1 percent of the posts analyzed utilize combined formats. These findings are partly different to those reported by Kwok and Yu (2013) in which text posts are more frequently used than photos, but their sample referred to restaurants, instead of hotels, and perhaps different communication strategies can explain these differences.

The 4,895 analyzed posts received 17,279 comments, which were classified into three categories: positive (8,530 comments), negative (307 comments) and neutral (7,839 comments). The value of a comment is rated as positive when the stakeholder shows a favorable opinion to the post and when the opinion is unfavorable it is rated as negative; otherwise, it is considered to be neutral. Stakeholder comments that had been deleted by the hotel's social media or community manager were 603. Most stakeholder comments are positive (49.4 percent) or neutral (45.4 percent). Only 1.8 percent of them may be classified as negative, 5.2 percent including those that were deleted. Bonsón and Ratkai (2013) report similar results, although negative comments were slightly higher, 7 percent. Deleted comments are supposed to be negative or inconvenient comments affecting company reputation (Johnson, 2012) and further (real time) research could be conducted to gain a better insight into them.

Statistical analysis
We conducted statistical tests in order to identify significant relationships among the analyzed variables. The first issue tested is whether the active presence of hotels on Facebook is related to their size. There are several reasons that could be put forward for including this relationship in this study. First, large hotels are under greater pressure to provide information because of there being many more actual and potential stakeholders with interests in their evolution on different topics (products, prices, promotions, environment protection, financials, customer support, job offerings, etc.).

It can also be stated that larger hotels are more visible and, consequently, the use of Facebook as a communication channel is almost compulsory. Additionally, larger hotel chains may have larger budgets to manage Facebook communications. As a result, large hotels would have stronger incentives to use Facebook actively. In fact, in their study of the web site strategies of Spanish hotel chains, Escobar-Rodríguez and Carvajal-Trujillo (2013) find a greater number of links to social media channels on the web sites of larger hotel chains.

To assess the differences between Spanish hotel chains using Facebook and those that do not have an active presence, we performed a Kolmogorov-Smirnov z-test to assess the normality of the distribution. No variables were distributed normally ($p < 0.05$). Therefore, a non-parametric Mann-Whitney U-test was used. This test was applied to the 109 hotel chains included in the sample. Table IV presents the mean, minimum, maximum and standard deviations of size (number of rooms) for both active and non-active hotel chains. It also provides the results of the Mann-Whitney U-test.

The obtained results show a significant relation between hotel size and active presence on Facebook, suggesting that active hotels on this social media platform are larger than non-active hotels. This finding is consistent with those reported by Escobar-Rodríguez and Carvajal-Trujillo (2013). As no other studies analyze this relation, it is difficult to reach a generalization beyond the Spanish industry. To assess the other significant relations related to our research questions and given that the variables used do not distribute normally, we conducted a Spearman's rho correlation analysis for 90 active hotel chains. The correlation coefficient results are shown in Table V.

The results show that both audience and activity have a direct significant relationship with hotel size. Larger hotels not only have wider audiences, but also higher activity, as they have a larger budget to develop a communication strategy on Facebook and hence can have people (community managers) to manage this strategy. On the other hand, smaller hotel chains have lower budgets. Additionally, the audience

Hotel chain presence type	Mean (SD)	Min.	Max.	Size		
				U	Mann-Whitney Z	Significance (p)
Non-active ($n = 19$)	1,899.10 (1,268.14)	1,088.00	6,602.00			
Active ($n = 90$)	5,969.36 (11,715.46)	1,019.00	77,996.00			
Total ($n = 109$)	5,259.87 (10,760.13)	1,019.00	77,996.00	497.00	−2.86	0.004**
Note: **$p < 0.01$						

Table IV.
Descriptive statistics of size for hotel chains and Mann-Whitney U-test

	Size	Audience	Activity	Engagement
Size	1			
Audience	0.585**	1		
Activity	0.304**	0.425**	1	
Engagement	−0.296**	−0.475**	−0.380**	1
Note: **Bilateral significance ($p < 0.01$)				

Table V.
Relationship between the different variables

has a positive significant relationship with activity. Indeed, a large audience makes the hotel feel more observed and it attempts to meet such higher information demands by developing a greater presence on Facebook. This may be reflected in the organizational structures of these large hotels, which tend to have specific communication departments staffed with social media experts, who would be responsible for maintaining high levels of activity. These findings do not agree with the results presented by Shuai and Wu (2011), which state that all companies regardless of their size make the same use of internet tools.

There is an aspect that requires our attention, however. The engagement levels of large hotels are lower in relative terms than those obtained by smaller ones. Thus, larger hotels have greater but less engaged audiences. That is, a large part of these audiences does not contribute to the development of Facebook as a bidirectional communication channel. Fans of smaller hotels have higher participation, probably because they feel closer to the company. Greater engagement in smaller hotel chains can be explained by the social integration that takes place because fans in smaller audiences may feel that they are part of the community, that their opinions matter and, therefore, that they can interact more (Daugherty *et al.*, 2008; Men and Tsai, 2013). Brodie *et al.* (2013) also find greater user engagement in small online companies because of the sense of belonging to the group. In larger hotel chains, they may not feel integrated and just use Facebook as a source of information (Men and Tsai, 2013). This is certainly a point that requires the attention of the social media managers of large hotel chains because they must focus some of their efforts on achieving a higher level of engagement. In this sense, we believe that it is necessary to develop engagement strategies that aim to increase user participation in communicating with the company (Men and Tsai, 2013).

Valuable information to act in this direction and achieve higher levels of engagement is to understand whether there is a relationship between media type or post content and the attention they receive from stakeholders measured by the number of "likes," "comments" and "shares." This analysis aims to know which media type and content receive higher levels of engagement. First, we analyze the relationship between the media type of posts and reactions of stakeholders. Table VI summarizes the main descriptive statistics of these relationships.

On average, each analyzed post receives 35.72 likes, 3.53 comments and 3.58 shares. However, these values change substantially depending on media type. For example, while photo album is the format that generates greater engagement levels among stakeholders (156.64+8.60+15.39), the posts with combined formats achieve a very low level (9.52+0.55+0.48). In general, the posts published in formats that require users to spend more time (text, video, combined format) receive less engagement than formats that allow them to grasp the message quickly (photo album, photo). In order to assess whether these differences can be considered to be significant, the Kruskal-Wallis *H*-test was applied (Table VI).

The results show significant relationships between the media type of the post and the reaction of stakeholders. Hence, Spanish hotel chains obtain greater user engagement by means of photo albums and photos. Although video posts further stimulate the senses (de Vries *et al.*, 2012), more time is required to watch them, which may explain why the photo album and photos generate more engagement. Kwok and Yu (2013) also report on the popularity of photo posts but find that status receives more likes and comments than the rest of the categories. The differences between our studies may be because of the different categories used to classify media types and the different industries and countries analyzed.

| Media type | Mean[a] (SD) | Average | χ^2 | Kruskal-Wallis H-test | |
				df	Significance (p)
Likes			764.09	4	0.000**
Photo	39.57 (142.89)	2,839.07			
P. album	156.64 (405.66)	3,273.73			
Video	15.44 (31.07)	2,230.53			
Text	25.82 (122.17)	1,942.76			
Combined	9.52 (29.84)	1,684.05			
Total	35.72 (151.41)				
Comments			448.90	4	0.000**
Photo	4.54 (14.12)	2,672.07			
P. album	8.60 (21.29)	3,016.24			
Video	1.99 (6.81)	2,252.97			
Text	4.96 (13.82)	2,713.42			
Combined	0.55 (1.84)	1,885.93			
Total	3.53 (12.44)				
Shares			310.95	4	0.000**
Photo	4.10 (15.95)	2,604.99			
P. album	15.39 (44.62)	3,002.40			
Video	2.17 (4.79)	2,838.01			
Text	3.54 (20.00)	2,099.59			
Combined	0.48 (3.02)	2,056.89			
Total	3.58 (17.11)				

Notes: [a]Calculated with media type total (Table III last row). **$p < 0.01$

Table VI.
Descriptive statistics
for media type and
engagement and
Kruskal-Wallis
H-test results

Finally, we analyze the relationship between post content and the achieved levels of engagement whose main descriptive statistics are summarized in Table VII.

The results show that posts generating more engagement are those presenting content classified as marketing content. On average, each post reaches 42.81 likes, 4.23 comments and 4.59 shares. The remaining posts are quite far from the interest of users. To contrast these relationships, the Kruskal-Wallis H-test was again applied (Table VII).

As in the previous case, the results show significant relationships between the content of the post and the reaction of stakeholders. As seen in Table III, marketing information constitutes more than 55 percent of the information provided on Facebook by Spanish hotel chains. It, in turn, also generates the most user participation. This finding suggests that users are current and potential customers that use the Facebook page as a source of information and, as noted by de Vries *et al.* (2012), that posts with product information are one of the reasons leading fans to participate in the information provided on social networks. This finding also aligns with the statement by Taylor *et al.* (2011) about people's positive attitudes toward posts with strong informational content. In contrast to our findings, Kwok and Yu (2013) report that marketing posts generate less engagement than conversational posts. As already discussed, the categories used by the two studies are heterogeneous and this prevents adequate comparisons of the results obtained. Thus, it would be desirable to establish a standardized classification of content type to include a sufficient number of categories (Kwok and Yu, 2013).

Media type	Mean[a] (SD)	Average	χ^2	Kruskal-Wallis H-test df	Significance (p)
Likes			68.76	6	0.000**
CSR1	13.59 (31.11)	2,165.45			
CSR2	12.32 (23.53)	2,241.59			
CSR3	26.59 (108.63)	2,210.43			
CSR4	18.90 (41.28)	2,565.61			
MKT	42.81 (176.45)	2,555.74			
CS	18.32 (75.26)	1,976.13			
Other	34.33 (139.13)	2,399.09			
Total	35.72 (151.41)				
Comments			91.08	6	0.000**
CSR1	0.56 (1.64)	1,867.77			
CSR2	1.14 (3.66)	2,119.94			
CSR3	2.86 (8.11)	2,386.59			
CSR4	2.11 (6.23)	2,454.17			
MKT	4.23 (14.50)	2,521.98			
CS	1.26 (6.25)	2,034.38			
Other	3.59 (11.10)	2,514.44			
Total	3.53 (12.44)				
Shares			103.57	6	0.000**
CSR1	0.59 (2.34)	2,053.22			
CSR2	0.67 (3.42)	2,058.24			
CSR3	2.02 (8.03)	2,182.95			
CSR4	0.93 (4.04)	2,164.78			
MKT	4.59 (20.53)	2,547.51			
CS	1.55 (13.62)	2,083.63			
Other	3.23 (12.91)	2,492.82			
Total	3.58 (17.11)				

Table VII.
Descriptive statistics for content type and engagement and Kruskal-Wallis H-test results

Notes: [a]Calculated with content type total (Table III last column). **$p < 0.01$

Conclusion and implication

This study provided an initial assessment of corporate Facebook use by Spanish hotel chains. Two main aspects were considered: communication activity and stakeholder engagement through this social media platform. Regarding the first aspect, the objective was to identify whether Spanish hotel chains use Facebook as a communication channel and, if so, assess their activity and audience levels, possible relations with hotel size, kind of content they normally post and most frequently used media types. The second aspect included the analysis of stakeholders' reactions measured by the number of likes, comments and shares to the posts published by the company on its corporate Facebook page and stakeholders' mood measured by their positive or negative comments. We also aimed to determine which media and content types generate more user engagement and which other factors, such as activity level, audience or the size of the hotel chain, influence engagement.

Our research suggests some conceptual and practical implications to understand how Spanish hotel chains are using Facebook. Its major findings are the following. First, Spanish hotel chains are using Facebook as a communication and engagement channel. Second, larger hotels are more active and receive wider audiences. Third, the information they post is mainly addressed to current or potential customers, and it is mainly

transmitted using photos. Fourth, most users' comments to posts are positive. Fifth, regarding engagement, there is a significant negative relationship between the size of the hotel chain and audience and activity. Finally, there is a significant positive relationship between engagement level and post content as well as with media type. These findings indicate that Spanish hotel chains typically use Facebook as a communication channel that is addressed to customers that show a greater degree of engagement.

The findings of this study suggest that the Spanish hotel chains that use Facebook as a communication channel should direct information not only to customers but also to other users such as employees, investors and the local community, because this can increase the confidence of stakeholders in the hotel chain and improve their competitive market position and added value (Theunissen and Noordin, 2012). Therefore, they should increase the quantity and quality of information transmitted on CSR and other aspects of the company. Moreover, smaller Spanish hotel chains must make active use of this communication channel because it is a cheap and effective tool to publicize the company and its products (Christ, 2005) whether the hotel chain is large or small. Both types of companies should make increased use of Facebook and transmit information on non-marketing aspects, such as environmental protection measures carried out, financial implications, social activities and personnel management issues. Although information on products and services generates more user engagement, providing more information about CSR may increase the number of stakeholders, other than customers, interested in getting information to satisfy their information needs and consequently increase two-way communication. On the other hand, using photo albums or photos to communicate information is recommended because they gain greater reaction from users. Although Spanish hotel chains are already using photos, it is thus desirable to use photo albums, which seem to be able to generate greater engagement.

For small Spanish hotel chains, it is easier to achieve greater user engagement because they have fewer activities and small audiences, meaning that fans feel more integrated and a part of a community, which leads them to interact more with the company on Facebook (Daugherty *et al.*, 2008; Men and Tsai, 2013). Larger hotel chains, despite having wider audiences, should also make their fans feel more integrated perhaps with posts emphasizing this philosophy of belonging to a community. Additionally, small Spanish hotel chains could increase their activities to attract more fans. Finally, the fear of many companies letting users post comments about the information provided by the company is unfounded because the percentage of negative comments is very low (Ralphs, 2011).

Regarding further research, we identify several issues. It is necessary to conduct research about the reasons that lead users to engage with the Facebook pages of hotel chains. It would also be of great interest to measure attitudinal and behavioral effects on users generated by the communication strategies of Spanish hotel chains on Facebook. Future studies should propose a Facebook engagement model for hotel chains to explain the relationship between antecedent factors, the engagement that occurs and the attitudinal and behavioral effects on users. In addition, it is advisable to conduct longitudinal studies of communication activity and engagement by Spanish hotel chains in order to establish general results, which would be useful to analyze the communication activity and engagement of hotel chains in other countries and other types of industries. Future studies should also analyze the conversations initiated by stakeholders in order to determine the information transmitted and interactions that take place as well as to characterize the stakeholders in order to identify different levels of engagement depending on their profile. Further research could also apply new

methodologies such as artificial intelligence techniques to enhance the findings. Finally, given that Twitter is the second most used social media platform by Spanish hotel chains and, as indicated by Leung and Bai (2013), that there is no study focussed specifically on Twitter in the hospitality sector, it would be interesting to examine this microblogging platform.

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