

A Service Quality Model Applied on Indian Hotel Industry to Measure the Level of Customer Satisfaction

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Abstract: *Evolution of economies worldwide highlights the fact that the service sector is growing faster than any other sectors. In contrary, the productivity and consequently the quality of this sector seems to be declining. Therefore, designing quality service is considered as a major challenge in service organizations. This study attempts to identify the level of customer's satisfaction in third category hotels of India and particularly of Ujjain city. The SERVQUAL model is applied to measure customer satisfaction in the hotel industry. It reports the gap between the customer expectations and perceptions. It includes more detailed analysis such as service offerings, hotel facilities, hotels factors, etc. that affect the customer's choices. It also provides suggestions to ease organization for improvement. To have the statistic data for the study, one survey with 36 questions of 13 SERVQUAL attributes was distributed to hotel customer and on the basis of arithmetic mean (avg.) results are obtained.*

Keywords: Service quality, Hotel industry, Expectation, Perception

1. Introduction

The service industry exhibits distinct features that are not shared in the manufacturing industry. Many service organizations are profit-earning business enterprises such as hotels, restaurants, and retail stores (Yang 2005). The hotel and hospitality industries often perceived as the most "global" in the service sector (Mace 1995; Littlejohn 1997). Hence, substantial capital is invested in designing and improving hotels each year. On the other hand, a key challenge for management is achieving customer satisfaction in an increasingly competitive marketplace. Therefore, the hospitality industry, and hotels in particular, have witnessed increasing competition for high service quality and customer Satisfaction. This is because the majority of hotels are currently implementing corporate-wide quality management programs designed to improve service offerings and market retention. Interest in service quality has increased in recent years, with a growing literature relating to the application of total quality management (TQM) concepts in the service industry, especially in the hotel industry. There are many classic cases that have applied quality management methodologies in this industry. For example, the Ritz-Carlton Hotel's TQM program has been widely recognized as a quality leadership program (Partlow 1993). This led to the hotel winning the Malcolm Baldrige National Quality Award in 1992 and 1999. In addition, the Sheraton Hotel recently initiated its Guest Satisfaction System to enhance its customers.

2. Literature Review

2.1 What is hotel industry?

According to A.M. Sheela, the author of the book "Economics of Hotel Management", hotel is the place where the tourist stops being the traveler and become a guest. Hotel usually offer a full range of accommodations and services, which may includes suites, public dining, banquet facilities,

lounges and entertainment facilities. It is considered as an industry whose main aim is also to make profits for the hoteliers.

2.2 Service quality and customer satisfaction in hotel industry

From the last decade, the service sector has become greater economic importance. The elimination of waste due to poor quality and meeting customer expectations are the major challenges facing managers in the service sector. This paper also presents the reasons why we should measure service quality, customer satisfaction in hotel industry as well as their measures. Time by time, different researchers tried to find out the way to measure of service quality and customer satisfaction in the hotel industry. Next scientist generation improved the model of the precedents or invented a new one. Among all, the most popular models to measure customer satisfaction and service quality in the hotel industry are SERVQUAL.

2.3 Service Quality Model

The SERVQUAL model is the most popular model to measure the customer satisfaction in almost services industry. The model is based on the client's evaluation of service quality, which is a comparison of the expected and the obtained value as well as a consideration of gaps in the process of service provision. The foundation of SERVQUAL scale was the gap model.

Parsuraman, zeithaml, and berry formulated a service quality model that highlights the main requirements for delivering high service quality. The model shown in Fig.1 identifies five gaps that cause unsuccessful delivery; (Kotler, 2003)

GAP 1: Gap between consumer expectation and management perception

This gap arises when the management does not correctly perceive what the customers want. For instance – hotel administrators may think customer want better food, but

customer may be more concerned with the speed of the delivery. Key factors leading to this gap are:

- Insufficient marketing research
- Poorly interpreted information about the audience's expectations
- Research not focused on demand quality
- Too many layers between the front line personnel and the top level management

GAP 2: Gap between management perception and service quality specification

Here the management might correctly perceive what the customer wants, but may not set a performance standard. An example here would be that hotel administrators may tell the waiter to respond to a request 'fast', but may not specify 'how fast'. Gap 2 may occur due the following reasons:

- Insufficient planning procedures
- Lack of management commitment
- Unclear or ambiguous service design
- Unsystematic new service development process

GAP 3: Gap between service quality specification and service delivery

This gap may arise owing to the service personnel. The reasons being poor training, incapability or unwillingness to meet the set service standard. The possible major reasons for this gap are:

- Deficiencies in human resource policies such as ineffective recruitment, role ambiguity, role and conflict
- Ineffective internal marketing
- Failure to match demand and supply
- Lack of proper customer education and training

GAP 4: Gap between service delivery and external communication

Consumer expectations are highly influenced by statements made by company representatives and advertisements. The gap arises when these assumed expectations are not fulfilled at the time of delivery of the service. For example – The hotel printed on the brochure may have clean and furnished rooms, but in reality it may be poorly maintained – in this case the customer's expectations are not met. The discrepancy between actual service and the promised one may occur due to the following reasons:

- Over-promising in external communication campaign
- Failure to manage customer expectations
- Failure to perform according to specifications

GAP 5: Gap between expected service and experienced service

This gap arises when the consumer misinterprets the service quality. The manager may keep ask the customer about service but the customer may interpret this as an indication that something is really wrong.

Figure 1 drawn below shows these 5 gaps in the conceptual model of service quality.

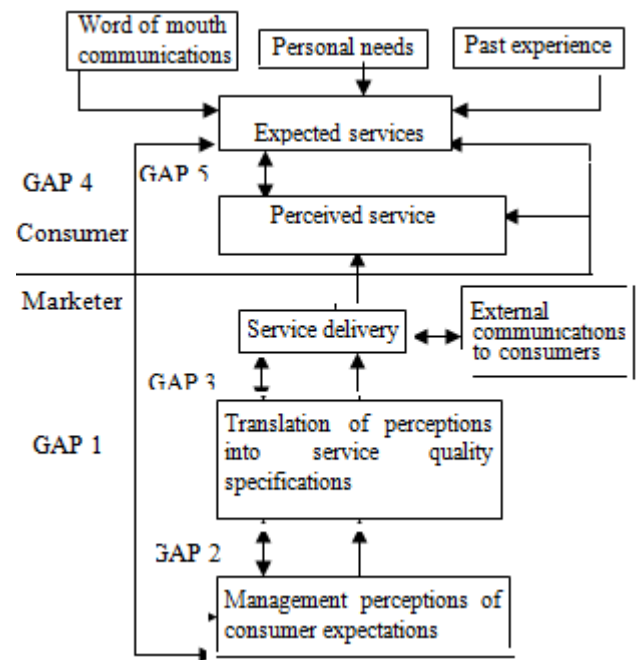


Figure 1: Conceptual Model of Service Quality (source: PZB, 1985)

2.4 SERVQUAL

SERVQUAL is a service quality assessment tool. Since the development of SERVQUAL, it has been extensively applied in a variety of businesses or better business models. SERVQUAL is the most favored instrument for measuring service quality (Robinson, 1999). Parasuraman et al (1988) concluded that consumers perceive quality by comparing expectations to performance and evaluate the quality of the service in different dimensions.

The SERVQUAL instrument consists of 36 statements for assessing consumer perceptions and expectations regarding the quality of a service. Respondents are asked to rate their level of agreement or disagreement with the given statements on a 5-point Likert scale. Consumers' perceptions are based on the actual service they receive, while consumers' expectations are based on past experiences and information received. The statements represent the determinants or dimensions or factors of service quality.

For each determinates, the SERVQUAL scale provides a score for customer expectations (E) and a score for customer perceptions (P) of service providers' performances. Customer expectations are "wants or desires of customer" (Miller, 1977), what they feel the providers should provide or it can be the prediction of future events. They appear before using service. While customer perceptions are measured directly within and after their experience in using service. They reveal the evaluations of customers about what they gain from service. According to Parasuraman and his colleagues, the difference between the two scores is service quality (Q).

$$Q = P - E$$

The key to optimizing service quality is to maximize this positive gap score. The negative value of this gap score

reveals the dissatisfaction of customers. The input to calculate this score is customers' feedbacks.

3. Research Methodology

3.1 Data Collection

The data is collected by using a questionnaire consists of 36 questions based on 13 SERVQUAL attributes in Govt. hotel and Private Hotel of Ujjain. The questionnaire was formed by taking a reference of PZB, 1985, thirteen attributes were arranged and questions were prepared by observing hotel service environment. This questionnaire was revised three times after pilot study. This questionnaire is distributed to 30 customers in the hotel.

The SERVQUAL scale (questionnaire) has two sections: one to map customer expectations in relation to a service segment and the other to map perception in relation to certain hotels. The original SERVQUAL scale uses 36 questions to measure the thirteen dimensions of service quality: reliability, tangibility, security, empathy, responsibility, responsiveness, competence, courtesy access, communication modes, understanding, credibility, food, amenities & entertainment. Table 1 shows the original version of the questionnaire.

Table 1: Rating of customer's expectation and perception

S. No	SERVQUAL Attributes	Modified Definition for Hotel industry	1	2	3	4	5
1	Reliability	i. Ability to deliver the promised service ii. Hotel equipment is always functioning					
2	Responsiveness	i. Hotel staff are always willing to help guest ii. promptness of room service					
3	Assurance	i. Guests feel safe and secure while staying in the hotel ii. Hotel staff are knowledgeable to answer guests iii. Guests feel that the hotel services are provided at a competitive and affordable price iv. Hotel staff have the proper skill to perform requested services					
4	Empathy	i. Hotel staff pay attention to guests' specific needs ii. Hotel staff take guests' best interest at heart					
5	Tangibles	i. Hotel has good looking furniture, soft furnishings and fittings ii. Hotel has comfortable beds, furniture and fittings iii. Hotel's equipment and facilities appear clean and shiny iv. Everything in the room works and is easy to use					

		v. Hotel has a well dressed staff					
		vi. Hotel ambience is attractive and has variety.					
6	Competence	i. Employees knowledge about local place of interest					
7	Access	i. Accessibility of the service provider					
8	Courtesy	i. Politeness and respect of the staff to customer ii. Behavior of the staff					
9	Communication modes	i. Phone (long distance and international line) ii. Quality of communication (voice clarity) iii. Availability of Wi-Fi in hotel room iv. Fax facility v. Scanner and printer availability					
10	Credibility	i. Trustworthiness of service provider ii. Honesty of the service provider					
11	Security	i. Alarm provided for danger ii. Fire proof arrangement iii. Accidental facility iv. General safety					
12	Understanding /Knowing the customer	i. Efforts by the service provider to know the customer					
13	Food, Amenities and Entertainment	i. Quality of food ii. Choice of food iii. Restaurant amenities iv. Entertainment facility like T.V. & DVD					

Table 2: SERVQUAL scale for customer's expectation

1	2	3	4	5
Not very important	Somewhat important	Moderately important	important	Extremely important

Table 3: SERVQUAL scale for customer's perception

1	2	3	4	5
Terrible	Poor	Avg.	Very good	Excellent

3.2 Descriptive Statistics

Descriptive statistics deals with collecting, summarizing, and simplifying data, which are otherwise quite unwieldy and voluminous. It seeks to achieve this in a manner that meaningful conclusions can be readily drawn from the data. Descriptive statistics may thus be seen as comprising methods of bringing out and highlighting the latent characteristics present in a set of numerical data.

3.3 Arithmetic Mean

Adding all the observations and dividing the sum by the number of observations results the arithmetic mean. It may

be noted that the Greek letter μ is used to denote the mean of the population and n to denote the total number of observations in a population. Thus the population mean is given by the formula

$$\mu = \sum x/n \dots\dots\dots 3.1$$

The formula given above is the basic formula that forms the definition of arithmetic mean.

3.4 Standard Deviation

Standard deviation is a widely used measurement of variability or diversity used in statistics and probability theory. It shows how much variation or "dispersion" there is from the average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values. Standard deviation is a statistical measure of spread or variability. The standard deviation is the root mean square (RMS) deviation of the values from their arithmetic mean.

$$S = \sqrt{\frac{\sum (X - \mu)^2}{n-1}} \dots\dots\dots 3.2$$

Where S = Standard deviation

X = Individual score

μ = Mean of all scores

n = Sample size

3.5 Validity of the questionnaire

The designed questionnaire in table is finalized before asking the respondents to fill it. A number of experts such as Project guide as well as the hotel managers asked to confirm the validity of the questionnaire.

4. Data Analysis

4.1 Introduction

In this Chapter the data is analyzed on excel sheet. It helps in finding the mean, standard deviation. The case study also includes the outcomes of the statistical analysis which are presented, discussed and used to compare the perceived quality of both the hotels.

4.2 The overall SERVQUAL gap

Table 4: Total SERVQUAL gap

Sr. N.	SERVQUAL Attributes	Expectation Mean	Perception Mean (Govt. hotel)	Perception Mean (Private hotel)	SERV-QUAL Gap (Q=P-E) Govt. hotel	SERV-QUAL Gap (Q=P-E) Private hotel
1	Reliability	4.333	4.133	3.966	-0.2	-0.367
2	Responsiveness	4.516	4.183	4.083	-0.333	-0.433
3	Assurance	4.425	4.225	4.108	-0.2	-0.317
4	Empathy	3.916	4.066	3.983	0.15	0.067
5	Tangibles	4.144	3.594	3.755	-0.55	-0.389
6	Competence	3.666	3.766	3.533	0.1	-0.133
7	Access	3.466	3.733	3.333	0.267	-0.133
8	Courtesy	4.133	4.116	3.883	-0.017	-0.25
9	Communication modes	3.506	3.273	3.326	-0.233	-0.18
10	Credibility	4.083	4.166	4.216	0.083	0.133
11	Security	3.858	3.391	3.441	-0.467	-0.417
12	Understanding the customer	3.533	3.133	3.166	-0.4	-0.367
13	Food, Aminities & Entertainment	4.586	4.206	3.626	-0.38	-0.96
	Total SERVQUAL gap	4.012	3.845	3.724	-0.167	-0.288

5. Results And Discussion

5.1 Results and Discussion

If we compare performance wise Govt. hotel's service quality is quite better than private hotel. The overall SERVQUAL gap in Govt. hotel is -0.167 and in Private hotel it is -0.288. In case of Govt. hotel empathy, competence, access and credibility these are the factors that got positive difference between perceptions and expectations (P-E), in case of private hotel only two factors empathy and credibility got positive difference between perceptions and expectations (P-E).

6. Conclusions

6.1 Conclusions

In order to minimize the gap between the guests' expectations and their perceptions of actual service delivered, the managers and personnel of both the hotels have to ensure that every contact with guests results in positive experience for the guests. Prior to any planning, it is necessary to establish company's current position. It is achieved by objective assessment of the level and quality of service delivered in the hotel. The results of this research may contribute to estimation of current level of service quality and support in planning aimed at correcting current deficiencies.

Development of hotel industry depends on further permanent application of total quality management, the approach applied within the whole organization aiming at continuous quality advancement for all organizational processes, products and service. The approach to management within an organization is targeted at quality, based upon participation of all members, aimed at long-term success by satisfying the customers' needs and for the benefit of all members of the organization and society.

6.2 Limitations and Future Research Directions

The study considers only the hotels of Ujjain city. Therefore, in future researches may be conducted on a larger scale in a metro city by considering a greater sample size to authenticate the differences between the customer expectation and perception about the hotel industry. In future, more variables, attributes and dimensions may be included and related with service quality to validate the importance of service quality in the hotel industry.

6.3 Managerial Implication

The study confirmed significant gap in all the dimensions of service quality according to the SERVQUAL model in the hotel industry. The study also suggested that SERVQUAL model is a suitable instrument for measuring the service quality in the hotels of Ujjain. Therefore, the management of the both the hotels may use this instrument for measuring service quality time to time. Moreover, because significant service gap exists in all the dimensions of service quality, the hotel management should emphasize on all the service quality dimensions for improving the service quality that they provide.

6.4 Suggestions to Case Organization

The results of the study show that the customers of the both the hotels are not fully satisfied by the service provided to them. There are some areas where improvement is desirable. The management of both the hotels has to make some strategies to meet the customer satisfaction. Though the results obtained from this study following the suggestions to both the hotels are made;

Tangibles

1. They should have modern equipment.
2. Availability of physical facilities should be visually appealing.
3. Bathroom should be very clean.
4. Room should be clean and clear.
5. Room should have sufficient area.
6. Parking should be convenient.

Assurance

1. When management of the hotel promises to do something by a certain time, they should do it.

Responsiveness

1. They should be expected to tell their customer exactly when services will be performed.
2. Customer who checks out should expect prompt service from employees of the hotels.

3. Customer who comes to hotel should expect prompt service from employees of the hotel for the check in operation.
4. Employees of the hotel should always be willing to help their customer.
5. The staff should be kept aware about the latest developments in and around the hotel so that they have enough Knowledge to be able to answer their guests' queries.

Reliability

1. Customer should be able to trust staff of the hotel.
2. Charges in account should be very clear.
3. Customer should be able to trust billing.
4. Customer should be able to feel safe in their transactions.
5. The hotels should have reliable and dependable staff that is honest and diligent.

Courtesy

1. Employees should be more polite.
2. Employees should handle customer effectively.

Competence

1. An effort should be made by private hotel management in the direction of hiring local Employees.

Access

1. The restaurant of private hotel should remain open for maximum hour.

Communication modes

1. Voice clarity should be improved technically while making an international call because it is unclear during the call.
2. Range and speed of Wi-Fi should be high that it can easily be access from anywhere in the hotel premises.

Security

1. There should not be any chance of short circuit in the hotels.
2. Hotels should have sufficient fire reducing equipment.

Understanding the customer

1. More effort should be applied to know/understanding the customer by the hotel management for this training should be provided to hotel staff by expert.

Food, amenities and entertainment

1. Food quality should be improved.
2. Variety of food should be there includes veg. and non veg.
3. Large Variety of drinks should be available in mini bar.
4. More entertainment facilities like video games for kids etc. should be introduced.

References

- [1] Badri, M. A. Abdulla, M. AL-Madani (2005) A. Information technology center service quality. International Journal of Quality & Reliability Management, vol. 22 n. 8, pp. 819-848
- [2] Carman J.M. (1990) Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions, Journal of Retailing, 66, (spring), pp.33-55.

- [3] C. N. Krishna Naik (2010) SERVQUAL model concerning with the service at retail unit in Andhra Pradesh, European Journal of Social Service, vol.16, pp.231-243.
- [4] Cavana, R.Y. Corbett (2007) Developing zones of tolerance for managing passenger rail service quality, International Journal of Quality & Reliability Management, 24(1), pp.7-31.
- [5] Chi Cui, C. Lewis, B.R. Park (2003) Service quality measurement in the banking sector in South Korea, International Journal of Bank Marketing, 21 (4), pp.191-201.
- [6] Kotler (2003) Marketing Management, Pearson Education, Inc. Eleventh edition.
- [7] K. Ravichandran, B. Tamil mani, S. Arun Kumar (2010) implication of SERVQUAL for measuring the service quality of Private Bank in retail Banking," IOSR Journal of Business Management", vol.5.pp.117-124.
- [8] M. Sheela (2007) "Economics of Hotel Management", New Age International Publisher.
- [9] Parasuraman, A. Zeithaml and Berry, (1985) "A Conceptual Model of Service Quality and its Implications for Future Research", Journal of Marketing, Vol. 49, No. 4, pp. 41-50.

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