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THE USE OF IPA IN THE ANALYSIS OF CUSTOMER SATISFACTION IN THE HOTEL INDUSTRY

Primena IPA metoda u analizi zadovoljstva gostiju u hotelskim preduzećima

Abstract

Customer satisfaction with service quality is one of the fundamental goals of hotel enterprises. Numerous specifics of hotel services (intangibility, inability to storage, etc.) make this goal hard to reach, and thus hotels invest enormous efforts in identification of guests' needs, in order to adjust their supply. The aim of this paper is to identify weaknesses and advantages of the selected hotel attributes by analysis of guests' importance and performance evaluation. The respondents were accommodated in four and five-star hotels in Serbia. In order to identify the weak points that could enable managers to raise the quality of services, the IPA method (Importance-Performance Analysis) was used. The results obtained reveal that guests are generally satisfied with the hotel attributes they consider highly important, while it is not the case with those less important. Furthermore, certain differences could be observed between the guests who stayed in city hotels and those in mountain and spa hotels.

Keywords: *hotel enterprises, guest satisfaction, IPA*

Sažetak

Zadovoljstvo gostiju kvalitetom pružene usluge jeste jedan od osnovnih ciljeva kojim hotelska preduzeća teže. Zbog brojnih specifičnosti (neopipljivost, nemogućnost skladištenja, itd) hotelske usluge taj cilj nije lako postići, pa menadžment hotelskih preduzeća ulaže velike napore u procesu identifikacije turističkih potreba, a zatim i prilagođavanju hotelskog proizvoda tim potrebama. Cilj našeg istraživanja je da se identifikuju slabosti i prednosti hotelskog proizvoda analizom ocena gostiju o važnosti (importance) i stvarnom stanju (performance) odabranih atributa. Analizirani su hoteli kategorisani sa četiri i pet zvezdica u Srbiji, odnosno 1308 gostiju koji su boravili u njima. Kako bismo identifikovali slabe tačke koje mogu poslužiti menadžerima za podizanje kvaliteta hotelskog proizvoda, koristili smo IPA metod (Importance-Performance Analysis). Dobijeni rezultati pokazuju da su anketirani gosti generalno zadovoljni onim atributima hotelskog proizvoda koji su im veoma važni, dok to nije slučaj sa manje važnim atributima. Takođe, postoje određene razlike između ocena gostiju koji su boravili u gradskim hotelima u odnosu na goste planinskih i banjskih hotela.

Ključne reči: *hotelska preduzeća, zadovoljstvo gostiju, IPA*

Introduction

The underlying goal of any private enterprise is to make profit. As regards hospitality industry, one of the safest ways to make a profit is through customer satisfaction with services provided. Even though the term quality is nowadays often used in colloquial language, it still represents a category that has not been thoroughly explored and analyzed. That could be mainly attributed to the consideration that everybody knows what the quality is and what it represents. Therefore, quality as a broad term represents a category that is often used in diverse forms, while management literature suggests several different approaches to defining quality. Barjaktarović [5] points out that the definitions of quality can be grouped as follows:

- Manufacturing approach
- Customer approach
- Definitions based on process
- Definitions based on value
- Transcendental approach

The starting point in defining quality comprises two aspects, namely the one that focuses on who provides (creates or offers) services on one side, and the customer (consumer) on the other. Accordingly, quality represents compatibility with production processes from the aspect of manufacturer/producer. From the consumer's point of view, it could be defined as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs and expectations [29]. Crosby mainly worked on defining quality from the aspect of production and claimed that quality represents conformance to customer requirements [15], while Juran identified the quality of the product with its characteristics that can satisfy customers' needs [26].

However, defining quality of services is much more complex than defining quality of a product, considering the specifics of the service process (services are heterogenic, intangible, non-possessable, cannot be stored, etc.).

Due to all characteristics and differences of services with regard to products, their quality cannot be checked prior to their use. Kotler considers that quality represents a set of all characteristics of a service which come from its capability to fulfill customers' expectations [30]. Avelini defines quality as a level of satisfaction with regard to customer expectations and requirements [3]. Numerous authors believe that service quality is a result of the evaluation process in which service users attempt to determine whether their customer experience matches their expectations [50], [21], [27], [44].

Service quality is by its very nature an extremely important segment in hotel business, and accordingly, quality is the subject of numerous research, both professional and scientific [45], [14], [43]. Čačić [6] defines hotel service quality as a set of its tangible and intangible characteristics based on which interpersonal relations with guests are formed, and their expectations and needs are met. Barjaktarović [5] points out that the core is in service characteristics that enable satisfaction of guests' needs, as they are the ones who can give the final assessment of the level of satisfaction with services experienced. Thus, service quality must fulfill or overcome the customer expectations. Quality defined in such manner encompasses all processes established by employees in work relations with guests and between themselves. The quality of hotel services is often defined as the attitude toward the gap between expectations and experience of services provided [41], [46], [24].

There is a great number of determinants of service quality in tourism and hospitality. Users perceive them through a multidimensional approach and use them as important criteria in the decision-making process [6]. From the customer perspective, the key determinants of hotel service quality are as follows [13]:

- Tangibility
- Reliability
- Responsiveness
- Competencies
- Availability
- Safety
- Communications
- Empathy, etc.

All above-listed determinants are very important, and different models used for determining and measuring quality rely on them.

Research shows that service quality represents an important precondition for business profitability [7], [11], [8]. The results of the majority of such studies have affected the creation of conceptual models and new instruments to measure quality.

Literature review

IPA analysis represents a simple technique that hotel management can perform in order to identify the attributes that are important for guests, and the level of their satisfaction with quality of those attributes [48]. This analysis is very important in market research as it enables exploring customer satisfaction in many areas, such as:

- Administration [34], [31]
- Healthcare [39], [36], [10], [52]
- IT [1]
- Banking [25]
- Education [28], [42], [51]
- E-commerce [33], [38], [37]
- Tourism [53], [12], [49], [32], [19], [17]
- Hospitality [23], [2], [16], [9]
- Restaurant business [35]

Even though this method is subject to criticism [4], it is still widely used and explored in the hospitality literature and related publications [40].

The research on customer satisfaction in hospitality using this method has not been conducted so far (it was mainly done on tourism destinations) [20]. The simplicity of the analysis, and yet the clarity of the results it presents, led the authors to the idea of testing guests' satisfaction in hotels in Serbia. Furthermore, the authors have not found a paper that compared guest satisfaction in city and spa hotels using this method. It should be determined whether there is any difference in the importance of certain attributes when it comes to guests' expectations, as the initial motives of taking a trip to a spa or a city hotel usually differ. On the other hand, performance which spa hotels and city hotels can achieve could also differ bearing in mind disposable resources (work force, infrastructure, facilities on the spot, etc.). Therefore, we decided to analyze the satisfaction of guests who stayed in four and five-star hotels in Serbia.

Data and methodology

By means of a survey, guests' ratings for hotel attributes were determined in 4 and 5 star hotels in Serbia (total of 50 hotels were observed). We used a direct method - a questionnaire, the guests were surveyed in person, and 1,308 guests filled out the questionnaires correctly. All the information was provided strictly anonymously and voluntarily, with prior consent of the respondents in line with high ethical standards. In this way, the risk of giving socially acceptable answers was reduced as well. The guests rated importance and performance on a five-point Likert scale (anchored at 1= very unsatisfied and 5= very satisfied) through 5 attributes in 5 dimensions (25 questions) and two additional ratings for free Internet access and best value for money:

- **Cleanliness:** Room cleanliness, hallways cleanliness, kitchen and restaurant cleanliness, lobby cleanliness, cleanliness of hotel surroundings;
- **Comfort:** Comfortable beds, comfortable restaurant chair, ambience, noise reduction;
- **Location:** Proximity to the bus station, airport distance, distance from the city center, distance from cultural-historical heritage, distance from the competition;
- **Amenities:** Spa & wellness, sport and recreation amenities, facilities for fun & games, banquet amenities;
- **Staff:** Friendliness of staff, staff professionalism, staff communication, language competencies, uncertainty of staff, staff readiness to react in unexpected situations;
- **Free Wi-Fi**
- **Value for money**

We selected these attributes because they are evaluated by guests on the most visited Internet distribution system - Booking.com. The website Booking.com™ has a large market share, especially in Europe, operating on a commission-based model and allowing its registered users to carry out a complete booking procedure online quickly and securely. Shortly after a stay, a user is routinely invited via email to fill out a guest review form. The first part of the form allows users to evaluate the property they stayed in, using

a standardized set of criteria, specifically - cleanliness, comfort, location, facilities, staff, and value for money, while the second part of the form gives users the option to write additional comments.

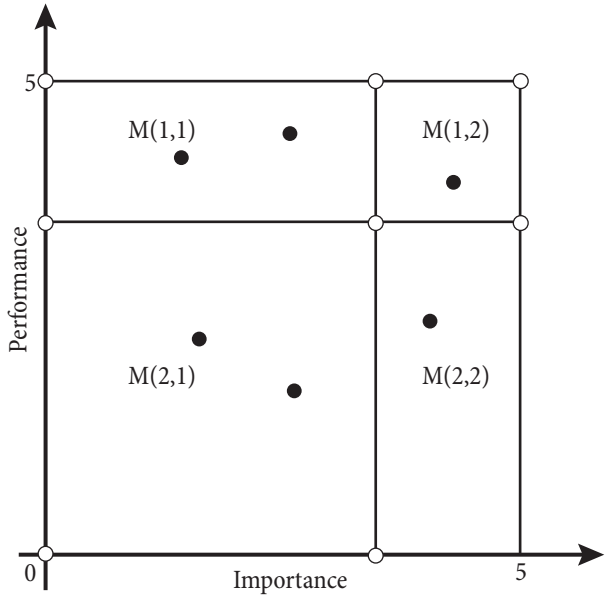
Many authors have analyzed data generated from online reviews but we have decided not to use data from online reviews, because internet distribution systems (IDS) enable quality assessment only to users who make a reservation of hotel services over them.

In order to collect more objective results, we used a direct method - a questionnaire. In that way, we gave the possibility for all guests to rate the quality of those dimensions, no matter how they have reserved the hotel services.

Collected data were analyzed by means of a statistical program IBM SPSS Statistics 22 (descriptive statistics and t-test used in the analysis), while the model we used is based on the importance-performance matrix, which is widely used in marketing. Nonetheless, it has been intensively used in tourism and hospitality in the last couple of years [31].

Attributes positioning (average importance points, average performance points) is done using an importance-performance matrix whose elements are the cells M(1,1), M(1,2), M(2,1) and M(2,2) (ordinary matrix labeling). Matrix cells M(1,1), M(1,2), M(2,1) and M(2,2) are determined in the following way. Firstly, average values for all attributes are determined (with regard to importance and performance as well). Secondly, two straight lines are set in a coordinate system, parallel to the axes, (axe Importance and axe Performance), which are placed in average rating points. Accordingly, four cells/quadrants are gained M(1,1), M(1,2), M(2,1), M(2,2) in a rectangle (0,0), (5,0), (5,5), (0,5) (importance-performance matrix graph).

Figure 1: IPA Graph



The performance-importance matrix can help managers gain valuable information and compete more successfully. In the outdoor market, some matrix cell tops are determined as follows [22].

- Cell tops M(1,1) are points (0, pp), (pv, pp), (pv, 5), (0,5),
- Cell tops M(1,2) are points (pv, pp), (5, pp), (5,5), (pv, 5),
- Cell tops M (2, 1) are points (0, 0), (pv, 0), (pv, pp), (0, pp),
- Cell tops M(2,2) are points (pv, 0), (5,0), (5, pp), (pv, pp).

As can be seen, the importance and performance ratings were plotted on a matrix divided into four quadrants. Namely, the first quadrant – Possible overkill M(1,1) includes those attributes that are rated low in importance and high in quality performance, while the second quadrant M(1,2) comprises attributes of high importance and high quality performance. The third quadrant – Low priorities M(2,1) includes attributes that are rated low in importance and performance, whereas the last quadrant – Concentrate here M(2,2) includes attributes of high importance and low quality performance.

Results and discussions

The results (Table 1) show that the majority of respondents stayed in city hotels. In addition, it is notable that the four-star hotels dominate in the overall structure. When it comes to education, higher education profile prevails. Business travelers make up the majority of respondents in terms of segmentation, while no significant difference could be observed between domestic and foreign travelers. When it comes to gender structure, male respondents prevail in the sample by 11%.

Table 1: Descriptive statistics

Variables		Frequency	Valid Percent
Gender	Male	721	55.1
	Female	587	44.9
Nationality	Domestic	643	49.2
	Foreign	665	50.8
Segmentation	Families	202	15.4
	Couples	199	15.2
	Groups of friends	188	14.4
	Solo travelers	227	17.4
	Business travelers	492	37.6
Education	Elementary school	3	0.2
	High school	137	10.5
	Junior college	385	29.4
	Bachelor's degree	684	52.3
	Master's degree	98	7.5
	Doctoral degree	1	0.1
Hotel Category	4 *	1,094	83.6
	5 *	214	16.3
Hotel location	City	857	65.5
	Mountain/Spa	451	34.5

The results of importance-performance analysis of guests who stayed in the observed hotels are given below. As previously mentioned, the authors have analyzed seven key dimensions: cleanliness, comfort, location, amenities, staff, value for money and free Wi-Fi usage. For the first five dimensions we analyzed 25 elements. We shall first present a graph which relates to all of the surveyed respondents, and then a graph showing the level of guest satisfaction in city and spa hotels.

We marked the dimensions we analyzed with letters: A for "cleanliness", B for "comfort", C for "location", D for "amenities", E for "staff", F for "value for money" and G for "free Wi-Fi", while other elements were marked with numbers from 1-25.[1]

Based on the results given in the table above, we can conclude that there are statistically significant differences between importance and perception ($p<0.05$) in all of the observed dimensions. In order to determine if experience (perception) was in agreement with expectations (importance), the above mentioned IPA analysis was used, and the results are presented in the following graph.

The first quadrant – Possible overkill M(1,1) includes those attributes of low importance and high quality, while the second quadrant – Keep up the good work M(1,2), covers attributes that are rated high in importance and quality performance. The third quadrant – Low priority M(2,1) includes those attributes of low importance and low quality, whereas the last quadrant – Concentrate here M(2,2) includes attributes of high importance and low quality.

Based on the results obtained, we can conclude that guests are satisfied with attributes they consider very important (cleanliness, comfort, staff, value for money, free Wi-Fi), while the results for attributes that guests do not consider very important are not high either (location or amenities).

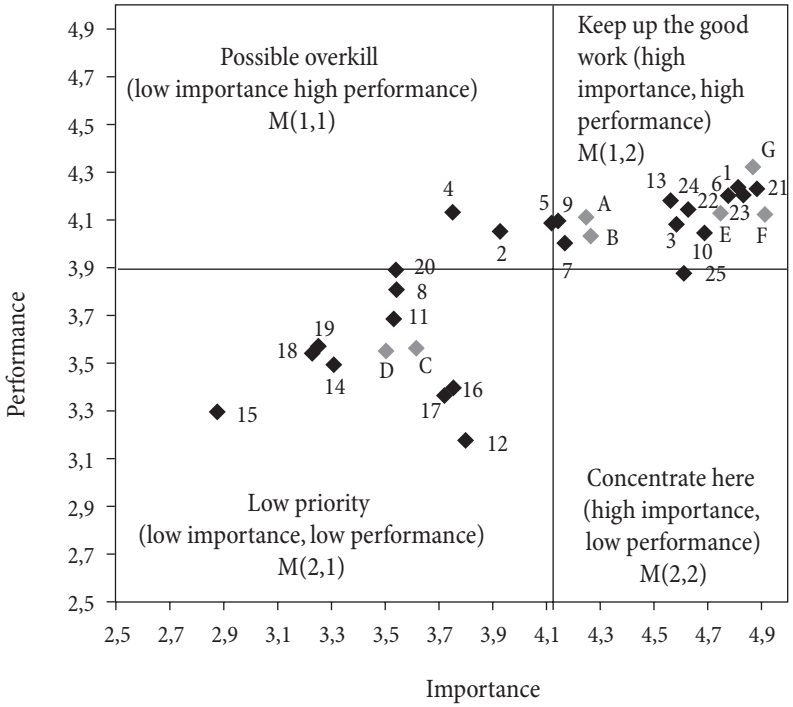
Moreover, it is notable that in the fourth quadrant – Concentrate here, there are no attributes. This shows that there are no elements that guests consider important and

Table 2: Differences in ratings of all respondents surveyed about importance-performance

DIMENSIONS	IMPORTANCE		PERCEPTION			TEST	
Ref. No.	Arithmetic mean (AM)	Standard deviation (SD)	Arithmetic mean (AM)	Standard deviation (SD)	Mean difference	t - statistics	Significance level (p)
A - cleanliness	4.25	0.38	4.11	0.5	0.14	9.6	0.000
B - comfort	4.27	0.39	4.04	0.54	0.23	14.41	0.000
C - location	3.62	0.44	3.57	0.43	0.05	2.941	0.003
D - amenities	3.5	0.61	3.55	0.76	-0.05	-2.161	0.031
E - staff	4.75	0.3	4.13	0.57	0.62	34.125	0.000
F - value for money	4.92	0.31	4.13	0.67	0.79	38.778	0.000
G - free Wi-Fi	4.87	0.38	4.33	1.22	0.54	15.441	0.000

1 Results for all 25 elements can be accessed in appendix – Table 1

Figure 2: Guests' ratings – IPA analysis



whose quality is not at the expected level. Accordingly, we can conclude that the management of the observed hotels has no reasons to be concerned, but they should pay special attention in the future to those attributes that guests consider very important.

Due to the big dispersion in destinations, or more precisely, location of the analyzed hotels (majority of hotels are located in big cities followed by mountain hotels and finally spa hotels) and indicated differences in market orientation and overall business concept between city, mountain and spa hotels, the authors shall use the same method to analyze the guests' ratings for city hotels, and specifically hotels located in the mountain and spa centers.

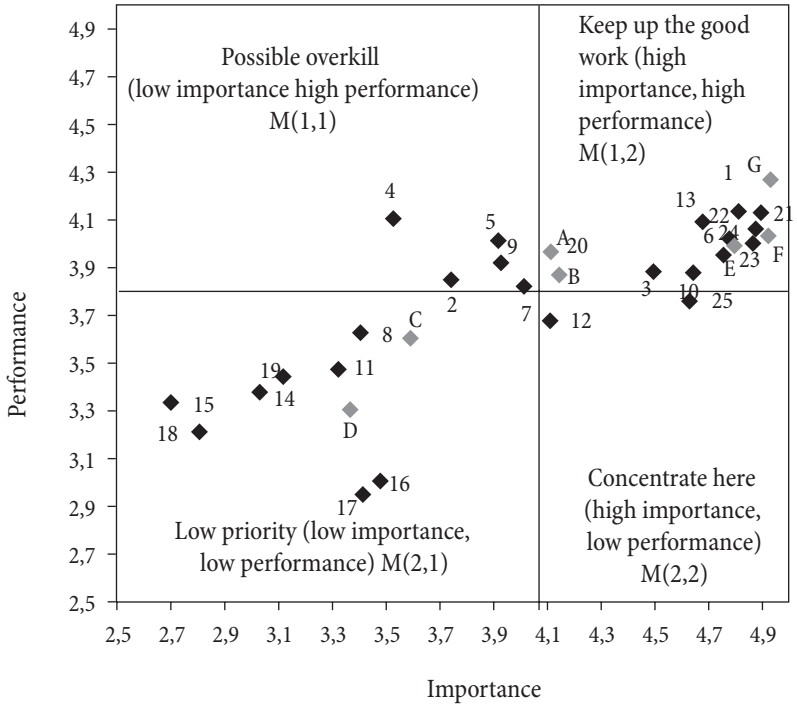
Based on the above-disclosed results, it can be concluded that there are no statistically important differences only when it comes to location and amenities ($p>0.05$), while clear statistical differences could be observed in all other dimensions ($p<0.05$).

The results presented in the previous graph show that guests who stayed in city hotels were satisfied with the quality of those attributes they consider very important. In addition, attributes that they do not consider very important did not perform high as well. However, it is worth noting that the following elements can be found in the fourth quadrant (Concentrate here): proximity to the airport (no. 12) and staff readiness to react in unexpected circumstances

Table 3: Differences in guests' ratings about importance-performance in city hotels

DIMENSIONS	IMPORTANCE		PERFORMANCE			TEST	
Ref. No.	Arithmetic mean (AM)	Standard deviation (SD)	Arithmetic mean (AM)	Standard deviation (SD)	Mean difference	t -statistics	Significance level (p)
A - cleanliness	4.11	0.330	3.96	0.501	0.15	7.717	0.000
B - comfort	4.15	0.352	3.87	0.565	0.27	12.269	0.000
C - location	3.58	0.452	3.61	0.460	-0.02	-0.987	0.324
D - amenities	3.36	0.677	3.30	0.791	0.06	1.920	0.055
E - staff	4.79	0.317	3.99	0.557	0.79	35.395	0.000
F - value for money	4.92	0.325	4.03	0.657	0.89	36.800	0.000
G - free Wi-Fi	4.92	0.348	4.27	1.225	0.65	15.182	0.000

Figure 3: Guests' ratings for city hotels – IPA analysis



(no. 25), which tells us that the management in city hotels should focus more on such matters in the future in order to maintain a high level of customer satisfaction.

The following table displays the results received for the analysis of ratings provided by the guests who stayed in mountain and spa hotels.

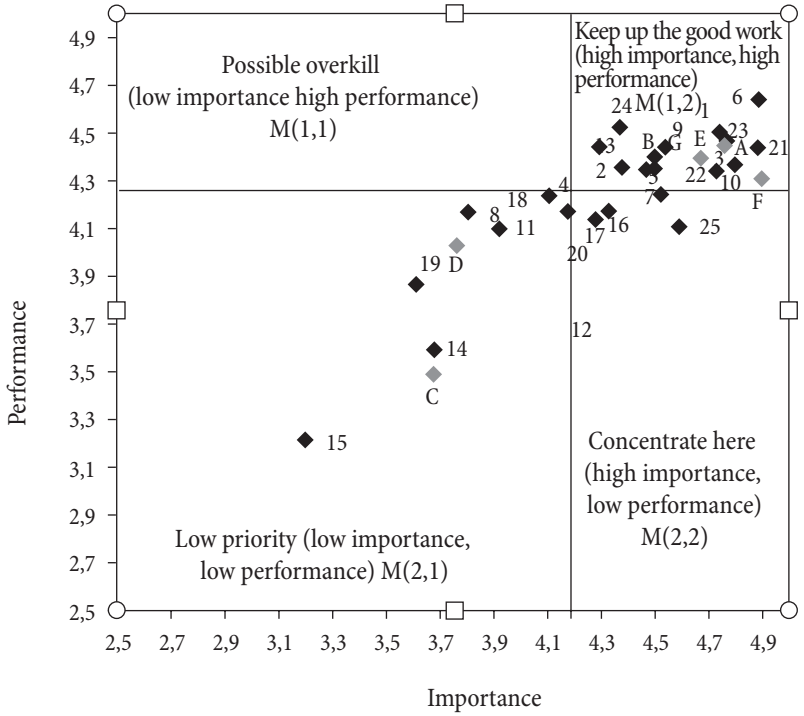
The above-disclosed results show statistically significant differences ($p<0.05$) in importance-performance in all of the observed dimensions.

Based on the above-presented results and using the IPA analysis, it is possible to conclude that the guests in mountain and spa hotels are generally satisfied with the attributes they consider very important. However, as with the previous examples, it is notable that there are still a few elements the management should devote particular attention to in the future in order to satisfy guests' expectations. Those elements include: room comfort (no. 7), wellness and spa facilities (nos. 16 and 17) and staff readiness to react in unexpected situations (no. 25). The limitations of this study could be that it was conducted on a national level. However, it should be noted that hotels of the best categories were analyzed, with some of them representing international corporative hotel chains. Thus, the results presented in this study could be considered and generalized in a broader context, which could be the subject of further research in this area.

Table 4: Differences in guests' ratings for mountain and spa hotels about importance-performance

DIMENSIONS	IMPORTANCE		PERFORMANCE			TEST	
Ref. No.	Arithmetic mean (AM)	Standard deviation (SD)	Arithmetic mean (AM)	Standard deviation (SD)	Mean difference	t -statistics	Significance level (p)
A - cleanliness	4.51	0.311	4.40	0.357	0.11	5.950	0.000
B - comfort	4.50	0.354	4.35	0.315	0.16	7.931	0.000
C - location	3.69	0.405	3.49	0.348	0.19	7.738	0.000
D - amenities	3.77	0.338	4.03	0.378	-0.25	-11.580	0.000
E - staff	4.68	0.262	4.39	0.505	0.29	11.909	0.000
F - value for money	4.91	0.291	4.31	0.646	0.60	16.913	0.000
G - free Wi-Fi	4.77	0.423	4.44	1.201	0.33	5.530	0.000

Figure 4: Guests' ratings for mountain and spa hotels – IPA analysis



Conclusion

Numerous studies have underlined the importance of customer satisfaction analysis, as shown in the introductory part. In fact, already in the year of 1992, Peterson and Wilson estimated there were 15,000 studies done on customer satisfaction or dissatisfaction [47]. Yet, little has been said about the implementation of this model in hospitality, although it is widely used in tertiary sector. The authors believe that guests' satisfaction reflects in situations when hotel managers deliver expected value for their customers, respectively guests' dissatisfaction occurs in situations when hotel managers fail to deliver the same expected value [18]. This means that guests have certain expectations and that they create the perception about service performance even before they experience it. Hence, we have decided to use the IPA method which precisely portrays the relationship between importance and performance of certain attributes of services provided.

Upon the analysis of ratings and attitudes of guests who stayed in four and five-star hotels in Serbia, we can conclude that guests' expectations are generally fulfilled when it comes to attributes they consider important. This was clearly presented in Figures 1, 2 and 3, where the majority of dimensions tested were grouped in matrix 1,2 indicating a high correlation between what is of "high importance" and "high performance" for the guests. Moreover, the slope indicates that tested hotels are moving into a positive direction, properly assessing guests' expectations.

Understanding the importance of certain attributes of hotel service can be crucial for some market segments in the process of service production. Despite such favorable results, it is necessary to perform continuous market research and follow the trend of guests' expectations, as well as the perception of services provided. One such method is the IPA analysis, which has been presented herein. The main advantage of this model for the managers could be the relative simplicity for its implementation. Thus, they could perform this analysis on a regular basis and track their performance according to the changes in customers' expectations. Finally, it could be used as a method of quality improvement through identification of weak points in hotels, as well.

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APPENDIX

All guests

ATTRIBUTES

ATTRIBUTES	IMPORTANCE		PERFORMANCE			TEST	
Ref. No.	Arithmetic mean (AM)	Standard deviation (SD)	Arithmetic mean (AM)	Standard deviation (SD)	Mean difference	t -statistics	Significance level (p)
1	4.83	0.42	4.21	0.74	0.62	27.295	0.000
2	3.93	0.68	4.05	0.73	-0.12	-5.174	0.000
3	4.59	0.57	4.09	0.72	0.5	22.616	0.000
4	3.75	0.8	4.13	0.68	-0.38	-13.768	0.000
5	4.14	0.64	4.1	0.81	0.05	1.806	0.071
6	4.82	0.43	4.24	0.79	0.58	24.279	0.000
7	4.17	0.7	4	0.8	0.17	6.395	0.000
8	3.54	0.79	3.81	0.8	-0.27	-8.95	0.000
9	4.12	0.7	4.09	0.74	0.03	1.271	0.204
10	4.7	0.57	4.05	0.97	0.65	21.073	0.000
11	3.53	0.98	3.69	0.88	-0.16	-5.191	0.000
12	3.8	1.17	3.18	1.15	0.63	17.252	0.000
13	4.57	0.7	4.18	0.95	0.39	12.243	0.000
14	3.31	1.1	3.5	0.95	-0.18	-4.592	0.000
15	2.88	0.86	3.29	0.84	-0.42	-12.016	0.000
16	3.75	1.04	3.39	1.26	0.36	9.564	0.000
17	3.73	1.13	3.37	1.22	0.36	10.035	0.000
18	3.26	1.13	3.56	1.11	-0.31	-9.225	0.000
19	3.23	1.01	3.55	0.97	-0.32	-8.346	0.000
20	3.55	1.3	3.89	0.87	-0.34	-9.609	0.000
21	4.89	0.39	4.23	0.83	0.66	25.934	0.000
22	4.78	0.45	4.2	0.76	0.58	23.929	0.000
23	4.84	0.4	4.2	0.81	0.64	25.28	0.000
24	4.63	0.62	4.15	0.82	0.48	16.738	0.000
25	4.62	0.55	3.88	0.8	0.73	27.084	0.000

Guests in city hotels

ATTRIBUTES

ATTRIBUTES	IMPORTANCE		PERFORMANCE			TEST	
Ref. No.	Arithmetic mean (AM)	Standard deviation (SD)	Arithmetic mean (AM)	Standard deviation (SD)	Mean difference	t -statistics	Significance level (p)
1	4.87	0.405	4.06	0.773	0.81	29.116	0.000
2	3.74	0.627	3.85	0.684	-0.11	-3.672	0.000
3	4.49	0.602	3.89	0.726	0.61	19.981	0.000
4	3.53	0.776	4.11	0.765	-0.58	-16.652	0.000
5	3.93	0.588	3.92	0.864	0.01	0.243	0.808
6	4.77	0.478	4.03	0.820	0.75	23.258	0.000
7	4.01	0.692	3.82	0.799	0.19	5.367	0.000
8	3.40	0.747	3.63	0.845	-0.23	-5.614	0.000
9	3.91	0.677	4.01	0.778	-0.10	-2.851	0.004
10	4.64	0.612	3.88	1.076	0.76	18.219	0.000
11	3.32	0.976	3.48	0.860	-0.16	-4.133	0.000
12	4.11	1010	3.68	0.941	0.43	10.013	0.000
13	4.67	0.614	4.09	1.064	0.58	13.747	0.000
14	3.12	1.181	3.44	0.994	-0.33	-6.345	0.000
15	2.70	0.851	3.33	0.808	-0.63	-15.690	0.000
16	3.47	1.101	3.00	1.299	0.47	8.813	0.000
17	3.41	1.192	2.95	1.247	0.46	8.920	0.000
18	2.80	1.037	3.21	1.147	-0.41	-9.011	0.000
19	3.03	1.066	3.39	1.008	-0.36	-7.186	0.000
20	4.11	0.944	3.97	0.904	0.14	3.757	0.000
21	4.89	0.427	4.12	0.839	0.76	23.646	0.000
22	4.81	0.456	4.13	0.806	0.68	21.062	0.000
23	4.86	0.389	4.00	0.832	0.86	26.861	0.000
24	4.75	0.510	3.96	0.809	0.80	25.175	0.000
25	4.63	0.539	3.76	0.777	0.86	25.146	0.000

Guests in mountain and spa hotels

ATTRIBUTES

ATTRIBUTES	IMPORTANCE		PERFORMANCE			TEST	
Ref. No.	Arithmetic mean (AM)	Standard deviation (SD)	Arithmetic mean (AM)	Standard deviation (SD)	Mean difference	t -statistics	Significance level (p)
1	4.75	0.433	4.50	0.563	0.25	7.750	0.000
2	4.30	0.634	4.43	0.668	-0.13	-3.969	0.000
3	4.78	0.438	4.47	0.542	0.31	11.474	0.000
4	4.19	0.644	4.17	0.497	0.02	0.486	0.627
5	4.55	0.524	4.43	0.579	0.12	3.381	0.001
6	4.89	0.309	4.63	0.518	0.26	9.717	0.000
7	4.48	0.594	4.34	0.666	0.14	3.487	0.001
8	3.81	0.787	4.16	0.545	-0.35	-8.527	0.000
9	4.53	0.547	4.24	0.638	0.29	7.917	0.000
10	4.81	0.453	4.36	0.619	0.44	11.076	0.000
11	3.94	0.855	4.10	0.774	-0.16	-3.140	0.002
12	3.21	1.227	2.21	0.853	1.00	15.849	0.000
13	4.39	0.815	4.35	0.671	0.04	0.887	0.375
14	3.69	0.784	3.59	0.839	0.10	1.646	0.100
15	3.21	0.789	3.22	0.883	-0.01	-0.145	0.885
16	4.29	0.638	4.14	0.760	0.15	3.897	0.000
17	4.33	0.677	4.16	0.622	0.17	5.095	0.000
18	4.12	0.730	4.23	0.649	-0.11	-2.703	0.007
19	3.63	0.759	3.86	0.794	-0.24	-4.255	0.000
20	2.49	1.226	3.73	0.795	-1.25	-22.157	0.000
21	4.89	0.312	4.43	0.761	0.46	11.744	0.000
22	4.74	0.439	4.33	0.637	0.41	11.880	0.000
23	4.79	0.407	4.57	0.605	0.22	6.705	0.000
24	4.38	0.734	4.52	0.694	-0.14	-3.154	0.002
25	4.60	0.559	4.11	0.808	0.49	11.769	0.000

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