Research of Service Quality of Hotels in Belgrade by Analysis of Guest Reviews on Facebook

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Abstract

The growth of the Internet has brought about a notable change in the way that information is accessed by users. Rather of relying just on the provider of tourism services, users may now obtain information from one another. The distribution of information is done word-mouth-WOM, but not in a traditional way, but through the use of Web 2.0 applications (eWOM). Hotels' social media profile are becoming an increasingly important source for consumers when collecting information about hotel products. Social networks make up one network platform for connecting people around the world, enabling them to download information freely through audio-visual, audio and text-based information. Successful communication through social networks today is almost no longer an issue of choice, but is one of the most important tools of business for every hotel and tourist company that contributes to achieving better business results. The aim of this research was to identify if there are differences in perception of service quality in selected hotels. The tested variables were gender and origin of guests and hotel category (number of stars). The results of research showed that there are no differences in perceptions of service quality according to gender and origin of guests. Hotel category proved to be a factor of differences in the perceptions of the guests.

Keywords: Reviews, Social Media, Facebook, Service, Quality, Hotels

Introduction

In the contemporary era, hotel operations are unimaginable without their presence on the Internet. The Internet represents the main source of information that serves customers and is an important tool based on which hotels can analyze and improve their business. Increasingly well-informed guests with refined needs and wishes imposed the need for hotels to constantly fulfill their wishes and adapt to the requirements of the modern market. With the development of the Internet, there has been an accelerated development of social networks. Apart from social networks becoming another way of booking accommodations, they represent one of the best,

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fastest, and most constant communication methods. Social networks are a favorite form of communication and information sharing, that is, living in augmented reality. About 1.6. billions of users in the world testify to this (Krapac, 2016). Social media is being used to spread an unprecedented number of Internet-based messages in the twenty-first century. According to Blackshaw (2006), social media are internet-based applications, that provide user-generated content that is pertinent to past experiences, any source, or online informational concerns. To spread knowledge about goods and services, customers produce this content on their own, based on their own experience with the goods and services (Xiang, Gretzel, 2010). They can be viewed as an extension of word of mouth (WOM), which is a very potent strategy for influencing the purchasing decisions of consumers. Research on the various effects of social media on tourism and hospitality has been conducted from both management and customer viewpoints (Law et al., 2014; Leung et al., 2013). Customers benefit from social media because it provides unique, in-depth and customer-generated content through interaction with other customers (Wang, Fesenmmaier, 2004). Many studies examined these contents as a resource for decision-making and a platform for sharing experiences (e.g. Pantelidis, 2010; Sparks, Browning, 2011; Kim et al., 2016). Customers' need to use social networks in different stages of travel planning and realization can vary in accordance with demographic and cultural characteristics (Knežević et al., 2014). Therefore, in general, the Internet and especially social networks, are used in the phase preceding the sale (for information about contents, prices, activities etc.), in the phase of the realization of the trip and after the end of the stay in accommodation facilities (Barjaktarović, 2013).

Literature review

Information obtained from sites such as Booking.com or TripAdvisor can be quantitative (review score) and qualitative (text review accompanying the review score). Following the example of travel portals, social networks like Facebook have also introduced this option. Numerous empirical studies in different industries have also investigated the impact of the number of reviews on organization performance (e.g. Dellarocas et al., 2007; Ghose, Ipeirotis, 2011). In the context of the hotel industry, significant progress has been made in understanding the impact of the number of reviews on various outcomes such as hotel revenue (Kim et al., 2015) and hotel sales and booking volume (Ye et al., 2009). Customers who book a hotel based on its ratings have an expectation of the level of service that the hotel will provide (Zeithaml et al., 2009). Customers will be happy and satisfied if the hotel service meets their expectations. Customer service expectation, according to Beard (2013), is a belief about service delivery that serves as a standard or reference against which performance is measured. Understanding hotel customers' expectations as a result of the hotel's rating is the first and most important step in providing a quality service, and misjudging what customers expect can lead to customers leaving for competitors (Kim-Soon et al., 2014). This implies that any discrepancy between consumers' expectations and their actual experiences has an impact on their level of satisfaction (Po-Hsuan et al., 2014; Kim-Soon et al., 2014; Al-Ababneh, 2013; Razi et al., 2012). In their study, Gavilan et al. (2018) emphasized the influence of positive and negative ratings on decisions about hotel reservations in the first stage of the decision-making process. The results showed that customers trust lower ratings more than higher ones. Despite this, customers tend to shortlist those hotels that have better and more favorable ratings.

When it comes to gender, there are gender-related differences between the affective and cognitive aspects of service quality (Chiu, Wu, 2002; Chiu, 2002). The authors claimed that

among females, the affective rather than the cognitive determinants of service quality perceptions are more potent. According to Furrer et al. (2000), service quality perceptions differed across cultural groups. Authors explicitly mapped the relationship between service quality perceptions and cultural dimensions positions. Tsaur et al. (2005) found significant differences in perceptions of all dimensions of service quality among three cultural groups.

Razi et al. (2012) claimed that the determinants of service quality differ depending on the size of the hotel. In addition to this, Kim et al. (2013) determined that customer's ratings towards perceptions of quality of several operational factors such as personal service, friendliness, standards and tangibles differ depending on the size of the hotel. When guests have certain feelings and attitudes during their hotel stay, they form perceptions of service quality in the hotel industry (Boon-Liat, Md. Zabid Abdul, 2013). In other words, depending on the services provided and the experiences they have had, guests will have different perceptions of the quality of hotel services (Kim et al., 2013).

Methodology

This research aimed to identify if there are differences in the perception of service quality in selected hotels. From the aspect of guests' characteristics, differences concerning guest gender and country of origin were examined. The hotel category implies a certain level of quality. From this, it follows that the perception of service quality differs depending on the category. For this reason, the hotel category as a variable was included in the research. Based on this, three hypotheses were set:

H_1: There are differences in perceptions of hotel service quality depending on the gender of the guests.

H_2: There are differences in perceptions of hotel service quality depending on the origin of the guests (domestic and foreign guests).

H_3: There are differences in perceptions of hotel service quality depending on the category of hotel (number of stars).

Results

The research was focused on selected hotels with 5*, 4* and 3* in Belgrade, which have a Facebook profile and allow their guests to post reviews about their experiences during their stay. Concretely, the sample was made up of two five-star hotels, four four-star hotels and four three-star hotels. The reviews were collected in November 2022. To collect an equal number of reviews from each hotel, the first 50 reviews that appeared were downloaded. If there were fewer reviews available, all available reviews were collected. A total of 499 reviews were collected. Only reviews which contained information on gender and country of origin were collected. Since the identity of the hotel is known, the category of the hotels was determined based on that. Table 1. shows the representation of reviews according to the gender of guests. A slightly higher percentage of guests are female, 51.1%, while the percentage of male guests is 48.9%.

Table 1. *Gender of reviewers*

Gender	Frequency	Percent
Male	244	48,9%
Female	255	51,1%

Source: results of research

Table 2. shows the distribution of guests who wrote reviews according to their country of origin. Based on the results presented in Table 2, the diversity of the origin of the guests of the observed hotels can be seen. The majority of guests originate from the Republic of Serbia (21,8%), followed by guests from Greece (7,4%), Germany (6,6%), Israel (5,8%), Turkey (5,4%) and the USA (4%). All other countries have a share of less than 4% of guests in the total number of reviews. The least number of guests are from Mexico (0,2%) and the UAE (0,2%). For the sake of simplification and further analysis, the guests are divided into two groups: domestic (guests from Serbia) and foreign (guests from all other countries).

Table 2. *Country of origin of reviewers*

Country	Number of reviews	Percentage
Serbia	109	21.8
Sweden	15	3.0
Greece	37	7.4
Israel	29	5.8
USA	20	4.0
Brasil	5	1.0
UK	9	1.8
Bosnia and Herzegovina	12	2.4
Netherlands	6	1.2
Albania	2	0.4
Switzerland	12	2.4
Russia	15	3.0
Mexico	1	0.2
UAE	1	0.2
Germany	33	6.6
Romania	14	2.8
Australia	4	0.8
Italy	16	3.2
Turkey	27	5.4
Spain	18	3.6
Macedonia	24	4.8
Croatia	26	5.2
Montenegro	5	1.0
France	6	1.2
Austria	5	1.0
Bulgaria	12	2.4
Slovenia	8	1.6

Country	Number of reviews	Percentage
Ukraine	5	1.0
China	7	1.4
Hungary	9	1.8
Norway	7	1.4
Total	499	100.0

Source: results of research

Results of t-test

T-test of independent samples according to gender (Table 3) did not show statistically significant differences in ratings, which means that males and females, users of Facebook, have the same perception towards service quality in selected hotels in Belgrade. These results did not provide support for H$_1$.

Table 3. *T-test according to gender*

Gender	N	Mean	T	p
Male	244	4.5615	-0.240	0.811
Female	255	4.5804		

Source: results of research

The results of t-test according to the origin of guests (Table 4) did not confirm statistically significant differences in ratings obtained from guests from Serbia and other countries (foreign guests). Although foreign guests give a higher average rating, it is not significantly higher than the ratings of domestic guests. Based on obtained results, it can be concluded that H2 is rejected. The average ratings of both domestic and foreign guests from the investigated hotel can be characterized as higher average ratings because they exceed the value of 4.

Table 4. *T-test according to country of origin*

Origin of guests	N	Mean	T	p
Domestic	109	4.4587	-1.510	0.132
Foreign	390	4.6026		

Source: results of research

Results of analysis of ANOVA

The results shown in Table 5 indicate that out of three selected categories of hotels, 4-star hotels are the best rated. The ANOVA variance results according to the hotel category showed that there are statistically significant differences depending on the hotel category (F=3.464, p=0.032). LSD post-hoc test showed that there are statistically significant differences in perceptions of service quality between 4-star and 3-star hotels. It can be seen that the perception of service quality in 4-star hotels is higher compared to the service quality in 3-star hotels. It is assumed that this is because services are often limited in three-star hotels, which often causes dissatisfaction among guests whose expectations were different. While in four-star hotels,

there is a wider range of services that are offered, which means that the guests are more satisfied. These results provide support for H3.

Table 5. *ANOVA by hotel category*

Hotel category	Number of reviews	Mean	F	LSD post-hoc	p
5*	99	4.5556			
4*	200	4.6900	3.464	2>3	0.032
3*	200	4.4600			

Source: results of research

Conclusions

The key element in the modern management, organization or operation of any business entity is quality. Quality, if properly understood and used by management, can become one of the best competitive assets in the international market. It is important to manage quality. Dealing with quality means dealing with the consumer at the same time. Modern information technologies have led to significant changes in the field of tourism and hotel management. There have been major changes in the way of doing business, especially when it comes to communication with users and the distribution of various services to guests, i.e. consumers. This had a direct impact on the operations of hotel companies due to numerous specifics in the service provision process (intangibility, the impossibility of storage, etc.). Internet distribution systems and social media played a big role in all of this, whose dynamic development and increasing application led to major changes in user behavior.

For the creation of successful marketing strategies, it is crucial for hotel managers to comprehend potential gender effects in the evaluation of service quality. Examining these relationships is important because managers run the risk of making poor decisions in the absence of reliable information and guidelines. If there are gender-based differences, ignoring them could be problematic, while in the absence of differences between male and female customers, a gender-sensitive approach may become even more problematic (Karatepe, 2011). Gender differences have been discovered in numerous studies (Chiu, Wu, 2002; Chiu, 2002; Yelkur, Chakrabarty, 2006). As it has been confirmed that women have higher expectations than men (Yelkur, Chakrabarty, 2006), it was assumed that the results of this research will go in that direction as well. On the contrary, the obtained results showed that there are no significant differences in the perception of service quality depending on the gender of the guests, which rejected H1.

Although in many previous studies cultural background was identified as a factor of differences (e.g. Mey et al., 2006; Ngai et al., 2007), results of this research showed that there are no differences in perception of service quality according to the origin of guests. This rejected H2.

Service quality has a great influence on guests' satisfaction. Quality assurance contributes the most to the quality of services in the hotel industry (Blešić et al., 2014). Since the hotel category represents a verified quality rank (Kosar, 2008), and therefore a certain guarantee of quality, numerous studies have shown that certain hotel attributes are valued differently depending on the hotel category. Based on the obtained results, we have seen that initial H3 has been proven: The perception of service quality differs statistically significantly depending on the accommodation facility - hotels included in the sample. The proof of this hypothesis was expected, considering the diversity of the offer of hotels included in the research.

This research is not without limitations. First of all, not all officially categorized hotels have profiles on Facebook. This led to the fact that not all hotels could be included in the research, which made the sample limited. Second, only 10 Belgrade hotels were included in this research, which is why no general conclusions can be drawn. This leaves room for further research and sample expansion. Future research could include variables related to the length of stay, the type of room in which the guest stays, and the price since these variables can affect the perception of service quality. In addition to this, full and limited-service hotels should be examined separately, due to the difference in services delivered to guests.

References

Al-Ababneh, M. 2013. Service quality and its impact on tourist satisfaction. *Interdisciplinary Journal of Contemporary Research in Business* 4(12), 164-177.

Barjaktarović, D. 2013. *Upravljanje kvalitetom u hotelijerstvu.* Univerzitet Singidunum, Beograd. (In Serbian)

Beard, R. 2013. *The secrets to high customer satisfaction.* Client Heartbeat.

Blackshaw, P. 2006. The consumer-generated surveillance culture, retrieved from: http://www.clickz.com/showPage.html?page=3576076 [accessed 20/3/2023].

Blešić, I., Popov-Raljić, J., Uravić, L., Stankov, U., Đeri, L., Pantelić, M., Armenski, T. 2014. An importance-performance analysis of service quality in spa hotels. Economic research-Ekonomska istraživanja 27(1), 483-495.

Boon-Liat, C., Md. Zabid Abdul, R. 2013. Service quality and the mediating effect of corporate image on the relationship between customer satisfaction and customer loyalty in the malaysian hotel industry. *Gadjah Mada International Journal of Business* 15(2), 99-112.

Chiu, H. C. 2002. A study on the cognitive and affective components of service quality. *Total Quality Management* 13(2), 265-274.

Chiu, H. C., Wu, H. C. 2002. Exploring the cognitive and affective roles of service quality attitude across gender. *Service Industries Journal* 22(3), 63-76.

Dellarocas, C., Zhang, X.M., Awad, N.F. 2007. Exploring the value of online product reviews inforecasting sales: the case of motion pictures. *Journal of Interactive Marketing* 21 (4), 23–45.

Furrer, O., Liu, B., Sudharshan, D. 2000. The relationships beteen culture and service quality perceptions: Basis for cross-cultural market segmentation and resource allocation. *Journal of Service Research* 2(4), 355-371.

Gavilan, D., Avello M., Martinez- Navarro G. 2018.The influence of online ratings and reviews on hotel booking consideration. *Tourism Management* 66, 53-61.

Ghose, A., Ipeirotis, P. G. 2011. Estimating the helpfulness and economic impact of product reviews: mining text and reviewer characteristics. *IEEE Transactions on Knowledge and Data Engineering* 23(10), 1498–1512.

Karatepe, O. M. 2011. Service quality, customer satisfaction and loyalty: the moderating role of gender. *Journal of Business Economics & Management* 12(2), 278-300.

Kim, B., Kim, S., Heo, C. Y. 2016. Analysis of satisfiers and dissatisfiers in online hotel reviews on social media. *International Journal of Contemporary Hospitality Management* 28(9), 1915-1936.

Kim, S.-H., Holland, S., Han, H.-S. 2013. A structural model for examining how destination image, perceived value, and service quality affect destination loyalty: A case study of Orlando. *International Journal of Tourism Research* 15(4), 313-328.

Kim, W.G., Lim, H., Brymer, R.A. 2015. The effectiveness of managing social media on hotel performance. *International Journal of Hospitality Management* 44, 165-171.

Kim-Soon, N., Rahman, A., Visvalingam, L. 2014. Servqual: Can it be used to differentiate guest's perception of service quality of 3 star from a 4 star hotel. *International Business Research* 7(7), 37-47.

Knežević, M., Barjaktarović, D., Obradović, P. 2014. Ocenjivanje kvaliteta hotelskih usluga putem Interneta. U Zborniku radova *Uticaj interneta na poslovanje u Srbiji i svetu* (767-771). Beograd: Univerzitet Singidunum (In Serbian)

Kosar, Lj. 2008. *Osnove hotelijerstva*. Visoka hotelijerska škola strukovnih studija, Beograd.

Krapac, I. 2016. Facebook ima gotovo 1,6 milijardi korisnika, ali i prihod od 5,8 milijardi dolara. Retrieved from: http://www.netokracija.com/facebook-korisnici-prihodrezulta-ti-2016-112942 [accessed 20/3/2023]. (In Serbian)

Law, R., Buhalis, D., Cobanoglu, C. 2014. Progress on information and communication technologies in hospitality and tourism. *International Journal of Contemporary Hospitality Management* 26(5), 727-750.

Leung, D., Law, R., Van Hoof, H., Buhalis, D. 2013. Social media in tourism and hospitality: A literature review. *Journal of Travel & Tourism Marketing* 30(1-2), 3-22.

Mey, L. P., Akbar, A. K., Fie, D. Y. G. 2006. Measuring service quality and customer satisfaction of the hotels in Malaysia: Malaysian, Asian and non-Asian hotel guests. *Journal of Hospitality and Tourism Management* 13(2), 144–160.

Ngai, E. W. T., Heung, V. C. S., Wong, Y. H., Chan, F. K. Y. 2007. Consumer complaint behaviour of Asians and non–Asians about hotel services. *European Journal of Marketing* 41(11/12), 1375–1391.

Pantelidis, I. S. 2010. Electronic meal experience: A content analysis of online restaurant comments. *Cornell Hospitality Quarterly* 51(4), 483-491.

Po-Hsuan, W., Ching-Yuan, H., Cheng-Kai, C. 2014. Service expectation, perceived service quality, and customer satisfaction in food and beverage industry. *International Journal of Organizational Innovation* 7(1), 171-180.

Razi, M. A., Siddiquei, A. N., Awan, H. M., Bukhari, K. 2012. Relationship between service quality, perceived value, satisfaction and revisit intention in hotel industry. *Interdisciplinary Journal of Contemporary Research In Business* 4(8), 788-805.

Sparks, B. A., Browning, V. 2011. The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management* 32(6), 1310-1323.

Tsaur, S.-H., Lin, C.-T.,Wu, C.-S. 2005. Cultural Differences of Service Quality and Behavioral Intention in Tourist Hotels. *Journal of Hospitality & Leisure Marketing* 13(1), 41–63.

Wang, Y., Fesenmaier, D. R. 2004. Modeling participation in an online travel community. *Journal of Travel Research* 42(3), 261-270.

Xiang, Z., Gretzel, U. 2010. Role of social media in online travel information search. *Tourism Management* 31(2), 179-188.

Ye, Q., Law, R., Gu, B. 2009. The impact of online user reviews on hotel room sales. *International Journal of Hospitality Management* 28(1), 180–182.

Yelkur, R., Chakrabarty, S. 2006. Gender Differences in Service Quality Expectations in the Fast Food Industry. *Services Marketing Quarterly* 27(4), 141–151.

Zeithaml, V., Bitner, M. J.,Gremler, D. 2009. *Service marketing: Integrated customer focus across the firm*. New York, McGraw-Hill.