

## EXTENDED ABSTRACT

# VARIABLES RELATING TO THE NUMBER AND THE CHOICE OF SOCIAL NETWORKS AMONG FOUR AND FIVE-STAR ANDALUSIAN HOTELS

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### 1. INTRODUCTION

Social network management has become a key factor in tourism development. Content generated on social networks can influence tourist choice, online reputation, and sales, as well as the very survival of the hotel establishment. Although social media studies are abundant, there are very few studies on implementation levels of hotel practices.

The current study is focused on the Spanish accommodation sector, ranked second among world tourist attractions (UNWTO, 2018). Specifically, one region with the highest touristic appeal in the South of Spain is Andalusia. According to the “Review of the tourism year 2017 in Andalusia” (Andalusian Regional Department of Tourism and Sports, 2018), global income from tourism reached 12.8% of Gross Domestic Product. The demand for goods and services from tourists was therefore the cause of both direct and indirect effects on the economy of that region, estimated at 25.8 billion euros, underlining the importance of this sector for Andalusia.

As regards the Spanish hospitality industry, research has basically focused on the use of social media in high (3, 4 or 5-) star hotels and their management, regardless of affiliation to a hotel chain, and mainly located in a Spanish coastal region (Martínez *et al.*, 2012 & 2013; Cañero *et al.*, 2015; Cascales *et al.*, 2017; Mellinas *et al.*, 2014 y 2016). Those studies claimed that on the whole, hotels used social media as an online promotion tool and booking channel, especially the establishments affiliated to a hotel chain. Moreover, it has been shown that proper use is related to efficient management and a high rating on Booking.com and TripAdvisor.

Additionally, hotels with a higher number of stars tended to use social media in greater proportion, especially Facebook and Twitter.

Despite the progress that these studies imply, they reduce the analysis of social networks to four or five social media platforms. In most cases, they perform no statistical hypothesis tests. In addition, they forget such interesting aspects in the study of social networks as the hotel modality, the age, and the size of the establishment.

Therefore, our work aims to analyze all social networks present on the web pages of Andalusian 4 and 5-star hotels, as well as the possible factors (number of stars, modality, age, size and affiliation to a hotel chain) that might influence their number and choice. In addition, a hypothesis test was developed to check the level of significance of the relationships between the variables under analysis.

The importance of social networks in the Andalusian tourism sector is present in the "Review of the tourism year 2016 in Andalusia" (Andalusian Regional Department of Tourism and Sports, 2017a) where the information sources are analyzed when choosing a destination in Andalusia or planning a trip there. The report indicates that 40.5% of tourists inquired with other travelers through a social network, while 29.5% relied on the opinion of friends and acquaintances on social media. Thus, the sum of both percentages reached a value very close to 67% collected by the TripAdvisor barometer relative to the same year (TripAdvisor, 2016).

## 2. METHODOLOGY

An observational cross-sectional study was designed by consulting the official website of all 4 and 5-star hotels located in Andalusia. The information available from the Tourism Registry of Andalusia (Andalusian Regional Department of Tourism and Sports, 2017b) was gathered in January 2018. After searching the hotel websites, those establishments that confirmed inactivity, with a lapsed star rating, or no official website were excluded, leaving a sample of 503 hotels.

For each of the hotels, the following variables were analyzed: 1) number of stars; 2) modality (road, rural, city, and beach); 3) start date of the activity; 4) size; 5) affiliation to hotel chain; 6) number of social networks; and, 7) network brand names (Facebook, Twitter, Google+, YouTube, Instagram, Pinterest, LinkedIn and Flickr).

Following a variable frequency-based descriptive analysis, possible dependence relations between the variables could be studied, according to the hypothesis contrast with the Chi-Square statistic, through the IBM SPSS Statistics for Windows, version 20 (IBM Corp., Armonk, NY, USA). Specifically, five hypotheses were posed, which sought to analyze whether the variables number of stars, modality, age, size and affiliation to a hotel chain could influence the number and choice of social networks.

The hypotheses were as follows:

H1: The number of hotel stars will be determinate in the number and choice of social networks.

H2: The modality of the hotel will be independent of the number and the choice of social network.

H3: Hotel age will influence the number and the choice of social network.

H4: Hotel size will affect the number and choice of social networks.

H5: Affiliation to a hotel chain determines the number and choice of social networks.

### 3. RESULTS

The results of the variable analysis showed that the majority of hotels were 4-star hotels (90.26%) and were located in the city (48.11%) or on the beach (40.95%). Only 12.92% started their activity after 2010. As regards hotel size, 62% could be considered medium hotels, 25% large, and almost 13% small; most of the hotels were affiliated to some hotel chain or other (69%).

In relation to social networks, it was observed that only 12.5% of establishments had no social-media presence on their website. Nevertheless, most of the hotels presented between 3 and 4 social networks (39.76%), or more than 4 (32.60%), highlighting especially Facebook, Twitter and Google+.

The hypothesis testing provided evidence to support three of the five hypotheses: H1, H4 and H5. A statistically significant relationship was therefore demonstrated between star ratings, size, plus affiliation to a hotel chain and the number and choice of social networks. In addition, the rejection of H2 implied that they are also related to the hotel modality.

Specifically, the 5-star establishments had, on average, a higher number of social media links. It was observed that beach hotels had a higher number of social networks than other sorts of hotels, with an average of over 4 social platforms. The road and rural hotels opted for the most common networks such as Facebook, Twitter and Google+, while city and beach hotels were, in addition, users of YouTube and Instagram, respectively. Furthermore, the larger hotels showed more social networks (4 on average compared to 2 of the small hotels). In addition, all the establishments integrated in the same chain linked up to the same networks.

Finally, H3 was rejected because there were no significant differences between hotel age and the number and choice of social networks.

### 4. CONCLUSIONS

The results of our study have shown two important aspects. Firstly, the efforts of 4 and 5-star Andalusian hotels to join Tourism 2.0, evidenced by the websites of the large majority (87.5%) that have incorporated social networks. Additionally, this paper has highlighted the commitment of the hotels to diversification across social networks to cover a large number of different profiles of potential clients. In this sense, we ought to point out that 72.36% of the hotels have more than 3 social networks on their websites, ranking the highest percentage in the range between 3 and 4. This aspect is of great importance, since the use of social networks and, especially, the management of online opinions, have become valuable marketing tools for the hotel sector.

A total of 63 establishments included no networks on their web pages, of which 70% may be noted as affiliated to a hotel chain. This could be caused by corporate policies, which may even imply a single website design for the whole group, with the corresponding

economies of scale. On the other hand, and with regard to the remaining 30% of hotels (independent establishments with no social networks on their web pages), the incorporation of social media and their use as a sales channel could be very useful on their websites. In addition, and given that these platforms act as a basic source of information in the process of selecting the tourist destination and planning the trip, its use would facilitate the adaptation of establishments to changes in consumption patterns. For all these reasons, we think that institutional attention should be sharply focused on these hotels, to encourage the incorporation of social networks on their websites, in order to improve booking, customer relationships, and management of their online reputation.

In relation to the number of social networks, the establishments with the largest number were the 5-star hotels, the larger size hotels and the beach hotels. Especially Facebook, Twitter, and Google+ in the hotels with a high star rating.

In general terms, we have shown that the hierarchy of social networks will not depend on the number of stars in the establishment, with the exception of YouTube and Instagram. It may be due to the importance of the predominate image of charm, luxury, and exclusivity associated with higher star ratings.

With regard to the link between the number of social networks and the modality, it is worth noting that beach hotels offer the widest range of platforms, which may be construed as an attempt to reach as wide a variety of potential clients (families, pensioners, conferences, etc.) as possible, in order to compensate for the high seasonal demand at those sorts of establishments. Evidence on the relationship between the number of networks and affiliation to a hotel chain has surfaced in previous studies (Martínez *et al.*, 2012 and 2013, Cascales *et al.*, 2017, Mellinas *et al.*, 2016). In that sense, it could be due to corporate policies and the search for economies of scale, using, in some cases, a single social platform of the group for all the hotels that make up the group. In addition, this relationship may be connected with the size of the establishment, such that the affiliation of smaller hotels to a hotel chain would be less likely and those hotels would have lower availability of resources, so it would lead to offering a lower number of social networks on their web pages.

The conclusions of this study are not to be generalized, as this research has been focused on 4 and 5-star Andalusian hotels, characterized by high rates of hotel chain ownership, which can have an impact on resources available for the management of social networks. We can never lose sight of the fact that social networks can be especially useful for the lower category hotels, the utility of which to improved communications, booking and reputation at a lower cost than traditional channels is challenging. For this reason, we will devote future research to analyze their presence in these establishments, as well as to expand the geographical scope to analyze possible parallels and obtain more general conclusions. It would be of equal interest to analyze effective social-media management and its potential effect on business performance as it would be to analyze which social networks are used in hotels and, importantly, how those social media are managed.