

EXTENDED ABSTRACT

STUDY OF HOTEL PRICES IN ADVANCE THROUGH A MAJOR ONLINE DISTRIBUTION CHANNEL

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These days, online distribution is a booming channel which enables firms to generate incomes. This is especially notable in the case of the tourism sector in general and the hotel sector in particular, which can be considered pioneers in the use of this distribution channel. Interested customers access Online Travel Agencies such as Booking.com both to inform themselves about offers and to make their bookings.

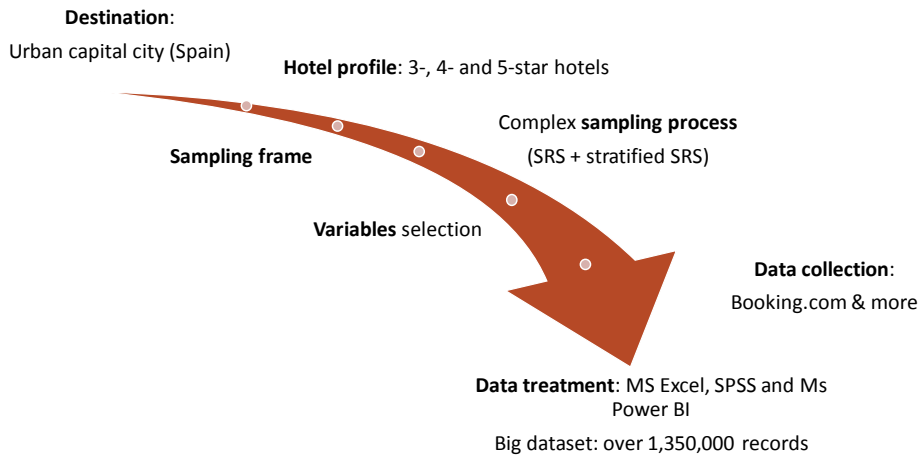
In these distribution channels the users can make queries about prices, selecting a great variety of characteristics which correspond with the service desired. For example, they can indicate the hotel category which they prefer, the day/s of the week that they expect to stay, the type of room which interests them, the number of people who will check in and even the number of days that they will stay overnight. For this to be possible, the hotels have previously published prices which respond to the combination of possible categories for each of these variables.

This is why determining prices is a very interesting topic for hotel managers. It is an activity which requires much time and dedication. More so when these prices, according to the previous studies in this respect, appear published in the distribution channels up to a year in advance.

In Revenue Management, pricing is one of the basic pillars, while distribution channel management has received attention more recently. Although improvements have been made in the matter, much of the research has been centred on the study of the consumer's behaviour when selecting an offer. Studies about determining prices and their determinants is a research area where gaps are still noted, especially considering more than 90 days in advance. Nor has progress been made in the study of rates with price data for lodging more than two people, or a length of stay of more than one night; that is to say, considering all the possible values associated with the offers published by hotels.

This work focuses on the descriptive study of prices offered through an online distribution channel (Booking.com) for a concrete urban tourism destination in Spain (see Figure 1). Hotels were selected by a stratified simple random sampling method with proportional allocation. The research has been done through an extensive dataset (big data). The advance booking period considered covers approximately a whole year, and this represents a great novelty with respect to previous studies. The average prices are calculated from the values ordinarily published by hotels in this type of channels, which enables providing an outline of the operational management of prices implemented in the destination, through the online distribution and from the supply perspective.

Figure 1
DESCRIPTION OF THE METHODOLOGY APPLIED



The results offer information about the maximum, minimum and average prices, along with an estimation of the price trend for each of the variables analysed. This produces better adjustment levels.

As to the hotel's category, the prices behave as expected: the higher the category the higher the rate, although this increase is not proportional. 3-star hotels at times apply prices which are more appropriate for a higher category. The maximum and minimum values vary by the category; a greater range of difference being noted for the 5-star category.

On the other hand, the influence of the hotel size on prices is confirmed. The range of prices shows three distinct behaviours: one whose difference between maximum and minimum rates is not very significant, being the most numerous group of hotels; another, with less establishments, which defines rates with a greater distance between the extreme values; and, lastly, a sole hotel which reflects a range well above all the rest.

Regarding the day of the week, the hotels publish more stable rates between Monday and Wednesday, an increase taking place from Thursday which is prolonged until Satur-

day night. Sundays produce the lowest rate, this being below that applied on Mondays. Therefore, these rates respond to what is expected for a holiday destination corresponding to the distribution channel analysed.

A fact to highlight is the great variety of terms used by the hotels when commercialising their rooms. As many as 87 different expressions have been identified. Figure 2 graphically shows the distinct words used and, depending on the size of the font, the frequency with which they are used: the greater the frequency the bigger the font. The cloud enables us to identify terms directly related with the type of room (double, twin, executive, suite). Also included are some references with a view to making the offer more attractive (with a jacuzzi, balcony, terrace, car park) and even alluding to the number of people it is aimed at (2, 4, triple, quadruple, child). As can be noted, the offer's international character is in evidence in the use of terms in English (the image has not been translated and therefore faithfully responds to the prevailing offer).

Figure 2
CLOUD OF TERMS USED FOR DIFFERENT TYPES OF ROOM



As is to be expected, the average price augments progressively as the size of the room increases. The most marked change is when we go from superior category to superior plus and from junior suite to suite. The standard and superior categories are those which concentrate a greater number of offers.

The prices applied do not increase proportionally depending on the number of people. The bookings for three people mean a relatively small variation on the rate for two, which reveals the use of extra beds more than larger rooms. The offer for four people is the one

which means a greater increase of price with respect to the previous category, in absolute terms. The volume of data is concentrated for lodging three or less people.

The hotels in this destination offer higher prices per night when longer stays are requested. A higher increase of prices percentage-wise is also noted with respect to what is usual when the number of nights is greater in the case of specific holidays. This conclusion is consistent with respect to previous studies done in other countries.

The results, in general, show the values of the anticipated offer, considering a broad time horizon. The advances enable helping Revenue Managers and hotel sector professionals to improve the management of prices and availabilities in distribution channels. They bring to light the great amount of data which hotels publish, resulting in much time dedicated to these activities. Each hotel publishes an average of more than 6,200 offers (in the study period). This means that the hotels on average multiply each room (in the destination) by 70 when they publish their offers in this distribution channel. This is a significant figure given that the study has considered a sole data capture for an advance of 300 days. In view of the results obtained, it is necessary to study in depth the conditioning of the prices offered in distribution channels, placing particular emphasis on their analysis and evolution depending on different moments throughout the notice period.