
AN EXPLORATORY ANALYSIS OF CUSTOMER SATISFACTION IN THE EXTRAHOTEL INDUSTRY

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ABSTRACT

Meeting customer satisfaction is crucial today to improve customer services by delivering higher quality in all service-oriented industries. The aim of this study is to develop a framework to assess customer service in the extra hotel industry for a sample of four non-hotel complexes in the south of Gran Canaria Island. A synthetic service quality indicator is built from customer reviews for 47 service quality attributes in order to analyze and rank the performance of each establishment. Data were collected from 164 tourists

who lodged in the four complexes through a structured questionnaire. The 47 attributes were analysed by both a bottom-up and a top-down approach differentiating them in three global hierarchies, name list physical tangibles, services and friendliness of staff. Through this exploratory analysis, management may be assisted with important insights to streamline their operations and enhance the quality of the tourist's experience by incorporating service quality attributes that tourists value most.

KEYWORDS

Customer Satisfaction, Exploratory analysis, Non-hotel industry, Synthetic Service Quality Indicators.

RESUMEN

Hoy en día las industrias de servicios tratan de mejorar el servicio que prestan a sus clientes por medio de mejoras en la calidad. Para ello, resulta crucial conocer el grado de satisfacción de sus clientes. El presente estudio pretende desarrollar un marco metodológico para evaluar el servicio al cliente en la industria extrahotelera del sur de la isla de Gran Canaria. Para ello, se realizó una encuesta estructurada a 164 turistas alojados en 4 establecimientos extrahoteleros. A partir de 47 atributos, se construye un indicador sintético de calidad del servicio con el fin de analizar el desempeño de cada establecimiento. Nuestro análisis utiliza dos enfoques diferenciados, Bottom-up y Top-down, diferenciándose ambos en tres dimensiones: tangibles físicos, servicios y amabilidad del personal. Gracias a este análisis exploratorio, los directivos pueden contar con una herramienta útil para coordinar y dinamizar sus operaciones, mejorando la calidad de la experiencia del turista mediante la incorporación de aquellos atributos que los turistas valoran más.

PALABRAS CLAVE

Satisfacción del cliente, Análisis exploratorio, Industria extrahotelera, Indicadores sintéticas de calidad de servicio.

INTRODUCTION

Tourism has become one important sector of Canary Islands economy. It is evident that the financial crisis of the euro zone has affected the hospitality industry in the region. This jointly with the appearance of new other important tourism competitor markets and the fierce competition has intensified the need for businesses and organizations to assume a quality perspective in the design and management of their operations. In such a competitive industry, companies will have to strive to deliver higher levels of service quality as a means to achieve competitive differentiation (McColl et al., 1998).

Garbarino and Johnson (1999) stated that customer satisfaction is derived from the quality of the product and service experience in comparison to previously held expectations. Definitions of customer satisfaction state that this term is the consequence of customers' comparison about their perception of how one service has been performed and their expectations about it. (Lewis and Bloom, 1983; Lehtinen and Lehtinen, 1982; Grönroos, 1984; Parasuraman et al. 1985). A positive relationship between the organizational performance in terms of quality of service, the level of customer satisfaction and the firm's success seems to be intuitively logical. In fact, numerous studies recognize the existence of a positive relationship between customer satisfaction and long term firms' success (Bowen and Shoemaker, 1998; Ittner and Larcker, 1998; Eklöf et al., 1999; Tepeci, 1999). As Matzler et al. (2004, p.271) mention, "*it is argued that satisfaction leads to increased loyalty, reduced price elasticity, increased cross-buying, and positive word of mouth*". Furthermore, Johnson et al. (1996) demonstrated that customer satisfaction is related to customer loyalty, which, in turn, is related to profitability. Therefore, service quality has been target of an increasing concern by practitioners, in their efforts to identify the critical factors that determine customer satisfaction and loyalty. For firms to meet customer expectations, it is important to know the importance customers place on the individual components of the service experience and how the business performs in relation to those components.

Consumers judge service offered on a limit set of attributes, some of which are relatively important in determining satisfaction, while others are not critical to consumer satisfaction but are related to dissatisfaction when performance on them is unsatisfactory (Swan and Combs, 1976). In this sense, it is essential to have a good understanding of the business facts that are important for customers in order to meet their expectations with regard to the services and products offered. Specific tools for managers to identify areas where they need to revise resource allocation are required. However, each company is constrained by limitations on its available resources. Therefore, it must be decided how scarce resources are best employed to achieve the highest level of customer satisfaction. The importance-satisfaction analysis is an effective and recognized method to set strategic priorities for the management of customer satisfaction (Matzler et al., 2002). Importance and satisfaction on service elements are two indicators applied to evaluate the corresponding service quality performance (Hung et al., 2003). The dimensions of satisfaction and importance to the customer are analysed for quality attributes and combined into a matrix that allow an organization to identify improvement priorities and direct quality-based marketing strategies. At the heart of the importance-satisfaction analysis is the importance-performance analysis (IPA) (Martilla and James, 1977). The extension of the analysis into the non-hotel industry provides opportunities for individual firms to evaluate its performance by identifying primary drivers of customer satisfaction, setting improvement priorities, identifying possible overkills and areas of “acceptable” disadvantage (Maztler et al., 2004).

Tourist apartments provide an ample range of services to customers. They include lodging services, reception, kitchen and kitchenware, swimming pools and gardens and room cleaning, among others. Many of them even incorporate restaurant services. But service quality not only consists of tangible attributes, but also intangible or subjective ones such as quietness, safety or staff friendliness. In this sense, it is obvious that service quality is constituted as a multidimensional measure from different services offered. In fact, Zeithaml and Bitner (2000) have suggested that customers do not perceive quality as a uni-dimensional concept. Rather, their

assessment of quality includes perceptions of multiple factors. In order to make comparisons of service quality performance, an indicator that add into a single measure the different service quality dimensions is needed. Synthetic indicators are a useful way to aggregate multidimensional information; thereby they facilitate interpretation and better representing the firms' performance on service quality. General public often find easier to interpret synthetic indicators than determinate common factors across many separate indicators (Saltelli, 2007). The general objective of most of these indicators is to establish a performance ranking according to some aggregated dimensions.

Despite the significant presence extra-hotel industry has for tourism in the Canary Islands¹, to our knowledge, there is no literature that evaluates service quality in tourist complex of apartments. The present study aims to fill this gap developing an analytical framework for creating a synthetic service quality indicator (SQI) from a weighted importance-satisfaction matrix analysis, using two different data processing approaches -bottom-up and top-down, in order to check if there are differences on the final results of SQIs rankings. Our study presents its empirical application for a sample of 164 tourists lodged in four complex of apartments located in the south of Gran Canaria island, concretely in the municipalities of San Bartolomé de Tirajana and Mogán.

The evaluation of service quality in the region is of utmost necessity, not only due to the importance tourism sector has on the economy of the island, but also because of the current necessity for rehabilitation of the main tourist areas which were mostly developed since the fifties (Medina et al., 2008). For this reason, our proposal could be used to analyse different rehabilitation projects that could be envisaged in the tourist areas in the municipality of San Bartolomé de Tirajana for different policy makers of the agencies that represent the Spanish State, the Canary

¹ San Bartolomé de Tirajana is the main tourist municipality of the island of Gran Canaria. In total, there are 72.523 extra-hotel beds on the island and the number of non-hotel establishments represents approximately 73% of the total in 2012. (ISTAC, 2013).

Islands government, the inter-island Council of Gran Canaria and San Bartolomé de Tirajana municipality Council.

The rest of the paper is organized as follows. Next section describes the service quality attributes, the questionnaire and data collection and the respondents' profile. Section 3 describes the importance-satisfaction analysis and the methodology employed to build the synthetic service quality indicators. The results obtained are shown and commented in section 4, and finally, section 5 concludes with management implications.

SERVICE QUALITY ATTRIBUTES AND QUESTIONNAIRE

SERVICE QUALITY ATTRIBUTES

The first step to evaluate quality of service is to identify a number of service attributes. The quality of services perceived by consumers can be represented and measured by some attributes. These attributes have to be selected in a correct way to reflect accurately the evaluation problem and the service problem to investigate. For our purpose, 47 service quality attributes have been analyzed to measure service quality performance: 29 tangibles, 9 attributes related to the services offered and 9 regarding the friendliness of the staff of each service offered. The attributes to be included in the study were discussed and studied deeply on a focus group meeting with the managers of the sample organizations. Table 1 shows the service quality attributes. Due to one of the organizations did not have restaurant service, the dimensions related to it were not considered.

TABLE 1. SERVICE QUALITY ATTRIBUTES

	FACILITIES AND TANGIBLES	
Ease of access to the apartment	Bathroom facilities	Furniture/Decoration in restaurants and bars
Front desk facilities	Laundry service	Furniture/decoration in common areas
Quietness in the apartment	Cleaning of the apartment	Hammocks

FACILITIES AND TANGIBLES		
Apartment temperature (air conditioning)	Apartment Security	Wireless / Internet
	Food at breakfast	Apartment views
Apartment furniture	Food at dinner	Closeness to beach (location)
Comfort of the mattress		
TV	Food at à la carte restaurant	Apartment decor and design
Kitchen furniture	Drinks	Apartment size
Kitchenware	State of the garden area	Parking
Pools	Pool temperature	
SERVICES		
Front desk service (check-in)	Repair and maintenance service	Restaurant service (à la carte)
Other front desk services	Restaurant service (breakfast)	Bar service (day)
Room cleaning service	Restaurant service (dinner)	Bar service (night)
FRIENDLINESS OF THE STAFF		
Front desk service (check-in)	Repair and maintenance service	Restaurant service (à la carte)
Other front desk services	Restaurant service (breakfast)	Bar service (day)
Room cleaning services	Restaurant service (dinner)	Bar service (night)

QUESTIONNAIRE AND DATA COLLECTION

Questionnaires are commonly used to reflect the customer satisfaction levels on critical service elements. A questionnaire consisting of four sections was structured for the purpose of measuring customer service in each of the four non-hotel complexes. The survey was structured to measure satisfaction, the degree of importance customers give to each attribute with respect to the overall quality and the degree of agreement/disagreement of how customers' expectations were or not fulfilled over all the 47 service quality attributes and for three quality dimensions: tangibles and facilities, services, and friendliness of the staff. Customer were asked to rate each attribute on its performance.

The first section of the questionnaire measured, through nine and five-point Likert scales respectively, the satisfaction level and the agreement/

disagreement regarding the degree of how customers' expectations were or not fulfilled for facilities, service and staff and overall quality items. The degree of security decision about returning to the complex and recommending it to friends and family was also asked. In the second section, tourist's socio-demographic and holiday-related data were obtained. Following sections constitute the main ones for our study. The third section, composed of 29 questions, was designed to determine tourist satisfaction and the degree of importance with facilities and tangibles of the establishments. Through nine-point Likert scales, the satisfaction level (ranging from *not satisfied to very satisfied*) and the importance (ranging from *not very important to very important*) are measured. A five-point Likert scale also measured the degree of agreement/disagreement regarding the degree of how customers' expectations were or not fulfilled for each of the 29 tangibles. It ranged from *much worse than expected to much better than expected*. Finally, the last section measured the same items than tangibles did but in the case of services and friendliness of the staff dimensions. Tourist satisfaction and importance with the dimensions of tangibles and facilities, services and staff friendliness will be the main variables to analyze service quality in the present study.

The sample population for this study was composed of international and domestic tourists, who lodged in one of the four tourist complex of apartments during the months of July and August, 2012. A total of 164 valid questionnaires were obtained from interviewing tourists over 18. A self-completion questionnaire was distributed by each organization receptionist at the end of their stay. Respondents were informed about the purpose of the survey in advance of being given the questionnaire.

RESPONDENT'S PROFILE

As Table 2 presents, German citizens (36.3%) were the most represented nationality lodged in the non-hotel accommodations studied. Are Germans, after the British, those who most visit Gran Canaria island in recent years (ISTAC, 2013). Managers stated that in summer months they receive a

higher proportion of Spanish tourists than the other months of the year. This assumption is supported by our sample profile, with 23.29% of Spanish tourists staying at one of the four complexes analyzed. The sample of respondents was differentially divided in terms of gender, with 62.75% males and 37.25% females. Tourists aged between 45 and 54 were the most represented group (29.66%), followed by respondents aged between 35 and 44 years old (19.31%). Regarding the nights of stay, the most represented percentage (45.04%) stayed between 7 and 13 nights. 60.63% respondents travelled in tourist class, and 36.22% chose charter/travel package as plane ticket. Most of respondents (76.40%) had never previously visited the complex they had stayed at. However, 13.48% of tourists had visited it from 1 to 3 times, while the remaining percentage (10.11%) had visited more than 5 times. The great proportion of people who traveled for holidays (96.67%) supports the idea that the south of Gran Canaria island is an attractive tourist holiday destination. Management staff, technicians and professionals and qualified workers came first in the list as the most frequently interviewed profession groups. Operators of machines or others and unqualified workers came last. The couple is the most represented travel companion (45.10%), followed by children and couple (16.99%) and friends (15.69%). Regarding the net family income per month, the most represented group in the sample presented revenues between 3001€ and 5000€, followed by 24.14% who obtained between 2001€ and 3000€. Net family income per month greater than 10000€ came last in the list (2.30%).

TABLE 2. RESPONDENT'S PROFILE (IN PERCENTAGES)

COUNTRY OF RESIDENCE		PREVIOUS VISIT TO THE COMPLEX	
Germany	3	6.30	0 times
Spain		23.29	1-3 times
UK		14.38	5-8 times
Ireland		7.53	9 or more times
Holland		6.16	
			REASON FOR TRAVEL
Denmark		2.74	Holidays
Italy		2.74	Other
			76.40
			13.48
			6.74
			3.37
			96.67
			2.00

COUNTRY OF RESIDENCE		PREVIOUS VISIT TO THE COMPLEX	
Switzerland	2.05	Business/Work	1.33
Sweden	1.37	Profession	
Scotland	1.37	Management Staff	25.42
France	1.36	Technicians and professionals	24.58
Lithuania	0.68	Qualified workers	19.49
Gender		Office worker	11.86
Male	62.75	Others	9.32
Female	37.26	Operators of machines or others	6.77
AGE		Unqualified workers	2.55
18-24	14.48	TRAVEL COMPANIONS	
25-34	18.62	Couple	45.10
35-44	19.31	Children and couple	16.99
45-54	29.66	Friends	15.69
55-64	12.41	Children	10.46
65 or older	5.52	Alone	4.58
NIGHTS OF STAY		Children, couple and friends	3.92
1-6	18.32	Children and friends	2.61
7-13	45.04	Couple and friends	0.65
14-20	27.48	Net family income per month (€)	
21-28	9.16	< 1000	4.60
TYPE OF PLANE TICKET		[1001,2000]	20.69
Tourist class	60.63	[2001,3000]	24.14
Charter/Travel package	36.22	[3001,5000]	36.78
Others	3.15	[5001,8000]	6.90
		[8001,10000] 4.60 > 10000	2.30

METHODOLOGY

APPROACHES TO MEASURE CUSTOMER SATISFACTION

As already mentioned in the previous section, satisfaction level and importance had a nine-point Likert scale for each service attribute. Means of the customer's satisfaction and service attributes importance ratings

were calculated and then sorted into three percentiles. In our study, top-down (TD) and bottom-up (BU) approaches are used to process data and measure customer satisfaction from different perspectives.

TD approach consists of evaluating service quality through a general overview of the 47 total attributes. The three dimensions (tangibles and facilities, services, and staff friendliness) are gathered together and satisfaction and importance percentiles delimitation is done throughout the 47 total attributes. No distinction among the three dimensions has been done. The overall synthetic service quality indicator will be built from a general perspective of all service quality attributes. In the bottom-up approach (BU), the three dimensions are clearly specified and satisfaction and importance percentiles are delimited for each dimension. By this way, BU approach allows to build an overall synthetic indicator from the specific dimensions of service quality. The difference between these two approaches lies on the way in which the percentiles are defined.

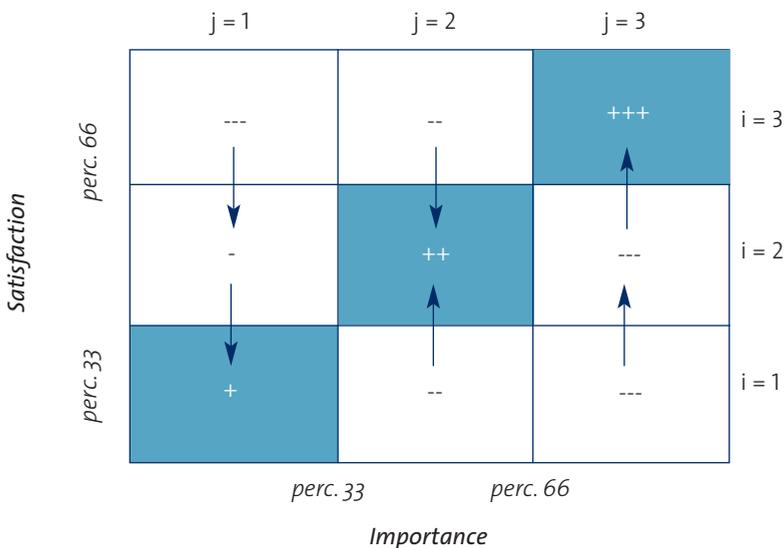
As mentioned above, the aim of this study is to create a synthetic service quality indicator (SQI) for the four non-hotel establishments of our sample using both TD and BU approaches and observe whether there are differences between both methods in the final SQIs rankings. Therefore, we will empirically test whether or not service quality measures built from a general overview of all the service quality attributes together and from specifying the different dimensions that conform service quality produce differences in final SQIs rankings.

IMPORTANCE-SATISFACTION MATRIX

We have applied an importance-satisfaction matrix with weights to build a synthetic service quality indicator and rank the customer service performance of the non-hotel accommodations studied. As mentioned above, the importance-satisfaction analysis is based on importance-performance analysis (Martilla and James, 1977). An importance-satisfaction matrix constitutes an effective and standard means of evaluating a firm's performance in the market, identifying improvement opportunities and guiding strategic planning efforts (Den, 2007). Importance and satisfaction

are measured using the same set of attributes, so as they can be directly compared within the same attributes via the importance-satisfaction matrix. Measures of service attributes importance and satisfaction are combined into a two-dimensional chart. Attributes importance is depicted along the x-axis and attributes satisfaction are depicted along the y-axis. They are measured in terms of percentiles. Figure 1 shows the Importance-Satisfaction matrix.

FIGURE 1. IMPORTANCE – SATISFACTION MATRIX



As mentioned above, the satisfaction level and the importance had a nine-point Likert scale for respondents to review customer service. Mean values of importance and satisfaction were calculated for each service attribute. Service attributes were then sorted into percentiles, dividing the data set into three subsets. This division defines nine quality performance zones in the Importance – Satisfaction matrix. Notation Z_{ij} ($i, j=1, 2, 3$) is used to simplify the illustration, representing the different service quality performance zones. Each area suggests different service quality strategies. Interpretations follow the combination of importance and satisfaction percentiles of each attribute. The bottom-left zone (Z_{11}) reflects customers

who present a low level of satisfaction and consider the service attribute as unimportant in the overall quality. The top-right zone (Z_{33}) reflects customers who are significantly satisfied and feel the service attribute as significantly important. The middle zone (Z_{22}) reflects clients who are moderately satisfied and consider the service attribute as moderately important. Organizations should maintain service quality performance in these three shaded target zones (Z_{11}, Z_{22}, Z_{33}). That is, providing levels of customer service according to the importance clients give to each of the service attributes. When a complex of apartments presents all its service attributes in the target zones, it means that there is no need to implement any strategy that requires a change in the managerial procedures. Cells outside the target zones indicate the service attributes the firm should focus on to enhance customer satisfaction, avoiding over wasting resources or increasing efforts in those attributes that are more valued. In this sense, companies would reduce the waste of resources by moving from zones Z_{31} , Z_{32} and Z_{21} to the correspondent target zones. On the contrary, companies should change part of the resources and efforts to increase the satisfaction levels in the zones Z_{12} , Z_{13} and Z_{23} . Arrows in figure 1 show the direction in which organizations should move to locate in the target zones. Down arrows indicate that companies are wasting resources. The apartment has over satisfied clients regarding some dimensions: satisfaction exceeds service importance. By providing an adequate service quality to customers, companies can meet customer expectations under reasonable operation costs. Organizations can use alternative plans with cheaper costs to locate the service quality performance within the correspondent target zone, with lower customer satisfaction to an adequate level of importance (Hung et al., 2003). On the contrary, up arrows show the direction in which firms have to orientate resources in order to fall in the correspondent target zone. Some dimensions exhibit areas where clients are under-satisfied. Actions to improve the service quality are required to enhance customer satisfaction and reach the target zones.

Based on this analysis, particular improvement opportunities are determined. Attributes that are rated high in importance and high in satisfaction (zone Z_{33}) constitute the major strength and should be

maintained and heavily promoted (Lambert and Sharma, 1990). Attributes having a low importance rating and a low satisfaction rating (zone Z_{11}) suggest that investing scarce resources on these attributes may have little strategic advance. Attributes that are rated high in importance and low in satisfaction (zone Z_{13}) are the attributes that an organization should pay particular attention to, investing greatest amount of resources to improve the performance of these attributes. Zone Z_{13} requires top priority and should be targeted for immediate improvement efforts. The degree of priority for action is represented by the quantity of minus signs in figure 1. The more minus signs are, the more immediate and higher priority should be the improvement actions to enhance service quality performance. The priorities for improvements are, first, Z_{13} , then Z_{31} and Z_{23} followed by Z_{12} and Z_{32} , and Z_{21} is the last. Plus signs in figure 1 indicate the degree of good customer service performance. The more important the service attributes are, the greater the strategic advance will be when investing resources on these attributes. Therefore, weights in target zones have different values. In this sense, zone Z_{33} has greater weight than zone Z_{22} , and this one presents greater weight than zone Z_{11} . Based on this reasoning, ad-hoc subjective² weights for each zone in the matrix need to be proposed as a way to represent the different levels of improvement priority and good performance in order to consistently evaluate service quality performance. Figure 2 shows the weights used in this paper to evaluate service quality performance.

SYNTHETIC SERVICE QUALITY INDICATOR (SQI)

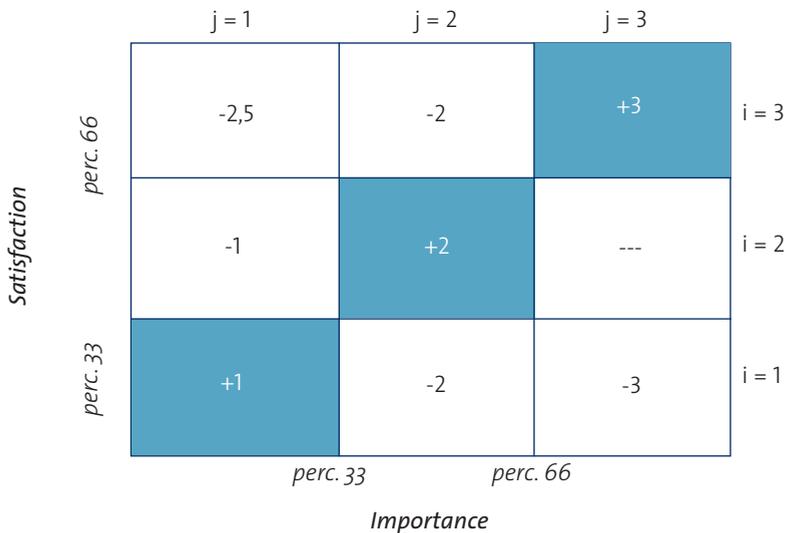
One of the priorities of hospitality firms is ensuring high levels of customer satisfaction. To measure service provider's performance and rank the organizations analyzed, this study develops a synthetic service quality indicator (SQI). SQI condenses the measurement of several sub indicators into one value, facilitating global interpretations. The possibility of

² It is out of the scope of the present paper but these weights should closely represent the profit or objective function of the apartment. Nevertheless, this ad-hoc values could be elicited from qualitative experts opinions of apartments' managers.

summarizing quality of service in one measurement has made these synthetic indicators very attractive for comparisons between different organizations. SQI is obtained for each non-hotel complex, for each of the three dimensions (tangibles (t), services (s) and friendliness of the staff (f)) and globally using both bottom-up and top-down approaches. Therefore, in total 32 service quality indexes were calculated. SQI-Bottom-up by dimension () is calculated by Eq. (1), in which the indicator measures the service quality index for dimension r , , and non-hotel complex k . This indicator depends on the weight matrix w_{ij} and on the number of service quality attributes located in each row i and column j in the importance-satisfaction matrix, taking into account that the matrix is calculated for each dimension independently. The denominator, expressed by Eq. (2), represents the total number of attributes that exist in the importance-satisfaction matrix for dimension r and organization k .

$$1. \quad SQI_{rk}^{bu} = \frac{\sum_{ij} w_{ij} \cdot n_{ij}^{rk}}{N_{rk}} \qquad 2. \quad N_{rk} = \sum_{ij} n_{ij}^{rk}$$

FIGURE 2. WEIGHTS USED TO EVALUATE SERVICE QUALITY PERFORMANCE



Global SQI Bottom-up (SQI_{rk}^{bu}) is expressed by Eq. (3), in which N_k , calculated by Eq. (4), is the number of total service quality attributes for firm k , that is to say, the sum of the attributes for the three dimensions.

$$3. \quad SQI_{rk}^{bu} = \frac{\sum_{ij} N_{rk} SQI_{rk}^{bu}}{N_k}$$

$$4. \quad N_k = \sum_{r=1}^3 \sum_{ij} n_{ij}^{rk}$$

The construction of the service quality index following a top-down approach is analogously based on the number of service quality attributes (n_{ij}^{rk}) located in each row i and column j in the importance-satisfaction matrix, but now the matrix is obtained taking into consideration all the attributes for each complex. Thus, the expression of the index following the top-down approach is as follows:

$$5. \quad SQI_{rk}^{td} = \frac{\sum_{ij} w_{ij} \cdot n_{ij}^{rk}}{N'_{rk}}$$

$$6. \quad N'_{rk} = \sum_{ij} n_{ij}^{rk}$$

$$7. \quad SQI_{rk}^{td} = \frac{\sum_{ij} N'_{rk} SQI_{rk}^{td}}{N_k}$$

SQI is designed to reflect the extent to which there is a mismatch between what customers require and the quality of what they receive. It can be an index for performance improvement. The highest level of performance is obtained when all customers indicate that all the service attributes were both highly important and very well supplied. The lowest level is obtained when all the service attributes were both highly

important and poorly supplied. In effect, the highest level of performance represents the perfect service. By the comparison of indicators, managers can know their relative position in the sector and make appropriate improvements to enhance service quality.

RESULTS

Mean values of the importance of the service attributes and SQIs final scores are shown in this section. It is useful for quality managers to understand those critical factors that determine customer satisfaction. In this sense, the knowledge of the degree of importance customers place on the individual components of the service experience and how the business performs in relation to those components is crucial to deliver higher levels of service quality as a means for firms to achieve competitive differentiation. Organizations' names have been preserved in anonymity and have been renamed with capital letters as organization A, B, C and D, respectively.

MOST AND LEAST IMPORTANT ATTRIBUTES

The mean for 47 importance attributes related to our sample of four tourist apartments in the south of Gran Canaria Island were calculated. The results are presented based on the mean performance score ranking of the importance of attributes, for each organization and for the whole sample (Table 3). The mean scores for all 47 satisfaction attributes of the whole sample (last column in Table 3) present an appreciate level of homogeneity, ranging from a value of 8.02 to a 6.67. It can be seen as service attributes regarding the friendliness of staff are considered as very important for respondents: friendliness of staff of different services appears among the ten most important attributes for each organization and for the whole set of apartments considered in the analysis. "Reception service" is another attribute that is considered as important for respondents in organizations B, C and D and it is among the ten most important service attributes for the whole set. However, for the whole sample, the service attributes: "TV", "Laundry service", "Food at à la carte

restaurant”, “Food at dinner” and “Furniture/decoration in restaurants and bars”, among others, are considered for respondents as the least important with respect to the overall quality. It is worth noting that tourists have segmented themselves at the time of choosing their accommodation. That is to say, for instance, tourists who give greater importance to apartment views will surely stay in an apartment with sea views. In fact, organization C is the only one with direct sea views in our sample, and it can be seen that this service attribute appears at the top of the importance ranking in table 3.

TABLE 3. MOST AND LEAST IMPORTANT ATTRIBUTES FOR EACH ORGANIZATION AND GLOBALLY

ORGANIZATION A	
Service attribute	Mean
Room cleaning service	8.34
Cleaning of the apartment	8.31
Friendliness of staff of the bar service (night)	8.29
Restaurant service (breakfast)	8.24
Friendliness of staff of the restaurant service (dinner)	8.21
Swimming pools	8.17
Apartment size	8.17
Friendliness of the staff of the reception service (check-in)	8.14
Friendliness of staff of the restaurant service (breakfast)	8.14
Friendliness of staff of the room cleaning service	8.11
Kitchenware	7.54
Kitchen furniture	7.50
State of the garden area	7.41
Front desk facilities	7.30
Apartment decor and design	7.25
Ease of access to apartment	7.07
TV	6.90
Laundry service	6.89
Closeness to beach	6.79
Wi-fi/Internet	6.74

ORGANIZATION B	
Service attribute	Mean
Friendliness of staff of reception service (check-in)	7.71
Friendliness of staff of restaurant service (à la carte)	7.64
Reception service (others)	7.61
Restaurant service (à la carte)	7.53
Friendliness of staff of reception service (others)	7.50
Room cleaning service	7.41
Friendliness of staff of restaurant service (breakfast)	7.36
Restaurant service (breakfast)	7.31
Restaurant service (dinner)	7.26
Friendliness of staff of restaurant service (dinner)	7.25
Hammocks	6.23
Parking	6.19
Bathroom facilities	6.18
TV	6.00
Apartment views	5.94
Kitchen furniture	5.88
Apartment decor and design	5.84
Kitchenware	5.75
Closeness to beach	5.72
Wi-fi/Internet	5.56
ORGANIZATION C	
Service attribute	Mean
Apartment views	7.72
Friendliness of staff of reception service (others)	7.57
Front desk facilities	7.42
Reception service (others)	7.36
Friendliness of staff of reception service (check-in)	7.35
Quietness in the apartment	7.28
Swimming pool temperature	7.28
Ease of access to the apartment	7.26
Swimming pools	7.26
Friendliness of staff of Bar service (night)	7.14

ORGANIZATION B	
Service attribute	Mean
Comfort of the mattress	5.76
Friendliness of staff of restaurant service (breakfast)	5.71
Wi-fi/Internet	5.71
Kitchenware	5.68
Closeness to beach	5.65
Food at breakfast	5.64
Food at dinner	5.60
Apartment temperature (air conditioning)	5.53
Kitchen furniture	5.29
TV	4.88

ORGANIZATION D	
Service attribute	Mean
Ease of access to apartment	9.44
Friendliness of staff of the maintenance service	8.64
Friendliness of staff of the reception service (others)	8.56
Reception service (others)	8.53
Friendliness of staff of reception service (check-in)	8.53
Apartment temperature (air conditioning)	8.51
Swimming pools	8.44
Cleaning of the apartment	8.44
Apartment security	8.44
Closeness to beach	8.43
Apartment views	8.00
Kitchen furniture	7.96
Front desk facilities	7.82
Kitchen ware	7.78
Furniture/decoration in common areas	7.73
Apartment decor and design	7.71
Apartment furniture	7.70
TV	7.67
Laundry service	7.33
Furniture/Decoration in restaurants and bars	6.83

TOTAL	
Service attribute	Mean
Friendliness of the staff of the reception service (check-in)	8,02
Friendliness of the staff of the reception service (others)	7,97
Ease of access to the apartment	7,96
Reception service (others)	7,94
Friendliness of the staff of the maintenance service	7,90
Room cleaning service	7,83
Swimming pools	7,77
Reception service (check-in)	7,70
Friendliness of staff of the room cleaning service	7,69
Maintenance service	7,65
Kitchen furniture	6,93
Wi-fi / Internet	6,90
Closeness to beach	6,89
Apartment decor and design	6,88
Kitchenware	6,88
Furniture/Decoration in restaurants and bars	6,81
Food at dinner	6,78
Laundry service	6,72
Food at á la carte restaurant	6,69
TV	6,67

SQIS RESULTS

SQI results of both approaches BU and TD are presented in Table 4. Table 4 shows SQIs values by dimension and globally for each non-hotel organization analyzed. Regarding SQI values by dimension, firm D has the best SQI value in the BU approach (0.98) for the dimension of tangibles and facilities. However, in TD approach this firm is the third in the ranking, being organization C the first positioned (1.16). Organization A has the worst values in both approaches for tangibles and facilities dimension. SQI best values for services dimension are presented by firm C in the BU

approach (1.33) and by organization B in TD approach (1.44). Firm A again presents the worst results in both approaches (-0.39 and -0.11, respectively). High values were obtained by organization B for staff friendliness dimension in both approaches. It is the non-hotel complex with the best performance regarding the friendliness of its staff. On the contrary, organization A has the worst values for both approaches. It is the organization with the worst performance with respect to the friendliness of its staff.

TABLE 4. GLOBAL AND BY DIMENSION SQIS VALUES

BOTTOM-UP APPROACH (BU) Non-hotel organization				
	A	B	C	D
SQI by dimension				
Tangibles and facilities	-0.26	0.24	0.77	0.98
Services	-0.39	0.67	1.33	0.5
Staff friendliness	-1.56	2	0.28	-0.38
Global SQI	-0.52	0.64	0.79	0.76
TOP-DOWN APPROACH (TD) Non-hotel organization				
	A	B	C	D
SQI by dimension				
Tangibles and facilities	-0.49	0.74	1.16	0.38
Services	-0.11	1.44	0.89	1.25
Staff friendliness	0.11	1.89	1.61	1.63
Global SQI	-0.31	1.08	1.19	0.63

According to global SQI results, is organization C the one with the highest SQI values in both BU and TD approaches (0.79 and 1.19, respectively). It is the first in the ranking (Table 5) with the best service quality performance. However, as it has just been mentioned, organization A comes up with the lowest values in both BU and TP approaches (-0.52 and -0.31, respectively). This firm is positioned as the last in the service quality performance ranking. In fact, it presents the worst results in all three

dimensions and globally for both BU and TD approaches. Organization A should take actions to enhance customer service by adapting its resources and efforts to achieve the appropriate customer satisfaction level according to the degree of importance that clients give to each of the dimensions, that is, the performance of some attributes need to be located in the target zones in the importance-satisfaction matrix, as explained in the previous section.

TABLE 5. GENERAL GLOBAL SQI RANKINGS

BOTTOM-UP APPROACH (BU) Top-down approach (TD)					
Organization	Position	Global SQI score	Organization	Position	Global SQI score
C	1	0.79	C	1	1.19
D	2	0.76	B	2	1.08
B	3	0.64	D	3	0.63
A	4	-0.52	A	4	-0.31

As it can be seen, organization C is the first positioned in both BU and TD rankings, and organization A is the last positioned. Differences in global SQI rankings between TD and BU approaches lies on organizations B and C. Differences exist due to it is not the same to make a general overview of the 47 service attributes without dimensions distinction, to analyse each dimension separately. Some service attributes changed from one percentile to another when applying both BU and TD approaches. Tarrant and Smith (2002) pointed out that the quadrant approach has a problem in distinguishing between the attributes positioned in the same region. Some points can overlap either of the two axes or be too close to the intersection of all the quadrants to infer valid interpretation of priorities. Measures of axes of our importance-satisfaction matrix are expressed in percentiles, dividing each axis into three ones. Differences on both BU and TP approaches exist on attributes that are close to the point of partition of the percentiles. Some of these service attributes have moved from one percentile to another when applying both methods.

These are the differences observed on both BU and TD final global SQI rankings.

To our criteria, BU approach reflects more accurately the evaluation problem to analyze. More dimension details are provided to the analysis by distinguishing dimensions. The final SQI scores provide more detailed information to avoid the joint analysis of service attributes and analyze separately the satisfaction and importance according to the dimension they belong.

CONCLUDING REMARKS

Nowadays, service quality and customer satisfaction are key drivers of financial performance. In hospitality industry, the importance of assessing and managing customer satisfaction is widely recognized (Hsin-Hui et al., 2009). Importance and satisfaction on service elements are two indicators applied to evaluate the corresponding service quality performance. This paper developed a synthetic service quality indicator (SQI) to evaluate service quality performance from the analysis of weighted importance-satisfaction matrices. Importance-satisfaction analysis has helped to divide the non-hotel selection factors into nine quadrants, so that managers are better able to understand how customers perceive their services. Two advantages arise in applying importance-satisfaction analysis for managers. The first one lies on that the analysis is a relatively inexpensive and easily understood tool. The results are displayed graphically into a two-dimensional grid and quality managers are better able to identify the strengths and weakness of service quality attributes. The analysis is of practical use to non-hotel managers in resource allocation and assisting them in identifying the factors of performance that need to be strategically revised. Second, the results provided by importance-satisfaction analysis let non-hotel managers redirect marketing strategies based on the importance and perception of performance revealed in each quadrant, from the perspective of customers. This constitutes an effective and useful way for management to identify what problems exist.

In addition, both Bottom-up (BU) and Top-down (TD) approaches have been employed on data processing, in order to analyze the total of 47 service attributes from a general overview (TD) or by allowing specific dimensions (BU) enter into the analysis. Final results show differences on final SQI rankings. To our criteria, BU approach reflects more accurately the evaluation problem to analyze, since BU approach lets the researcher work with more detailed information using different dimensions.

The application of the methodology to four non-hotel hospitality organizations has allowed the possibility of comparing and ranking customer satisfaction results. Service attributes performance relative to competitors must be considered in order to formulate effective strategies. By comparison, managers can know their relative position in the market and take appropriate measures to enhance their quality performance. For further research and policy implications, a regional study that would include more holiday non-hotel accommodation establishments to generate segment-specific data could be conducted. It would be desirable to design a single model questionnaire in the region to compare data through the largest possible number of non-hotel establishments. Thus, it will be possible to generalize the findings for this specific segment and make comparisons of regional service quality performance. Future policy actions should consider this point and include such suggestions.

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