

## **An Assessment of Service Quality of Hotel Industry**

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This paper attempts to study the service quality of hotel industry in Ludhiana. Service quality is the degree and direction of discrepancy between consumers' perceptions and expectations in terms of different but relatively important dimensions of service quality. A 22-question (item) SERVQUAL scale measuring five basic dimensions i.e., Tangibles, Reliability, Responsiveness, Assurance and Empathy of service quality was used to understand the service quality of hotel industry. Population for the study consisted of customers of all the hotels listed with the Hotels and Restaurant Association of Ludhiana. In all there are 113 hotels listed with the Association. These hotels were classified under three categories- the hotels with the single room rent above 2000 were put under the high category hotels, the hotels with the single room tariff between 1000-2000 were put under the medium category and the hotels with the single room rent below 1000 were put under the low category. 15 hotels (5 hotels from each category) were randomly selected. 10 customers were chosen on convenience basis from each of the selected hotels and were asked to fill the questionnaire. In all 150 customers were surveyed. It was found that the high category hotels were performing as per customers' expectations whereas the medium and low category hotels were not doing so. The difference between the three categories was checked for its significance through ANOVA. There was a significant difference in three categories for empathy. No significant difference was found in other dimensions. On the whole the industry did not match the expectations of customers. To minimize this gap between customers' perceptions and expectations customers suggested introduction of wi-fi, entertainment facilities, swimming pool, trained reliable staff, better equipment, better food, prompt service etc.

**Keywords :** Service Quality, SERVQUAL, Service Quality GAP, High, Medium & Low Category Hotels.

### **Introduction**

All service organizations try and provide the best possible and high quality services to their customers but still they very often fall short of the customers' expectations since the customers have become more aware of their requirements and demand higher standards of services. Their perceptions and expectations are continually evolving, making it difficult for the service providers to measure and manage the

services effectively. The concept of service quality has been explored by many researchers but due to its elusive, indistinct and abstract nature it had been difficult to delimit and measure it. As a result only a handful of researchers have operationalized the concept like Gronroos in 1984, Parasuraman, Zeithaml and Berry in 1988, Brown and Swartz in 1989, Carman in 1990 and Cronin and Taylor in 1992. Service quality in its simplest form is a product of the effort that every

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member of the organization invests in satisfying its customers. It also refers to the delivery of excellent or superior service relative to customer expectations. Zeithaml et al in 1988 defined service quality as the degree and direction of discrepancy between consumers' perceptions and expectations in terms of different but relatively important dimensions of service quality, which can affect their future behavior. Parasuraman, Zeithaml and Berry's (1988) conceptualization of five dimensions: tangibles, reliability, responsiveness, assurance and empathy, eventually led to the development of SERVQUAL, a model for measuring service quality.

### **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 favoured 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. A 22-question (item) scale measuring five basic dimensions listed as follows was developed:

**Tangibles:** The appearance of the physical facilities, equipment, communication material and personnel.

**Reliability:** The ability to perform a promised service dependably and accurately.

**Responsiveness:** The willingness to help customers and to provide prompt services.

**Assurance:** The knowledge and courtesy of employees and their ability to inspire trust and confidence in the customers.

**Empathy:** The caring, individualized attention a firm

provides its customers.

SERVQUAL has been widely used by the researchers in a variety of industrial and commercial settings like tyre retailing (Carman, 1990), Hotels (Saleh and Ryan, 1992), travel and tourism (Fick and Ritchie, 1991), car-servicing (Bouman and Van der Wiele, 1992), business schools (Rigotti and Pitt, 1992), information services (Pitt et al, 1995), higher education (McElwee and Redman, 1993), health care applications (Babakus and Mangold, 1992) and many more. The present study employs Parasuraman, Zeithaml and Berry's 22-item scale and five-dimension structure of service quality for examining the research problem i.e. the quality of services offered by hotels in Ludhiana.

### **Hotel Industry in India**

Hotels play the role of providing guests a home away from home. And it is this facility that facilitates the further attraction of guests towards a place because it makes their visit more convenient. A hotel refers to a commercial establishment providing lodging and meals on temporary basis to its customers. In 1902 the "Indian hotels company" was incorporated by the founder of the Tata group Mr. Jamshedji Nusserwanji Tata and the company opened up its first property The Taj Mahal Palace and Tower, Mumbai. After this there was an upsurge in the Indian hotel industry as many other Indians followed the footsteps of Mr. Tata like Mr. Mohan Singh Oberoi who started by taking over the grand hotel Calcutta and expanded his business. Later companies like ITC and Air India also ventured into this field. In the last few years the hotel industry has changed and developed considerably in terms of the services it provides.

India is an attractive destination for tourists because of its rich heritage, which includes the famous Taj Mahal, various temples and caves and many other famous monuments. Also there are a lot of businessmen and officials who visit India for business purposes because

of the trade relations that our country has with the world. Similarly within our country also there are people who travel from one state to another or from one city to another for business or leisure. Ludhiana also known as the Manchester of India is also a major industrial city with industries like hosiery, textiles, bicycle and bicycle parts, hand tools etc. It is home to some big companies like Hero Cycles, Oswal, Trident, Vardhaman etc. Because of it being an industrial city it has a lot of business travelers from all over the world. And thus it requires not only a good number of hotels but also good quality hotels to accommodate these travelers (Thapar, 2007). All these hotels vary in the kind and extent of services they provide like accommodation, food and beverage services, entertainment, recreation, communication, transportation, room service, laundry service, conference and meeting arrangements, first aid, etc. Looking at the importance that Ludhiana has as an industrial city it is important to know where its hotel industry stands in terms of its service quality. The present study was aimed at achieving the following specific objectives:

- To assess the relative importance of service quality dimensions of hotel services
- To find the difference between customers' perceptions and expectations w.r.t hotel services and suggest various measures for minimizing gaps between customers' perceptions and expectations.

### **Review of Literature**

Hospitality services are a harmonious mixture of three elements- material products, behaviour and attitude of employees and the environment (Reuland et al, 1985). E I Farra in 1996 found that price was the most important factor which influences the patronage of medium priced hotels by customers. Many studies have been conducted on the service quality issues of hotels, but very few have been conducted in India. Thomson and Thomson in 1995 conducted a study on quality

issues of nine hotels in Wellington, New Zealand and Juwaheer in 2004 analysed the strategic importance of service quality in hotels of Mauritius. Shergill (2004) examined travelers' perceptions when evaluating the service quality of hotels in New Zealand and identified factors considered important to customers using factor analysis. Davidson (2003 a) argued that there was a causal link between good organizational climate and the level of service quality in a hotel. In another study Davidson (2003 b) examined the service quality in hotels and also incorporated customer satisfaction in organizational culture and climate. SERVQUAL was considered to be the most appropriate tool to measure service quality of hotels (Fernandez, 2005). Knutson et al (1991) used SERVQUAL to create a lodging specific instrument called LODGSERV which is a 26 item index designed to measure consumer expectations for the service quality in the hotel experience.

### **Research Methodology**

The research design of the study is exploratory in nature. The target population consists of the customers of those hotels of Ludhiana whose names have been mentioned in the list provided by the Hotel and Restaurant Association of Ludhiana. There are 113 hotels given in the list. All the hotels in the list were categorized into high, medium and low category hotels based on the single room tariff. The hotels with the room rent of 2000 or more for a single room were categorized under the high tariff category of hotels. The hotels with the single room rent between 1000 and 2000 were put under the medium tariff category of hotels and the hotels with the single room rent of less than 1000 were put under the low tariff category of hotels. A total of 5 hotels from each category were selected based on random sampling. So a total of 15 hotels were selected from the list of 113 hotels on the basis of single room rent. The customers from these selected hotels were selected on the basis of convenience sampling. Out of all the selected hotels in

each category ten customers from every hotel i.e., 150 customers in all were selected.

Primary data was collected using the structured and non-disguised questionnaire which was administered personally. In all 150 customers who had availed the services of these hotels were asked to fill the questionnaire on the tangibility, reliability, responsiveness, assurance and empathy parameters. These parameters have been derived from the SERVQUAL model suggested by Parasuraman, Ziethaml and Berry (1988). The statements in the model were adapted as per the hotel industry. The respondents were first asked to give weightage to the service quality dimensions like tangibility, reliability, responsiveness, assurance and empathy based on how important each of these factors was to them. The total score of these weights must add up to make a total of 100. Overall relative importance of all the dimensions for the three categories

separately was assessed and from the table showing the inter category comparison in terms of relative importance and overall relative importance of the various dimensions for all the fifteen hotels was derived. Then respondents were asked to mark their expectations and perceptions on a 7 point scale ranging from Low i.e. 1 to High i.e. 7. Service quality gap as well as the weighted SERVQUAL score for all dimensions for each of the 15 hotels was calculated. Then overall service quality gap and weighted service quality score for all the dimensions in case of all the categories of hotels was drawn followed by the overall SERVQUAL score for the hotel industry in Ludhiana.

Further the inter category analysis was carried out to see whether the results were significant or not. A one-way ANOVA as given below was applied. The various statistical tools that were used on the data were mean, weighted mean and one-way analysis of variance.

**ANOVA table for one way classification**

Sources of variation	SS (sum of squares)	Degree of freedom	MS (mean square)	Variance ratio of F
Between samples	SSC	$v_1 = c-1$	$MSC = SSC/(c-1)$	$MSC/MSE$
Within samples	SSE	$v_2 = n-c$	$MSE = SSE/(n-c)$	
total	SST	$n-1$		

Where, SST = Total sum of squares of variations  
 SSC = Sum of squares between samples (columns)  
 SSE = Sum of squares within samples (rows)  
 MSC= Mean sum of squares between samples  
 MSE= Mean sum of squares within samples

### **Findings of the Study**

The findings of the study have been divided into three sections- first section deals with the relative importance of service quality dimensions for various categories of hotels, second section assesses service quality gap among three categories of hotels through SERVQUAL and third section deals with intercategory analysis of various variables.

### **I. Relative importance of service quality dimensions for various categories of hotels**

The customers were explained the five service quality dimensions and were asked to assign relative importance to each of them. This helped the researcher to know which dimension is relatively more important to the customers as compared to the other dimensions and also helps us in calculating the weighted service quality score.

**Table 1: Relative importance of service quality dimensions for high, medium and low category hotels**

Service quality dimensions	Relative importance score (N= 50)					
	High category Hotels					
	Park Plaza	Gulmor	Maharaja Regency	Fortune Klassik	Country Inn and Suites	Overall
Tangibles	22.5	18.5	18	21	19.5	19.9
Reliability	24	24	24.3	25	25.5	24.6
Responsiveness	20.7	23.5	21.5	22.5	19	21.44
Assurance	15	15.5	18	14.5	16.5	15.9
Empathy	16.8	18.5	18.2	17	19.5	18
Total	100	100	100	100	100	100

  

Service quality dimensions	Relative importance score (N=50)					
	Medium category Hotels					
	Imperial Executive	Friends Regency	Batra	Nagpal Regency	Mahal	Overall
Tangibles	20.5	26.5	26.5	28.2	28.0	25.94
Reliability	24.5	24	23.0	23.0	20.0	22.90
Responsiveness	18.8	18.5	19.5	19.0	19.5	19.06
Assurance	18.5	14	14.5	13.0	15.0	15.00
Empathy	17.7	17	16.5	17.5	17.5	17.24
Total	100	100	100	100	100	100

  

Service quality dimensions	Relative importance score (N=50)					
	Low category Hotels					
	Dyal	Taksonz	Le Baron	Abhishek	The Great Wall	Overall
Tangibles	23.9	19.8	19	19	19	20.14
Reliability	23.5	25.2	23.5	23	23.4	23.68
Responsiveness	20	20.5	19	21.5	22.2	20.64
Assurance	15	16	17.5	16.5	15.2	16.04
Empathy	17.6	18.5	21	19	21.2	19.46
Total	100	100	100	100	100	100

From Table 1, we find that for the customers of high category hotels reliability i.e. the hotel's ability to perform the promised service dependably and accurately, providing safety and privacy, honesty and diligence of the staff etc. is the most important service quality dimension. Next parameter that is considered important is responsiveness i.e. the willingness of hotel and its staff to help the customers and provide assistance. This is followed by tangibles i.e. the physical appearance of the hotel like the premises, equipment, material, appearance of personnel, taste of the food, cleanliness, comfort, communication and entertainment services etc. matters to customers after responsiveness.

Tangibles and reliability matter the most for the customers of medium category hotels and reliability and tangibles matter the most for customers of low category hotels.

Inter category comparison of the over all relative importance of the service quality dimensions of the three categories of hotels

In the following table the results of the three categories of hotels with respect to the five dimensions have been compiled and the overall relative importance of each dimension has been found.

**Table 2: Inter category comparison in terms of relative importance and overall relative importance for all the fifteen hotels (N=150)**

Category	High	Medium	Low	Over all
Dimension	relative importance			
Tangibles	19.9	25.94	20.14	21.9
Reliability	24.6	22.9	23.68	23.72
Responsiveness	21.44	19.06	20.64	20.38
Assurance	15.9	15	16.04	15.64
Empathy	18	17.24	19.46	18.23
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

If we compare the categories of hotels for the relative importance of service quality dimensions, we find that in case of the first dimension i.e. tangibles, the medium category hotels have a higher score (25.94), in case of reliability (24.6) and responsiveness (21.44) high category hotels have higher score and for assurance (16.04) and empathy (19.46) low category hotels have higher score. This shows that the customers of the medium category hotels give greater preference to the physical appearance of the hotel like the premises, equipment, material, appearance of personnel, taste of the food, cleanliness, comfort, communication and entertainment services as compared to the customers of the low and high category hotels.

The customers of the high category hotels give more preference to reliability i.e. the hotel's ability to perform the promised service dependably and accurately, providing safety and privacy, honesty and diligence of the staff etc. and responsiveness dimension i.e. the willingness of hotel and its staff to help the customers and provide assistance as compared to the customers of the other two categories. Assurance is the most important dimension for the customers of the low category hotels. The customers of the low category hotels demand more care and individualized attention as compared to the other category customers.

Except tangibles the difference in the overall scores of

the three categories for the four dimensions is very less. For the entire hotel industry in Ludhiana the most important service quality dimension is reliability, followed by tangibles, responsiveness and empathy and the least important dimension is assurance.

## II. Assessment of service quality gap among three categories of hotels using SERVQUAL

This section discusses the service quality gap for service quality dimensions for all the three categories of hotels. After calculating the service quality gap for each hotel in a category, the service quality gap for the

category itself was calculated by taking an average of the sum of the gaps for five hotels in a category. Positive gap indicates that perception is more than the expectation and the negative gap indicates that perception is less than the expectations.

## Service quality gap and weighted service quality score for high category hotels

The following section discusses the service quality gap and weighted service quality score for each dimension for each hotel in the high category.

**Table 3: Service quality gap and weighted service quality score for high category hotels (N=10)**

Service quality dimension	Expectation (E)	Perception (P)	Service Quality Gap (P-E)	Weights (%)	Weighted SERVQUAL score
<b>Park Plaza</b>					
Tangibles	6.18	6.63	0.45	22.5	0.1
Reliability	6.1	6.38	0.28	24	0.07
Responsiveness	5.7	6.03	0.33	20.7	0.07
Assurance	5.63	5.93	0.3	15	0.05
Empathy	5.65	6.05	0.4	16.8	0.07
Overall	6.09	5.08	0.35	100	0.07
<b>Gulmor</b>					
Tangibles	5.96	6.15	0.19	18.5	0.04
Reliability	6.22	6.4	0.18	24	0.04
Responsiveness	6.23	6.43	0.2	23.5	0.04
Assurance	6	6.47	0.43	15.5	0.07
Empathy	5.9	6.1	0.2	18.5	0.04
Overall	6.06	6.31	0.24	100	0.05

<b>Maharaja Regency</b>					
Tangibles	5.49	5.55	0.06	18.0	0.01
Reliability	5.48	5.42	-0.06	24.3	-0.02
Responsiveness	5.37	5.4	0.03	21.5	0.01
Assurance	5.3	5.67	0.37	18	0.07
Empathy	5.23	5.7	0.48	18.2	0.09
Overall	5.37	5.55	0.18	100	0.03
<b>Fortune Klassik</b>					
Tangibles	6.61	6.8	0.19	21	0.04
Reliability	6.52	6.78	0.26	25	0.07
Responsiveness	6.43	6.77	0.33	22.5	0.07
Assurance	6.47	6.73	0.27	14.5	0.04
Empathy	6.48	6.7	1.03	17	0.18
Overall	6.5	6.76	0.42	100	0.08
<b>Country Inn &amp; Suites</b>					
Tangibles	6.46	6.65	0.19	19.5	0.04
Reliability	6.32	6.58	0.26	25.5	0.07
Responsiveness	6.4	6.63	0.23	19	0.04
Assurance	6.33	6.47	0.13	16.5	0.02
Empathy	6.43	6.65	0.22	19.5	0.04
Overall	6.39	6.6	0.21	100	0.04

From Table 3 it can be seen that in case of Hotel Park Plaza the gap for all the dimensions is positive showing that perceptions are more than expectations for all the parameters. The gap for tangibles (0.45) is maximum and positive as compared to other dimensions which means that this hotel is able to satisfy its customers very well in terms of the entertainment and communication services, food, visual appeal of the physical facilities and personnel, room comfort etc. The hotel is performing the second best in case of the empathy (0.4) i.e. the staff is able to satisfy the customers well in terms of the individualized attention and care that they provide to the customers, convenient

operating hours and having the customers' personal interest at heart. The hotel is performing the next best in case of responsiveness (0.33) which means that hotel staff is willing to serve the guests and provides prompt service which is closely followed by assurance (0.3). Even though the gap is positive for all the dimensions yet out of all the dimensions it is the least positive for reliability (0.28) that means the hotel is performing better in the other four dimensions as compared to the reliability dimension. The overall weighted service quality score for Park Plaza is also positive i.e. 0.07. In the case of Hotel Gulmor also the gap is positive for all the dimensions i.e. the perceptions of the customers'



is more than what they expected from each dimension. The gap is the most positive in case of assurance (0.43) i.e. the knowledge and competence of the hotel staff is up to the mark and their ability to convey trust and confidence is high. The hotel is also performing equally well in case of responsiveness and empathy (0.2). Its performance in reliability (0.18) and tangibles (0.19) is also positive and almost the same. The overall weighted service quality score for all the dimensions collectively for Hotel Gulmor is 0.05. Hotel Maharaja Regency is performing well in all its dimensions except reliability. It has a positive gap for tangibles (0.06), responsiveness(0.03), assurance (0.37) and empathy (0.48) dimensions but it lacks in the reliability dimension (-0.1) i.e. according to its customers it is lacking in its ability to perform the services on time, providing privacy and safety and in its ability to instill confidence in its customers. However the overall weighted service quality score for Maharaja Regency is positive i.e. 0.03. Hotel Fortune Klassik is performing the best in its empathy parameter (1.03) i.e. its ability to treat the customers with proper care and attention as compared to its other parameters as well as compared to all the other hotels in the high category. All its other parameters

also have a positive score with tangibles (0.19) and reliability (0.26) having the least positive score which means that even though it is positive but the hotel lags a little behind as compared to its other parameters in these two dimensions. The overall weighted service quality score is also the maximum for this hotel in the entire high category and it is 0.08. In the case of hotel country inn and suites the perception of its customers for its reliability (0.26), responsiveness (0.23) and empathy (0.22) dimensions is almost the same and positive. The hotel is also performing well on its tangibles (0.29) and assurance (0.13) dimensions but the performance on the assurance parameter is a little below all the other dimensions. Its overall weighted service quality score is 0.04.

Service quality gap and weighted service quality score for medium category hotels

The following tables show the service quality gap as well as the weighted SERVQUAL score for each dimension for each hotel in the medium category of hotels.

**Table 4:Service quality gap and weighted service quality score for medium category hotels (N=10)**

Service quality dimension	Expectation (E)	Perception (P)	Service Quality Gap (P-E)	Weights (%)	Weighted SERVQUAL score
<b>Imperial Executive</b>					
Tangibles	5.94	6.06	0.12	20.5	0.02
Reliability	6.02	5.98	-0.04	24.5	-0.01
Responsiveness	5.83	5.67	-0.16	18.8	-0.03
Assurance	5.93	5.83	-0.1	18.5	-0.02
Empathy	5.68	5.6	-0.08	17.7	-0.01
Overall	5.88	5.83	-0.05	100	-0.01

<b>Friends Regency</b>					
Tangibles	5.24	5.55	0.31	26.5	0.08
Reliability	5.5	5.8	0.3	24	0.07
Responsiveness	5.2	5.8	0.6	18.5	0.11
Assurance	5.23	5.5	0.27	14	0.13
Empathy	5.1	5.48	0.38	17	0.06
Overall	5.25	5.63	0.38	100	0.09
<b>Batra</b>					
Tangibles	5.18	3.98	-1.2	26.5	-0.32
Reliability	5.64	4.82	-0.82	23	-0.19
Responsiveness	5.8	4.33	-1.47	19.5	-0.29
Assurance	5.2	4.5	-0.7	14.5	-0.1
Empathy	5.3	4.43	-0.88	16.5	-0.15
Overall	5.42	4.41	-1.01	100	-0.21
<b>Nagpal Regency</b>					
Tangibles	4.88	3.89	-0.99	28.2	-0.28
Reliability	4.92	4.24	-0.68	23	-0.16
Responsiveness	5.13	3.6	-1.53	19	-0.29
Assurance	4.83	4	-0.83	13	-0.11
Empathy	4.95	3.8	-1.15	17.5	-0.2
Overall	4.94	3.91	-1.02	100	-0.21
<b>Mahal</b>					
Tangibles	5.31	4.3	-1.01	28	-0.28
Reliability	5.1	4.5	-0.6	20	-0.12
Responsiveness	5.17	4.13	-1.03	19.5	-0.2
Assurance	5	4	-1	15	-0.15
Empathy	5.05	3.93	-1.13	17.5	-0.19
Overall	5.13	4.17	-0.96	100	-0.19

Table 4 shows that the Hotel Imperial Executive is performing well only on the tangibles dimension (0.12) i.e. it is satisfying its customers more than what they expected in case of the visual appeal of the facilities and personnel, food, comfort, entertainment etc. However in case of all the other dimensions this hotel has a negative gap i.e. the customers' perceptions are falling short of their expectations. Also its poorest performance is in case of responsiveness (-0.16) i.e. the customers don't feel that the hotel and its staff are responding well in time to their requests. Hotel Friends Regency has a positive gap for all the dimensions thus showing that it is able to satisfy its customers well and is providing them with more than what they expect in terms of each dimension. It is performing the best in case of responsiveness (0.6) and is performing almost

equally well in case of tangibles, reliability and empathy. Hotel Batra is showing a negative gap for all its dimensions i.e. it is not performing well on any of the dimensions. The Hotel Nagpal Regency also has a negative gap for all its dimensions and its performance is the worst for responsiveness (-1.53) and empathy (-1.15) dimensions. Hotel Mahal again has a negative gap for all its dimensions and its score is the most negative for empathy (-1.13).

#### **Service quality gap and weighted service quality score for low category hotels**

The following tables show the service quality gap and the weighted service quality score for each dimension for each of the five hotels in the medium category.

**Table 5: Service quality gap and weighted service quality score for low category hotels (N=10)**

<b>Service quality dimension</b>	<b>Expectation (E)</b>	<b>Perception (P)</b>	<b>Service Quality Gap (P-E)</b>	<b>Weights (%)</b>	<b>Weighted SERVQUAL score</b>
<b>Dyal</b>					
Tangibles	4.75	4.09	-0.66	23.9	-0.16
Reliability	4.72	4.56	-0.16	23.5	-0.04
Responsiveness	4.67	4.43	-0.23	20	-0.05
Assurance	4.37	4.27	-0.1	15	-0.02
Empathy	4.53	4.38	-0.15	17.6	-0.03
Overall	4.44	4.35	-0.26	100	-0.06
<b>Taksonz</b>					
Tangibles	5.7	4.25	-1.45	19.8	-0.29
Reliability	5.64	4.74	-0.9	25.2	-0.23
Responsiveness	5.63	4.4	-1.23	20.5	-0.25
Assurance	5.53	4.83	-0.7	16	-0.11
Empathy	5.45	4.35	-1.1	18.5	-0.2
Overall	5.6	4.51	-1.08	100	-0.22

<b>Le Baron</b>					
Tangibles	5.54	4.41	-1.13	19	-0.21
Reliability	5.14	4.84	-0.3	23.5	-0.07
Responsiveness	5.2	4.17	-1.03	19	-0.19
Assurance	5	4.77	-0.23	17.5	-0.04
Empathy	5.03	4.3	-0.73	21	-0.15
Overall	4.82	4.5	-0.68	100	-0.13
<b>Abhishek</b>					
Tangibles	4.86	4.9	0.01	19	0.0019
Reliability	5.12	5.3	0.18	23	0.04
Responsiveness	4.77	5.17	0.4	21.5	0.09
Assurance	4.6	4.87	0.27	16.5	0.04
Empathy	4.75	4.9	0.15	19	0.03
Overall	4.82	5.03	0.2	100	0.04
<b>The Great Wall</b>					
Tangibles	4.21	4.21	0	19	0
Reliability	4.84	4.9	0.06	23.4	0.01
Responsiveness	4.63	4.83	0.2	22.2	0.04
Assurance	4.4	4.63	0.23	15.2	0.03
Empathy	4.88	5.13	0.25	21.2	0.05
Overall	4.54	4.74	0.15	100	0.03

From Table 5 it is clear Hotel Dyal has a negative score for all its service quality dimensions i.e. the customers' perceptions have fallen short of their expectations. Its performance is least in the case of tangibles (-0.66) followed by responsiveness (-0.23) and then reliability (-0.16). Hotel Taksonz's performance is also negative for all the dimensions with the poorest performance

for tangibles (-1.45) followed by responsiveness (-1.23). Hotel Le Baron's performance is no different from the previous two, i.e. it again has a negative gap for all its dimensions and its poorest performance is again for the same two parameters i.e. tangibles (-1.13) and responsiveness (-1.03). Hotel Abhishek is performing well. It has a positive score for all its dimensions which

means this hotel is able to deliver quality service and is able to satisfy its customers well. According to its customers the hotel is performing the best in its responsiveness dimension (0.4) followed by assurance (0.27) i.e. its staff responds well in time to the customers' request and has adequate knowledge of the hotel's services. Hotel The Great Wall is performing well and has a positive gap for all its dimensions. From the table 4.19 it is clear that this hotel has staff that empathizes well with its customers and responds well in time to their requests.

### **Overall weighted SERVQUAL score for all the dimensions for all the categories of hotels**

The overall score for each of the five service quality dimensions for each individual category of hotels i.e. for the high, medium and low category of hotels is given in Table 6. These scores will further help us to calculate the overall weighted SERVQUAL score for the entire hotel industry in Ludhiana which will tell us where the present hotel industry of Ludhiana stands in terms of its service quality.

**Table 6: Overall weighted service quality score for all dimensions in case of all the categories of hotels (N=150)**

<u>Weighted SERVQUAL score</u>	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Overall Weighted SERVQUAL score
<b>Category 1 hotels</b>						
Park Plaza	0.1	0.07	0.07	0.05	0.07	0.07
Gulmor	0.04	0.04	0.04	0.07	0.04	0.05
Maharaja Regency	0.01	-0.02	0.01	0.07	0.09	0.03
Fortune Klassik	0.04	0.07	0.07	0.04	0.18	0.08
Country Inn & Suites	0.04	0.07	0.04	0.02	0.04	0.04
<b>High category hotels</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.08</b>	<b>0.05</b>
<b>Category 2 hotels</b>						
Imperial Executive	0.02	-0.01	-0.03	-0.02	-0.01	-0.01
Friends Regency	0.08	0.07	0.11	0.13	0.06	0.09
Batra	-0.32	-0.19	-0.29	-0.1	-0.15	-0.21
Nagpal Regency	-0.28	-0.16	-0.29	-0.11	-0.2	-0.21
Mahal	-0.28	-0.12	-0.2	-0.15	-0.19	-0.19
<b>Medium category hotels</b>	<b>-0.16</b>	<b>-0.08</b>	<b>-0.14</b>	<b>-0.05</b>	<b>-0.09</b>	<b>-0.11</b>
<b>Category 3 hotels</b>						
Dyal	-0.16	-0.04	-0.05	-0.02	-0.03	-0.06
Taksonz	-0.29	-0.23	-0.25	-0.11	-0.2	-0.22
Le Baron	-0.21	-0.07	-0.19	-0.04	-0.15	-0.13
Abhishek	0.0019	0.04	0.09	0.04	0.03	0.04
The Great Wall	0	0.01	0.04	0.03	0.05	0.03
<b>Low category hotels</b>	<b>-0.13</b>	<b>-0.06</b>	<b>-0.07</b>	<b>-0.02</b>	<b>-0.06</b>	<b>-0.07</b>

Overall weighted SERVQUAL scores in Table 6 shows that for all the three categories we find that the high category hotels are performing well. The overall weighted SERVQUAL score for this category is positive (0.05) which means that these hotels are performing their services as promised and to their best. This goes to show that the customers of these hotels have had very satisfying experiences at these hotels which has resulted in the positive score i.e. their perceptions have exceeded their expectations.

**Looking at the medium category, the overall SERVQUAL score is negative**

(-0.11) thereby showing that the hotels in this category are not living up to their customers' expectations. Out of the individual dimensions the score is the most negative for tangibles followed by responsiveness which

is not good because the customers for this category give more importance to tangibles and responsiveness.

Coming to the low category hotels, here also the overall SERVQUAL score is negative (-0.07) but it is better than the score for the medium category. The performance for tangibles and responsiveness dimensions is least in the case of low category hotels.

**Overall SERVQUAL score for the Ludhiana hotel industry**

The following table shows us the overall SERVQUAL score for each dimension as well as the overall weighted SERVQUAL score for the entire hotel industry in Ludhiana which has been calculated by taking an average of the overall weighted SERVQUAL scores for all the three categories.

**Table 7: Overall SERVQUAL score for the hotel industry in Ludhiana (N=150)**

Service quality dimension	Weighted service quality Score
Tangibles	-0.08
Reliability	-0.03
Responsiveness	-0.05
Assurance	-0.007
Empathy	-0.02
Overall score	-0.04

Table 7 shows that the score for all the dimensions is negative thus resulting into the overall score being negative (-0.04). The industry has the lowest score in case of tangibles, i.e. the customers are not really happy with the physical facilities, equipment, food, entertainment, taste of the food, cleanliness etc. The second lowest performance is in the case of responsiveness i.e. the hotels are not responding well to the customers' demands and are not providing prompt service. The performance is also not up to the mark in the case of reliability which means that the customers don't feel that the hotels' staff is reliable. The customers

are also not fully satisfied with the empathy and assurance dimensions.

Even though the overall industry score is negative still we can see that it is very close to zero thereby indicating that the industry is not extremely poor in its performance. It lacks in certain aspects here and there which if paid attention to can improve the performance and bring it to the positive side. As we have already seen that the high category hotels are performing fairly well so mainly the improvement is needed in the medium and low category hotels.

### III. Inter category analysis

In order to know whether the difference in the results for the three categories is significant or not an inter category analysis was conducted using one way analysis of variance with the null hypothesis (Ho) that there is no significant difference for the five service quality dimensions as well as for the overall weighted SERVQUAL score between the three categories and the alternative hypothesis (H1) that there is a significant difference for the five service quality dimensions as

well as for the overall weighted SERVQUAL score between the three categories. The results for the various dimensions as well as for the overall SERVQUAL score have been shown below.

The following table shows the variance ratio of F for various parameters of service quality. This will help us to know whether the difference between the categories for this dimension is significant or not.

**Table 8: ANOVA table for attributes of service quality**

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Variance Ratio of F
<b>Tangibles</b>				
Between categories	0.122	2	0.056	3.111
Within categories	0.216	12	0.018	
<b>Total</b>	<b>0.328</b>	<b>14</b>		
<b>Reliability</b>				
Between categories	0.046	2	0.023	2.875
Within categories	0.097	12	0.008	
<b>Total</b>	<b>0.143</b>	<b>14</b>		
<b>Responsiveness</b>				
Between categories	0.089	2	0.045	2.5
Within categories	0.215	12	0.018	
<b>Total</b>	<b>0.304</b>	<b>14</b>		
<b>Assurance</b>				
Between categories	0.026	2	0.013	2.6
Within categories	0.066	12	0.005	
<b>Total</b>	<b>0.092</b>	<b>14</b>		
<b>Empathy</b>				
Between categories	0.092	2	0.046	5.111
Within categories	0.116	12	0.009	
<b>Total</b>	<b>0.208</b>	<b>14</b>		

The table value of F at (2, 12) degree of freedom and at 5% level of significance is 3.8853 which is greater than the calculated value of F for tangibles (3.111), reliability (2.875), responsiveness (2.5) and assurance (2.6) as shown in the table 8. Therefore the result is insignificant in other words it means that the difference in tangibles, reliability, responsiveness and assurance for the three categories of hotels i.e., low, medium and high category hotels is insignificant. So H<sub>0</sub> is accepted for these parameters.

The table value of F at (2, 12) degree of freedom and at 5% level of significance is 3.8853 which is less than

the calculated value of F for empathy i.e. 5.11. This goes to show that the result is significant. So H<sub>1</sub> is accepted. There is significant difference in empathy parameter between the three categories of hotels.

#### **Inter category analysis for the over all SERVQUAL score**

The following table shows the variance ratio of F for the SERVQUAL score for the three categories. This will help us to know whether the difference between the three categories for the SERVQUAL score is significant or not.

**Table 9: ANOVA table for overall SERVQUAL score**

<b>Source of Variation</b>	<b>Sum of squares</b>	<b>Degrees of freedom</b>	<b>Mean squares</b>	<b>Variance Ratio of F</b>
Between categories	0.069	2	0.035	3.18
Within categories	0.126	12	0.011	
<b>Total</b>	<b>0.195</b>	<b>14</b>		

The calculated value of F at (2, 12) degree of freedom and at 5% level of significance is 3.18 which is less than the table value which is 3.8853 thus showing that the results are insignificant. In other words the difference in the SERVQUAL score for the three categories of hotels is not significant. Therefore we accept H<sub>0</sub>.

#### **IV. Various suggestions for minimizing the gaps between customers' perceptions and expectations**

Some suggestions given by the customers of the various hotels which can be helpful in minimizing gap between the perceptions and the expectations of the customers.

#### **Suggestions of the customers for improvement in the high category hotels**

- Some of the high category hotels don't have wi-fi

which is a very important facility today. So this must be introduced especially in the high category hotels.

- All the hotels in this category are not providing very good entertainment services therefore these should be introduced. E.g. indoor games like pool, table tennis, video games etc. and outdoor games like badminton, basketball etc.
- The high category hotels must introduce swimming pool and health club.
- The food should be paid special attention to by selecting good cooks and having efficiently trained kitchen staff.
- Staff should smile and be polite while serving.
- Privilege discount card should be introduced.



### **Suggestions of the customers for improvement in the medium category hotels**

- The hotels should have reliable and dependable staff that is honest and diligent.
- More entertainment facilities should be introduced.
- The hotels must make promises which it knows it can easily achieve and must perform all its services at the promised time.
- Some hotels lack in terms of the privacy they provide. Care should be taken to make sure that the guests don't get disturbed and are given proper privacy.
- 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.
- The hotel staff should be regularly made to realize what the hotel's main aim is. They must be told about the importance a customer holds for their hotel so that the staff is more willing to serve the guests well.
- The food should be improved.

### **Suggestions of the customers for improvement in the low category hotels**

- Better equipment, furniture etc. should be used.
- Hotel premises should be kept clean.
- The menu card and other such material should be kept in a good presentable condition.
- Some sort of entertainment services should be introduced. E.g. video games for the children
- Rooms should be more spacious and comfortable.
- The hotels should have adequate number of employees so that the services are performed in time.

- Care must be taken to avoid unnecessary delays in delivering a service.
- The staff should be encouraged to serve with a smile and be polite with the customers.
- 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.
- The hotel should try and focus on the specific demands of its customers. This will help it to differentiate itself from the others and will provide customers with better satisfaction.
- More variety should be introduced in the food items.

### **Conclusion**

The study concludes that the hotel industry of Ludhiana is not performing as per the customers' expectations on any of the service quality dimensions. There is a lot more that the customers expect from the hotels. Since Ludhiana is a major industrial city therefore it must have good quality hotels. To improve their performance, the hotels need to focus more on tangibles e.g. they must introduce wi-fi facility which is a necessity today, swimming pool, health club, more entertainment facilities etc. Also they must have well trained, groomed and reliable staff. This will help the hotels to focus better on the other dimensions. The hotel industry is witnessing a boom in Punjab in both the five star and budget hotels. The state has emerged as a favourite destination for visitors. Ludhiana is emerging as one of the most preferred cities for the hospitality industry. A lot of major hotel chains have announced their plans for the city like Raddison, Intercontinental, Ginger brand of Taj etc. The arrival of these big-ticket hotel brands (both luxury and budget) could yield a slew of spin-off benefits for the city's hospitality fortunes, by improving the service quality. And this may further spark a chain reaction for the present hospitality players to improve upon their service quality.

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