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THEMATIC PROCEEDINGS I

UNIVERSITY OF KRAGUJEVAC
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CONSUMERS' PERCEPTIONS OF SERBIA'S HOTEL PRODUCT QUALITY

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Abstract

This study is concentrated on the analysis of consumers' perceptions of Serbia's hotel product quality. A total of 71,700 reviews of 240 hotels taken from the Booking.com portal are analysed regarding the features of 'Cleanliness', 'Comfort', 'Location', 'Facilities', 'Staff', 'Value for Money', and 'Free Wi-Fi'. By applying Kruskal-Wallis H and Mann-Whitney U tests, the differences between the rating scores of these features for different hotel groups have been investigated. The findings indicate that category-wise hotels can be subsumed under two groups among whose scores for the features of 'Cleanliness', 'Comfort', 'Facilities' and 'Location' there are statistically significant differences, whereas within the groups they seem to be irrelevant. The first group consists of 5-star and 4-star hotels, and the second consists of the remaining hotels. The results also point out that the 5-star and 4-star hotel guests, although satisfied with the service quality, think that the rates are too high. The hotels are also grouped by their location. These results do not yield a statistically significant difference of the review values of the observed features between these hotel groups, but significant differences are identified within the group of city hotels regarding 'Cleanliness' and 'Value for Money' features.

Keywords: *hotel product quality, online hotel reviews, booking, perceptions*
JEL classification: *L83,M30.*

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Introduction

Hotel guests can share their impressions about the consumption of a hotel product with other Internet users using social media or using commercial portals of online travel agencies - OTAs (Yan et al., 2016). Hotel reviews and ratings posted by hotel guests are definitely subjective measures of quality. Customer satisfaction, and accordingly the hotel reviews, can be affected by a range of factors, such as the quality of a hotel product, consumer preferences, motives for traveling or characteristics of the selected destination (Radojević et al., 2017).

The aim of this research was to study consumers' perceptions of hotel product quality in Serbia based on the reviews available on the Booking.com portal. The Booking.com portal was selected for several reasons: (1) it is one of the largest OTAs, (2) it offers a wide range of hotels in Serbia, (3) the users are given the opportunity to rate a consumed hotel product by assigning a quantitative assessment to different features of the hotel product, (4) a hotel can be reviewed only by the consumers who have previously booked a hotel product on the portal and then stayed at the hotel - which does not eliminate the possibility of false reviews, but it certainly makes their publication more difficult.

In order to achieve this aim, we grouped the hotels in different ways. Firstly, we determined the rating scores of the observed features of `Cleanliness`, `Comfort`, `Location`, `Facilities`, `Staff`, `Value for money` and `Free Wi-Fi` for hotels belonging to different categories. Then, based on the determined significance of the differences in the scores between the hotel categories, we made conclusions about the consumers` perception of the quality of the hotel offer. Secondly, we analyzed whether there were statistically significant differences between the scores of certain features within the hotel categories. The aim was to identify the features whose average scores showed significant differences from the average scores of other features and to draw relevant conclusions based on these findings. We further grouped the hotels according to their location into city, mountain, lake and resort spa hotels and tested the significance of the differences in the scores of the observed features between the hotels in these groups. The same method was used to study the ratings of city hotels which were classified into Belgrade, Novi Sad, Niš and Kragujevac hotels. Another idea was to study the differences in the scores assigned to the observed features between the hotels operating within international hotel chains and other hotels of the same category.

However, as there is a small number of hotels in Serbia that operate within global hotel chains (Barjaktarović & Mašić, 2014) and most of them are located in Belgrade and belong to high category hotels (Kosar et al., 2016), it would not be possible to make an adequate comparison since certain samples would have just a few hotels. Therefore, this idea was dismissed.

Literature review

The rapid development of ICT technologies has brought about changes in consumers' preferences. Today, a large number of consumers use Internet sources when planning a trip (Toh et al., 2011; Filieri et al., 2015; Liu & Park, 2016) not only to get informed about the offer, make bookings (Toh et al., 2011) and avoid traditional agents, but also to share their experiences about the consumed hotel products with other users of hotel services. This horizontal form of electronic communication between users is called electronic word of mouth - eWOM (Hennig-Thurau et al., 2004). Bearing in mind the importance of sharing these experiences with other consumers, Carvao (2010) states that Lewis's AIDA marketing model (attention, interest, desire, action) has been actually replaced with AISAS model (attention, interest, search, action, sharing). The concept which implies a high degree of interactivity and users` ability to influence the contents through various forms of experience exchange is in the tourism industry also known as the Travel 2.0 (Buhalis & Law, 2008; Middleton et al., 2009; Xiang & Gretz, 2010). Further progress of technology has coined the term Travel 3.0 (World Travel Market Global Trends Report, 2015) which refers to the use of mobile applications that can partially or fully automate your search and offer personalized solutions when planning a trip based on the preferences and the current location of individual consumers.

Online sale of hotel services makes one of the most important channels of sales (Xiang et al., 2015) and the role of the Internet in today's tourism market is reflected in the data obtained from the Statista.com that in 2015 the online travel sales reached the level of about 533.5 billion US dollars. It must be further noted that the online travel sales of hotel services have been recording the highest growth rates. According to the World Travel Market Global Trends Report, online sales of hotel services in 2015 recorded a growth rate of approximately 10.3%.

To get information about hotels, make bookings or share their impressions about the quality of hotel services, hotel guests use personal

computers as well as tablets and smartphones. Murphy et al. (2016) cite Google and Ipsos MediaCT report 'The 2014 traveler's road to decision' according to which users prefer the use of personal computers and tablets (88%) to smartphones in the process of data collection about a trip they are planning. A similar trend can be observed at the booking stage – about 81% of users rely on PCs and tablets. After they have consumed a tourism product, guests often share their experiences with other Internet users through various social media. The aforementioned report states that users often use smartphones (50%) for this purpose. Booking.com has developed applications that make their offer available to tablet and smartphone users. According to data obtained from the Booking.com portal, these applications have so far been downloaded and used by more than 20 million users.

Since publishing on social media is simple and anonymous, individuals can publish hotel reviews that are not authentic but written to enhance or damage the online image of certain hotels (Ayeh et al., 2013; Li et al., 2014; Banerjee and Chua, 2014; Filieri et al., 2015). For a review to be published on TripAdvisor, the portal does not require any proof that the user has actually stayed at the hotel. It certainly leaves room for false hotel reviews to be published, so Schuckert et al. (2016) report that about 20% of the total number of reviews on TripAdvisor are fictitious. Ayeh et al. (2013), Filieri and McLeay (2013) and Baka (2016) have also confirmed that a great number of reviews on TripAdvisor are unreliable. On the other hand, for a review to be published on OTA portals such is Booking.com, a hotel booking must be previously made through the site and sometimes the stay must be confirmed by the hotel. Although the possibility of false hotel reviews cannot be ruled out even in the case of these portals, their number is definitely smaller than in the case of the TripAdvisor portal (Ott et al., 2012).

The contents that depict hotels in the published reviews significantly affect their business performance (e.g. Cantallops & Salvi, 2014; Kim et al., 2015). Nevertheless, research shows that hoteliers in Serbia have only recently begun to use the opportunities provided by review sites to improve their online image (Mašić & Kosar, 2016).

The review of the available literature points to the papers which study the ways the hotel offer in Serbia is presented on eWOM portals. Čačić and Mašić (2013) studied the ways hotels in Serbia were presented on the TripAdvisor website. They found that at the end of 2012, a total of 165

hotels were presented and their average score was 3.92 on a five-point scale. Mašić et al. (2014) used a sample of Belgrade hotels to compare hotel ratings on different OTAs to those on TripAdvisor. The results did not reveal any significant differences between them. Knežević et al. (2014) conducted research on the presence of Serbia`s hotel offer on the leading electronic portal sites and found out that it was the highest on the Booking portal. The increasing use of Internet as a sales channel for hotel services in Serbia in the last decade is further illustrated by the fact that the Booking.com portal offer for 2006 included only two hotels from Serbia (Ćurčić, 2006), while according to the results of this research there are 255 today. Živković et al. (2015) studied the activities of social media users, including TripAdvisor, using a sample of selected mountain hotels in Serbia and Bulgaria.

Research methodology

The paper is based on the research conducted in February 2017. The first step was to download the list of categorized hotels in Serbia from the internet portal of the Ministry of Trade, Tourism and Telecommunications of the Republic of Serbia (updated in January 2017). An inquiry was then sent to the Booking.com portal for each of the categorized hotels in order to determine whether they are included in the hotel offer of this portal. The offer of 255 hotels was confirmed. We further had to determine whether the hotels whose offer was presented on the Booking.com portal had any reviews written by the guests who consumed their services. Only the hotels with more than 30 reviews were included in the sample. We thus formed a sample of 240 hotels of different categories which had a total of 71.700 hotel reviews.

The users of the Booking.com portal can evaluate hotel services in several ways. They are given the opportunity to give a qualitative assessment of what they perceive as a positive and negative aspect of a hotel product. They are further expected to provide a quantitative assessment of different features of a hotel product such as 'Cleanliness', 'Comfort', `Location', 'Facilities', 'Staff', 'Value for Money', and 'Free Wi-Fi '. A small number of hotels had 'Breakfast' as an additional feature, but as this was not the case with all hotels, we couldn’t include it in the analysis. For each of the 240 hotels on the Booking.com portal, we took the average grade scored for each of the seven features.

For the purposes of this study the hotels were grouped in the following three ways: (1) according to the official hotel categorization, (2) according to their macro-location into those located in the spas, mountains, cities or by lakes, and (3) for the sample of city hotels into those located in Belgrade, Novi Sad, Niš and Kragujevac.

The results of the initially conducted Shapiro Wilk-test ($p < 0.05$) lead us to the conclusion that we can reject the null hypothesis that the observed variables in the analyzed sample have a normal distribution. Therefore, we used non-parametric tests to determine the significance of the differences between the observed hotel features scores. The significance level was set at 0.05 for all the statistical methods applied in the study.

Results and discussion

The results of the Kruskal-Wallis test show statistically significant differences in the scores of certain features between hotels of different categories. The differences are statistically significant for the following variables: `Cleanliness`- $\chi^2(4) = 28.707$, $p<0.05$, `Comfort` - $\chi^2(4) = 38.104$, $p<0.05$, `Location`- $\chi^2(4) = 13.601$, $p<0.05$, `Facilities` - $\chi^2(4) = 36.835$, $p<0.05$. On the other hand, the differences could not be proved to be statistically significant for the average scores of the following variables:`Staff` $\chi^2(4) = 6.880$, $p=0.142$, `Value for money` - $\chi^2(4) = 2.048$, $p=0.727$ i `FreeWi-Fi` - $\chi^2(4) = 7.006$, $p=0.136$.

Based on the results the Kruskal-Wallis test we can draw a general conclusion that the average scores of certain features significantly differ between hotels of different categories, but it cannot tell us which categories are different from each other. For instance, are there statistically significant differences in the scores between 1-star and 2-star hotels or perhaps between 2-star and 4-star hotels? Since the Kruskal-Wallis test cannot give us the answer to this question, a series of Mann-Whitney tests has to be performed. They test the statistical significance of the differences in the scores of the observed features between pairs of hotels of different categories. The test results are presented in Table 1.

Table 1: *Results of Mann-Whitney tests for a sample of different categories hotels*

CLEANLINESS				
Category	4 star	3 star	2 star	1 star
5 star	U=340,p=0.389	U=183.5,p<0.05	U=53, p<0.05	U=8.5,p<0.05
4 star	---	U=3127,p<0.05	U=934.5,p<0.05	U=149,p<0.05
3 star		---	U=1206.5, p=0.131	U=189, p=0.232
2 star			---	U=87, p=0.640
COMFORT				
Category	4 star	3 star	2 star	1 star
5 star	U=356, p=0.497	U=146, p<0.05	U=43, p<0.05	U=9, p<0.05
4 star	---	U=2830, p<0.05	U=895.5, p<0.05	U=96.5, p<0.05
3 star		---	U=1238, p=0.184	U=161.5, p=0.106
2 star			---	U=75, p=0.349
LOCATION				
Category	4 star	3 star	2 star	1 star
5 star	U=384.5, p=0.722	U=269, p=0.253	U=95, p=0.223	U=15, p=0.244
4 star	---	U=3460.5, p<0.05	U=1186.5, p<0.05	U=197.5, p=0.131
3 star		---	U=1363.5, p=0.545	U=245, p=0.736
2 star			---	U=98, p=0.969
FACILITIES				
Category	4 star	3 star	2 star	1 star
5 star	U=280.5, p=0.125	U=121.5, p<0.05	U=35, p<0.05	U=2.5, p<0.05
4 star	---	U=3011, p<0.05	U=866, p<0.05	U=119.5, p<0.05
3 star		---	U=1189.5, p=0.108	U=178.5, p=0.175
2 star			---	U=81, p=0.483

Source: *Authors*

The results of the series of Mann-Whitney tests for the `Cleanliness` feature clearly indicate that there are two groups of hotels whose scores for this feature are significantly different. At the same time the differences within these groups are not statistically significant. The first group comprises 5-star and 4-star hotels and the second group 3-star, 2-star and 1-star hotels. It must be noted that the median scores of the first group are significantly higher (5-star=9.30; 4-star=9.20) than the medians of the second group (3-star=8.60; 2-star=8.20; 1-star=8.10). It is obvious that higher category hotels have developed and implemented more stringent housekeeping standards, which resulted in higher rating scores for this feature. Cleanliness surely isn't and it should never be a criterion

for hotel categorization because spotless hygiene is a basic standard that must be provided regardless of the hotel category.

The tests conducted for the `Comfort` feature provide almost identical results. 5-star and 4-star hotels are not significantly different. The same applies to 3-star, 2-star and 1-star hotels. However, there are statistically significant differences between these two groups of hotels in the scores achieved for the observed feature. The differences are such that the median scores of the first group hotels (5-star=9.15; 4-star=9.05) are significantly higher than those of the second group (3-star=8.40; 2-star=8.40; 1-star=7.50).

The established pattern is repeated for the `Facilities` feature. On the one hand, there are the 5-star and 4-star hotels whose average rating scores are not significantly different. On the other hand, there are the hotels of other categories whose scores also do not differ from each other. However, there are statistically significant differences in the average rating scores for each pair of hotels from these two groups.

The current Regulation on standards for the categorization of lodging facilities, namely the part that deals with the standards for the categorization of hotels lists a number of different requirements that hotels must meet in order to get a particular category. Different requirements for different categories should definitely result in different levels of guest comfort and different facilities available at a hotel. The results of the conducted Mann-Whitney tests show that the guests notice significant differences only between two groups of hotels - the hotels of the highest categories (5-star and 4-star hotels) on the one hand and the hotels of other categories on the other hand. Simply put, hotel guests do not see significant differences in the comfort level and facilities within these two groups of hotels. There may be several reasons for that. Some hotels may gradually begin to fall short of the established standards after they have been officially classified into a particular category. Some hotels may, on the other hand, gradually meet the requirements for a higher category, but keep operating within the previously assigned category for a certain period of time before they are officially upgraded to a higher category. The price that customers pay for hotel services is certainly a factor that shapes their expectations. Since the higher category hotels have higher prices, the guest expectations are also higher which can influence the assessment of each of the observed features, not only the `Value for money` feature. The more the guests pay, the more they

expect, and vice versa. High rates can sometimes make them be unreasonably strict in the feature assessment, while low rates can produce the opposite effect, which can cumulatively affect the results for the whole category. Furthermore, we cannot exclude the possibility that there are some hoteliers who attempt to manipulate the reviews on the Booking.com portal with the aim of improving the average scores, which can certainly affect the obtained results.

The `Location` feature shows statistically significant differences in the rating scores between the group of 4-star hotels on the one hand and the groups of 3-star and 2-star hotels on the other. The absence of statistically significant differences in the rating scores of the `Location` feature between the highest and the lowest hotel categories can to some extent be explained by the fact that a large number of lower category hotels were built back in the time of the former Yugoslavia. At the time, most of these hotels ranked higher than today. They were often built in the best locations of their destinations. However, little had been invested in these hotels for several decades, so they failed to meet the standards laid down for certain categories and eventually they were downgraded to lower categories. Today, a number of lower category hotels have excellent locations in the observed destinations, which results in the high rating scores of the `Location` feature. On the other hand, the best locations, provided that they are available at all, are today prohibitive in cost. In such cases, investors, even when they plan to build high-class hotels, tend to settle for second best.Cumulatively, these factors certainly contribute to the absence of the statistically significant difference between the highest and the lowest category hotels for the `Location` feature.Table 2 shows the median scores of the observed features by hotel categories.

Table 2: *The median scores of the observed feature by hotel categories*

	5 star	**4 star**	**3 star**	**2 star**	**1 star**
Cleanliness	9.30	9.20	8.60	8.20	8.10
Comfort	9.15	9.05	8.40	8.40	7.50
Location	8.70	8.95	8.60	8.50	8.45
Facilities	8.90	8.80	8.10	7.70	7.25
Staff	9.25	9.20	9.00	9.00	8.60
Value for Money	8.30	8.70	8.60	8.60	8.30
Free Wi-Fi	9.10	8.80	8.60	8.65	8.35

Source: *Authors*

The analysis has so far been focused on testing the significance of the differences in the scores of certain features between different hotel categories. However, the analysis can be carried out in a different way. Using the Kruskal-Wallis we can test the significance of the differences between the scores of different features within each category. This means that we won`t compare the scores assigned to e.g. the `Cleanliness` feature between the hotels of different categories. We`ll now test the statistical significance of the differences in the scores between the features within each category.

The results of Kruskal-Wallis test show statistically significant differences in the values of the rating scores assigned to the features in the sample of 5-star hotels - $\chi^2(6) = 14.841$, $p<0.05$, 4-star - $\chi^2(6) = 71.475$, $p<0.05$; 3-star - $\chi^2(6) = 53.949$, $p<0.05$ and 2 -star- $\chi^2(6) = 20.541$, $p<0.05$. At the same time, the results of Kruskal-Wallis test - $\chi^2(6) = 5.474$, $p = 0.485$ do not give us ground to conclude that there are statistically significant differences between the average scores of the analyzed features within the group of 1- star hotels.

Since the assessment of the `Value for money` feature means that the guests express their opinion on whether the hotel service they received was worth the price they paid for, this feature can be especially interesting. A series of Mann-Whitney tests can be used to test the significance of the differences between the scores of the `Value for money` feature and the median scores of all the remaining features. The analysis was conducted for the hotel categories for which the Kruskal-Wallis test confirmed statistically significant differences between the feature scores. In the case of 5-star hotels, the results of the conducted Mann-Whitney test ($U=7$, $p<0.05$) show statistically significant differences between the observed scores. According to the results presented in Table 2, the score of the `Value for money` feature is significantly lower than the average scores of other features, which implies that the guests staying at 5-star hotels don`t think that they get the value for the money they pay, i.e. the price is too high, which is why they rate this feature significantly lower than other features. This perception may to some extent result from their comparison of the hotel services with the lower-priced services outside the hotel, for instance with the prices of meals served in restaurants. It can also result from the comparisons with the prices they have previously paid in the same hotel

category in similar destinations. In the case of 4-star hotels, the results ($U=4004$, $p<0.05$) lead to the same conclusions, with the differences being stronger in the case of 5-star hotels. On the other hand, the sample of 3-star hotels ($U=3708$, $p=0.462$) and the sample of 2-star hotels ($U=459$, $p=0.273$) do not show statistically significant differences between the scores of the `Value for money` feature and the median scores of other features.

The analysis of the hotel review scores based on the hotel location

The hotels were then grouped according to their location into those located in cities, spa resorts, mountain resorts or along a lake. The structure of the sample analyzed on the basis of the location criterion is shown in Table 3.

Table 3: *The sample of hotels according to their location*

Location	**Number of hotels**
Cities	201
Spa resorts	10
Mountain resorts	22
Lake resorts	7
Total	240

Source: *Authors*

Based on the results of Kruskal-Wallis test, we cannot conclude that there are statistically significant differences in the scores of any of the observed features. The test results are given in Table 4.

Table 4: *The results of the Kruskal-Wallis test on the analyzed features according to the hotel location*

	Cleanliness	Comfort	Location	Facilities	Staff	Value	Free Wi-Fi
χ^2	1.898	0.720	6.270	0.597	3.064	7.432	5.682
df	3	3	3	3	3	3	3
Sig	0.594	0.869	0.099	0.897	0.382	0.059	0.128

Source: *Authors*

The results indicate that there are no statistically significant differences in the scores of the observed features between the hotels located in different types of places. However, these results do not rule out the possibility that

there are significant differences within these groups. The hotels from Belgrade, Novi Sad, Niš and Kragujevac were then extracted from the group of city hotels in order to study whether there are statistically significant differences between the scores of the observed features.

The results of the Kruskal-Wallis test point to the statistical significance of the differences in the average scores achieved for `Cleanliness` - $\chi^2(3) = 8.283$, p<0.05 and `Value for money` - $\chi^2(3) = 11.278$, p<0.05, but not for the other analyzed features.

Table 5: *The results of Mann-Whitney tests obtained from the sample of scores of the hotels in the selected cities*

CLEANLINESS			
	Novi Sad	Nis	Kragujevac
Belgrade	U=645.5,p<0.05	U=714.5, p=0.609	U=385, p=0.589
Novi Sad	- - -	U=122.5, p<0.05	U=59.5,p<0.05
Nis		- - -	U=85.5,p=0.829
VALUE FOR MONEY			
	Novi Sad	Nis	Kragujevac
Belgrade	U=801.5, p=0.163	U=540.5, p<0.05	U=254.5, p<0.05
Novi Sad	- - -	U=109.5, p<0.05	U=53, p<0.05
Nis		- - -	U=76.5, p=0.516

Source: *Authors*

According to the results of the series of Mann-Whitney tests (Table 5), the hotels can be classified into two groups regarding the `Cleanliness` feature. The first group includes the hotels in Kragujevac, Niš and Belgrade, and the second group comprises the hotels located in Novi Sad. For each pair of hotels combining scores of the first group hotels and the group of hotels located in Novi Sad there are statistically significant differences in the observed feature. On average, the first group hotels have better scores than Novi Sad hotels. At the same time, there are no statistically significant differences in the `Cleanliness` scores within the group comprising Belgrade, Niš and Kragujevac hotels. The management of the hotels in Novi Sad should identify the reasons the guests are fairly less satisfied with the cleanliness of their hotels compared to other cities. The median scores determined for all the observed features of the hotels from Belgrade, Novi Sad, Niš and Kragujevac are presented in Table 6.

Table 6: The median scores of the analyzed features in different cities

	Belgrade	**Novi Sad**	**Niš**	**Kragujevac**
Cleanliness	9.05	8.30	9.10	9.00
Comfort	8.90	8.20	8.95	8.70
Location	8.60	8.40	9.10	9.05
Facilities	8.60	8.00	8.50	8.30
Staff	9.20	9.00	9.35	9.40
Value for Money	8.70	8.30	9.05	9.15
Free Wi-Fi	8.90	8.60	8.85	9.15

Source: Authors

Two distinct groups of hotels can also be formed regarding the scores of the `Value for money` feature. The first group comprises the hotels in Kragujevac and Niš, while the second group includes the hotels in Belgrade and Novi Sad. For each pair of hotels combining a first group hotel and a hotel from the second group there are statistically significant difference between the scores for this feature. However, the differences are not statistically significant within the groups. The first group hotels are better scored regarding the observed feature. The median of the scores given to this feature in the sample of hotels located in Kragujevac is 9.15, while it is 9.05 for the hotels in Niš, 8.70 for the hotels in Belgrade and 8.30 for the hotels in Novi Sad. It is clear that the hotel guests in Belgrade and Novi Sad believe that they receive less for the price they pay than the hotel guests in Kragujevac and Niš. This can probably be attributed to the higher prices of hotel services in Belgrade and Novi Sad which lead to higher expectations. The results of the initially conducted Kruskal-Wallis test indicate that there are no significant differences between the hotels of the study cities in five out of the six remaining features. Even in the case of `Cleanliness` only the hotels in Novi Sad show significantly lower scores. All in all, it is clear that the reason for the statistically significant differences in the scores assigned to the `Value for money` feature should not be sought in the `value`, but in the `money` component of the feature.

Conclusions and implications

The results show that there are statistically significant differences between the hotels of different categories in the scores assigned to `Cleanliness`, `Comfort`, `Location` and `Facilities`, whereas the differences are not significant for `Value for Money`, `Staff` and `Free Wi –Fi` features. At the same time, these hotels can be classified into two

groups between which there are statistically significant differences, with the differences not being significant within the groups. The first group comprises 5-star and 4-star hotels and the second group includes the remaining categories. The fact that the `Cleanliness` feature has significantly higher scores in the case of higher class hotels can be of great importance for the management of 3-star, 2-star and 1-star hotels. In practice, there are no elements of categorization that can justify this difference. Hotel hygiene is not and should not be an element of categorization and the fact that they were given significantly lower grades for this feature should certainly prompt the management of these hotels to do something to improve the hygiene. Unlike `Cleanliness`, the differences in the scores between hotels of different categories for the `Comfort` and `Facilities` features are quite expected. What is unexpected is the absence of statistically significant differences in the scores of these features within the two groups of hotels. There are various factors that may affect the absence of these differences, starting from the inability to meet the standards of the service quality set for particular categories over the impact of the rates of hotel services on guests' expectations to the tendency of some hoteliers to manipulate the reviews posted on the portal. The absence of differences in the scores for the `Location` feature was also unexpected, but it can be explained.

A great number of hotels that today belong to lower categories were built in the best locations of their destinations. Since little had been invested in these hotels for several decades, they failed to meet the standards laid down for certain categories and eventually they were downgraded to a lower category. On the other hand, the best locations, provided that they are available at all, are expensive. In such cases, investors, even when they plan to build high-class hotels, tend to settle for second best.

Based on the statistically significant differences between the scores determined for the `Value for money` feature and the score medians of other observed features, we can conclude that the guests of the highest category hotels think that they pay too much for the service they receive and the quality of the service is not worth the price they pay for. Such a situation is not sustainable in the long run. Being rational customers, hotel guests will try to get better value for the money they pay by choosing different hotels. In order to avoid losing customers, the hotel management can either improve the value of the service delivered or reduce the price of the products. This is especially important for those destinations where there is a strong and ever-growing competition between high-class hotels.

The results of the tests indicate no significant differences in the scores of the observed features between the hotels located in mountain, lake, spa or city destinations. At the same time, there are significant differences within the group of city hotels for `Cleanliness` and `Value for money` features. Novi Sad hotels scored significantly lower for the `Cleanliness` feature compared to the hotels located in Belgrade, Niš and Kragujevac. This finding should be of practical importance for the management of the hotels in Novi Sad which should identify the specific reasons which cause lower scores and take corrective measures. The hotels in Belgrade and Novi Sad scored significantly lower grades for the`Value for money` feature. Bearing in mind that these hotels have high scores for all the other observed features, it can be concluded that the guests think that the price they pay is too high even though they are satisfied with the quality of the products.

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