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## **Gap analysis between the customer's expectations and satisfaction of real estate sector using the SERVQUAL model**

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**Abstract:** The research is focused on understanding the level of service quality gap which exists between the customer's expectation level and satisfaction level for real estate services in Delhi NCR region. The gaps in service quality are identified and analysed with the help of the SERVQUAL model which examines the five dimensions of service quality namely tangibles, reliability, responsiveness, assurance, and empathy. The sample for the study comprises those respondents who bought a house or flat in the last two-year or planning to buy in the upcoming years. Data is collected using a questionnaire with 36 questions and each the dimension of service quality is measured on a seven-point Likert scale. The gap in service quality between expectation level and satisfaction level is calculated by subtracting the expectation score from satisfaction score. The paper also identifies suggestions and measures to minimise these gaps and ways to bring beneficial changes in the perception of customer service experience towards real estate sector of Delhi NCR's.

**Keywords:** SERVQUAL; customer expectation; customer satisfaction; gap analysis; SPSS V23; real estate sector of Delhi-NCR.

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Pushpa Singh is working as an Associate Professor in Computer Science and Engineering at IEC College of Engineering, Gr. Noida, India. She is having more than 16+ years of teaching exposure. She has acquired MCA, MTech (CSE), and PhD (CSE) from AKTU Lucknow in wireless networks. Her current areas of research include performance evaluation of heterogeneous networks, machine learning, and cryptography. She has 30 papers in reputed international journals and conferences. She has published four books and contributed to the book chapter. She is also a member of the Computer Society of India (CSI).

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## 1 Introduction

India is a fast-growing country. There is an extensive demand for real estate houses due to the large size of the population living in urban and semi-urban areas and every household wants to own an affordable and durable house packed with the best amenities. The real estate sector in India is expected to achieve US\$1 trillion by 2030 and it will contribute 13% of India's GDP by 2025, which implies that tremendous employment and foreign direct investments (FDI) opportunities exist in India's real estate sector. Fast urbanisation, rising number of nuclear families, and increasing household incomes are some of the significant drivers of development in real estate fields, including commercial, retail, and residential. According to India Brand Equity Foundation, the metropolitan regions will contribute more than 70% of India's GDP by 2020.

Despite increasing demand, real estate players have to face various challenges to sell the property with values because selling the real estate property depends on many factors, most importantly on the builders' reputation and fulfilment of customer's expectations. Parasuraman et al. (1985, p.42), characterised service quality as "recognitions result from a correlation between customer expectations and credible service performance or execution". Customer satisfaction relies upon how well customer get service to satisfy their desires (Austin, 1992). Customer satisfaction is one of the most significant post-buy issues for a wide range of business gatherings; including real estate organisations, as solid and positive fulfilment could impact future customer purchase intentions and unwaveringness (Gustafsson et al., 2005). Thus the capacity to give an organised review of customer satisfaction factors and the post-buy reaction of real estate investors would

give an essential premise to helping advertisers/marketers and associations fabricate an effective plan of action (Zaw and Tan, 2015). Understanding the real customer expectations from the real estate sector and service gets fundamental. According to conclusions communicated by Forbes contributors (Solomon, 2017), the clients in the real estate sector anticipate that the services should rapidly react like foreseeing client needs and not simply reacting to them, sharing details with customers, be persistent when filling positions in real estate organisation, nail your welcomes and farewells totally, endeavour to recall and recognise each bringing customer back. Do not simply quantify your nature of service against other real estate organisations 'prevailing standards'. Client expectation implies what they truly need. Magnificent client support and customer satisfaction at the best quality or standard must start with information on client desires. A high level satisfied client is the one whose desires have been met and meeting desires is the after effect of apparatuses and services provided by CRM. Therefore, knowing about the expectation of the customer and matching these expectations with the services and promises of the builder are very essential.

## **2 Objective of the study**

This study aims to understand the gap between real estate customer expectations level and satisfaction level. Furthermore, this study examines the importance of the services offered by the builder during the purchase agreement and provides managerial implications to improve the quality of the service.

## **3 Literature review**

Service characteristics make it difficult to measure the service quality concept. Likewise, two services are not equal because each customer according to their reference elements interprets the nature of the product, i.e. on lines, tangibility, and intangibility (Dey and Shandilyan, 2012). The idea of service quality-examined commonly of a century, while every client or customer has an alternate perception about the advancement of centrality by their audit (Mohsin, 2005). In a specific social setting, characteristics and quality must be portrayed and sum up (Raajpoot, 2004). In different proclamations, all activity has its own significant theory as clarified by Parasuraman et al. (1988) that properties and nature of service is a widespread judgment of height of conduct or service. It is portrayed that "known significance is seen as the norm and bearing of variety between the customer's expectations and perceptions" (Jain and Gupta, 2004).

The service quality could be viewed as a continuum between 'high-quality performance' and 'completely unacceptable quality'. Stevens et al. (1995) claim that the quality of service is determined by the customer's view of the supremacy of the facility provided in two aspects: abstract, such as private care, and physical, such as the property itself and workers' presence. Cheng (2005) outlined the parameters used between 1982 and 2001 to explain the quality of service, including pictures, standardisation, waiting times, reaction times, staff skills and understanding, staff ready to meet obligations, fair price, and specific service delivery elements as the service itself are intangible. Service quality is one of the main drivers of satisfaction, determined primarily by the accessibility, price, and quality of the food of the workers, whereas the essence and

delivery of the concept, is of minor importance (Andaleeb and Conway, 2006). Food quality, environment, and service development are three important points when assessing a restaurant (Wall and Berry, 2007). Berry et al. (1985) said the service quality is concerning the client's necessity that the client is not taking care of. Berry et al. (1985) talked about methods of improving quality all through a service business. Berry et al. (1985) recommended that the nature of service is an examination among perception and expectation. Dawes and Swailes (1999) said banks comprehend that clients would hold on the off chance if they offer preferable assistance and better services over adversaries. Zeithaml et al. (1993) researched that monetary gain for any enterprise would improve if the association offers a superior nature of services. Heskett et al. (1997) explored the gainful connection between customer satisfaction, service quality, and profitability. Zeithaml et al. (1993) talked about the possibility that service quality is the most significant factor in the accomplishment of any association. The gaps that cause ineffective delivery are featured by Parasuraman et al. (1988) quality has five measurements (SERVQUAL model), as indicated by Parasuraman et al. (1988):

- 1 assurance
- 2 empathy
- 3 responsiveness
- 4 reliability
- 5 tangible.

The key factors that affect the CRM are necessary to identify in any field (Singh and Gupta, 2020). Previous customer involvement study tends to concentrate on examining the effect of customer involvement on customer satisfaction and its resulting results, such as customer loyalty, customer readiness to pay, and business results. Conventionally, customer satisfaction is acknowledged as a significant link between company and customer loyalty operations and therefore a strategic is imperative (Haumann et al., 2014). In Singh et al. (2018), builders are getting several advantages of Delhi-NCR region, they are setting up their projects in this region. They want to know the customer satisfaction. The research also has important consequences for the marketers of real estate. When it comes to providing products to potential buyers, marketers should concentrate on those variables recognised, depending on the order of choice observed in the research. Marketers should communicate their project characteristics prominently based on the identification of variables. Yadav et al. (2018) developed a model that links CRM with its impact on buying behaviour in the Delhi/NCR actual property industry. Machine learning-based techniques are also used to enhance the customer satisfaction by providing better services to their valuable customer (Singh et al., 2020, 2021).

#### **4 Research methodology**

Research methodology is known to be a sequence of phases underlying a research project's design and execution, including deciding the goals of the study and findings, assessing the data quality, designing, and executing the analysis. The study methodology of the research paper has been discussed as follows:

#### *4.1 Research design*

The goal of this study is to extract and define the significance of important variables influencing the buying behaviour of residential apartments in the Noida, Greater Noida area. The concept for descriptive work has therefore been used.

#### *4.2 Area and target population*

The population for this exploration comprised of investors from Noida-Greater Noida City in suburbia of New Delhi. The objective segment was characterised as salaried and independently employed who intended to purchase an apartment or had just bought an apartment in light of the fact that the greater part of the investors or financial specialists putting resources into the residential apartment was accepted to have a place just with these populaces. Along these lines, we may infer that the work should be a review of studies.

#### *4.3 Sample size and sampling technique*

In this examination, purposeful sampling was utilised; be that as it may, endeavours were made to get data from singular strolls. Questionnaires were at first disseminated to 400 individuals (speculators or investors) out of which just 379 questionnaires were returned. Out of 379 questionnaires, just 367 were precise. The examination results are in this way dependent on the reactions of 367 respondents.

#### *4.4 Instruments design and data collection*

Data has been gathered from the standardised questionnaire. The related experts and various researchers, real estate dealers, and potential buyers were contacted to discuss the questionnaire with the help of literature published in this field (Misra et al., 2013). The final draft of the questionnaire was followed by a pilot survey of 50 participants. The investigator eventually defined 36 variables with the assistance of debates after eliminating six variables, which were strongly linked to other variables. There were two areas in the questionnaire. While the primary area predominantly centred around demographic information of the respondents, the second section collected relevant information from the respondents about their opinions on the factors mentioned, using a Likert scale of seven points ranging from 'strongly disagree (1)' to 'strongly agree (7)'.

#### *4.5 Statistical tools and data analysis*

The collected information was analysed using the SPSS v.23. Exploratory factor analysis (EFA) was utilised to characterise the different components in the list of variables. The SERVQUAL model was the basis for the collection of primary data for this research work. There was an expanded collection of 36 variables among the five dimensions described and the questionnaire was created to accomplish the same.

Table 1 displays the adapted version of the SERVQUAL model to be analysed in the identified reference frame in the five-dimensional analysis used for this study.

**Table 1** SERVQUAL measurements scale for real estate of Delhi-NCR

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Tangibles</i>	<i>Reliability</i>	<i>Responsiveness</i>	<i>Assurance</i>	<i>Empathy</i>
1 Smart enquiry counter.	1 Investment assistance.	1 Scouting during the visit.	1 End to end bank assistant.	1 Pick and drop facility to office as well as site visit.
2 Neat and clean builder office with proper sitting arrangement.	2 Property insurance.	2 On time delivery.	2 Shifting assistance.	2 Multi location comfort.
3 Dummy/map of projects.	3 Easy mode of payment.	3 Proper customer care handling.	3 Discounts/offers/schemes.	3 Multi payment plans/customised plans.
4 Proper amenities availability.	4 Transparency and visibility of transactions.	4 Get together meeting/party.	4 Extra construction cost.	4 Keeping words and promises. (trust worthiness)
5 Sample flat.	5 Timely updated about apartment progress.	5 Configure and trigger automated communication.	5 Hidden cost or expenses.	5 Professional comm. by SMS/Whatsapp.
6 Professional counsellors and help desk.		6 Service response based on customer input.	6 Forced expenses.	6 Professional communication by phone call.
7 Appealing interior and exterior decorations.			7 Alteration in construction plan.	7. One to one solutions to customer requirement.
8 Arrangement of tea/coffee/refrshment.			8 Change in said amenities/facilities.	
9 Arrangement of safety and security.				
10 Kids entertainment and playing area.				

## 5 Results and discussion

Raw information is stacked into the PC programming and marked for investigation. The mean estimation of every one of the components remembered for the review was resolved to survey the interests of shoppers in the real estate sector and their buying

experience. The mean rating of customer actual experience factors was deducted from the mean score of factors reflecting customer expectations. The error between clients' expectations average score and actual experience observations proposed the service quality gap(s).

Firstly, it is very important to know and learn about the respondents in such kind of research. It can be easily understood with the support of demographic profile. Table 2, demonstrating the demographic details of respondents, for example, sexual orientation, age gathering, conjugal status, territory, education, occupation, salary (month to month) and settlement/accommodation status is as per Table 2.

**Table 2** Demographic profile of the customers ( $n = 367$ )

<i>Demographics characteristics</i>	<i>Frequency of respondent</i>	<i>Percentage (%)</i>	
Gender	Male	250	68.1
	Female	117	31.9
	Total	367	100.0
Age group	25 and below	10	2.7
	26–35	95	25.9
	36–45	107	29.2
	46–55	155	42.2
	Total	367	100.0
Marital status	Single	62	16.9
	Married	305	83.1
	Total	367	100.0
Area	Urban	339	92.4
	Rural	28	7.6
	Total	367	100.0
Education	Up to HSC	6	1.6
	Graduate	68	18.5
	Postgraduate	161	43.9
	Doctorate	38	10.4
	Professional	94	25.6
	Total	367	100.0
Occupation	Salaried	270	73.6
	Self-employed	97	26.4
	Total	367	100.0
Income (monthly)	Less than 300,000	125	34.1
	300,001–600,000	200	54.5
	600,001–900,000	42	11.4
	Total	367	100.0
Present accommodation status	Rented	321	87.5
	Owned	46	12.5
	Total	367	100.0

Table 3 indicates the difference between the weighted average values of the actual experiences (satisfaction) of customers in Delhi-NCR real estate industry and original expectations regarding the quality of service. The mean score for customer's expectations and customer's satisfaction is measured as 5.53 and 4.84 respectively. The difference between the aggregate mean score of consumer expectations and their satisfaction is 0.70, suggesting a disparity in the quality of service offered by Delhi-NCR's real estate companies. The factors that propose a noteworthy gap in the expectations of clients and their fulfilments are – balanced answers for client prerequisite, appropriate client care taking care of, service reaction dependent on client input, discounts/offers/schemes, transparency and visibility of transactions, sample flat, timely updated about apartment progress, neat and clean builder office with proper sitting arrangement, keeping words and promises (trust worthiness), appealing interior and exterior decorations and easy mode of payment.

**Table 3** Service gap between customers' expectations and their experiences

S. no.	Factors	Mean			Mean = (E+S)/2
		Expectations (E)	Satisfactions (S)	Gap	
1	One to one solution to customer requirement.	5.82	4.16	1.66	4.99
2	Proper customer care handling.	5.79	4.33	1.46	5.06
3	Service response based on customer input.	5.70	4.32	1.38	5.01
4	Discounts/offers/schemes.	5.86	4.56	1.30	5.21
5	Transparency and visibility of transactions.	5.82	4.66	1.16	5.24
6	Sample flat.	6.05	4.96	1.09	5.51
7	Timely updated about apartment progress.	5.68	4.59	1.09	5.14
8	Neat and clean builder office with proper sitting arrangement.	5.78	4.70	1.08	5.24
9	Keeping words and promises (trust worthiness).	5.90	4.82	1.08	5.36
10	Appealing interior and exterior decorations.	5.81	4.80	1.01	5.31
11	Easy mode of payment.	5.79	4.78	1.01	5.29
12	Get together meeting/party.	5.60	4.62	0.98	5.11
13	Multi location comfort.	5.61	4.64	0.97	5.13
14	Arrangement of safety and security.	5.97	5.02	0.95	5.50
15	Kids entertainment and playing area.	5.94	5.01	0.93	5.48
16	On time delivery.	5.73	4.84	0.89	5.29
17	Proper amenities availability.	5.76	4.88	0.89	5.32



**Table 3** Service gap between customers' expectations and their experiences (continued)

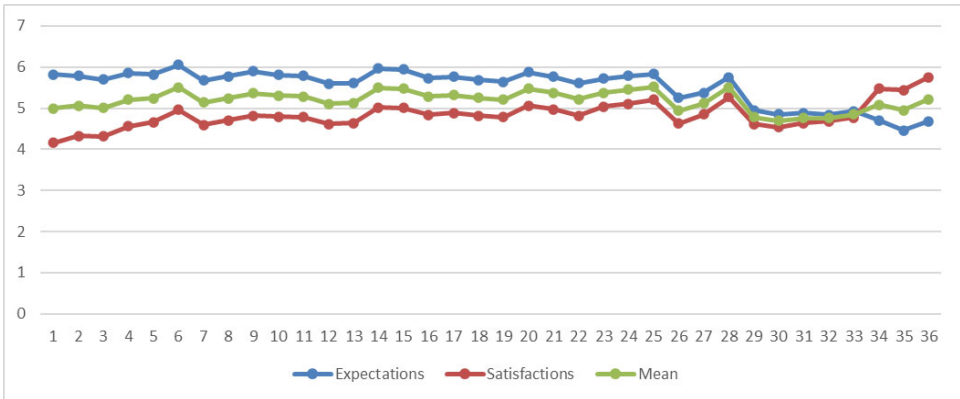
S. no.	Factors	Mean			Mean = (E+S)/2
		Expectations (E)	Satisfactions (S)	Gap	
18	Property insurance.	5.69	4.82	0.87	5.26
19	Pick and drop facility to office as well as site visit.	5.64	4.78	0.87	5.21
20	End to end bank assistant.	5.88	5.06	0.82	5.47
21	Multi payment plans/customise plans.	5.77	4.97	0.81	5.37
22	Arrangement of tea/coffee/refreshment.	5.61	4.82	0.80	5.22
23	Investment assistance.	5.72	5.04	0.68	5.38
24	Professional counsellors and help desk.	5.79	5.11	0.68	5.45
25	Scouting during the visit.	5.83	5.21	0.62	5.52
26	Configure and trigger automated communication.	5.25	4.63	0.62	4.94
27	Shifting assistance.	5.38	4.85	0.53	5.12
28	Dummy/map of projects.	5.75	5.27	0.48	5.51
29	Change in said amenities/facilities.	4.95	4.62	0.33	4.79
30	Extra construction cost.	4.85	4.54	0.31	4.70
31	Alteration in construction plan.	4.88	4.64	0.24	4.76
32	Hidden cost or expenses.	4.84	4.68	0.16	4.76
33	Forced expenses.	4.93	4.77	0.16	4.85
34	Smart enquiry counter.	4.71	5.47	-0.76	5.09
35	Professional communication by SMS/Whatsapp.	4.46	5.44	-0.98	4.95
36	Professional communication by phone call.	4.68	5.75	-1.06	5.22
Aggregate mean score		5.53	4.84	0.70	5.19

The difference is above 1.00 (mean difference between expectations and satisfaction) in many of the variables. Individual discrepancies in many of the variables are 1.66 (one to one customer condition solution), 1.46 (customer care handled properly), 1.38 (service response based on customer input), 1.30 (discounts/offers/schemes), 1.16 (transparency and visibility of transactions), 1.09 (sample flat), 1.09 (timely updated about apartment progress), 1.08 (neat and clean builder office with proper sitting arrangement), 1.08 (keeping words and promises (trust worthiness)), 1.01 (appealing interior and exterior decorations) and 1.01 (easy mode of payment). It is also identified that the major gap in service quality of these variables lies in the SERVQUAL model's 'Tangible measurement scale'. It is very important for both the real estate companies and the concerned authorities to focus on these factors in order to reduce the quality of service gaps. The other variables that indicate a significant gap in the quality of service in terms of the expectations of customers satisfactions are get together meeting/party, multi-location comfort, an arrangement of safety and security, kids entertainment and playing area, on time delivery, proper amenities availability, property insurance, pick and

drop facility to office as well as site visit, end to end bank assistant, multi-payment plans/customise plans, arrangement of tea/coffee/refreshment, investment assistance, professional counsellors and help desk, scouting during the visit, configure and trigger automated communication and shifting assistance. The discrepancy ranges between 1.00 and 0.50 (mean a difference in expectations and satisfaction) in each of these variables. For example, a difference in mean score is 0.98 in variable like (meet/party), 0.97 (multi-location comfort), 0.95 (arrangement of safety and security), 0.93 (kids entertainment and playing area), 0.89 (on-time delivery), 0.89 (proper amenities availability), 0.87 (property insurance), 0.87 (pick and drop facility to office as well as site visit), 0.82 (end to end bank assistant), 0.81 (multi-payment plans/customise plans), 0.80 (arrangement of tea/coffee/refreshment), 0.68 (investment assistance), 0.68 (professional counsellors and help desk), 0.62 (scouting during the visit), 0.62 (configure and trigger automated communication), 0.53 (shifting assistance). The real estate companies and concerned authorities should work upon these variables to decrease service quality gaps. It is also recognised that the majority of these variables having a visible gap in service quality lies in ‘Tangible measurement scale’ of the SERVQUAL model.

The other variables that denote the service gap below 0.50 (mean difference of expectations and satisfaction) are 0.48 (dummy/map of projects), 0.33 (change in said amenities/facilities), .31 (extra construction cost), 0.24 (alteration in construction plan), 0.16 (hidden cost or expenses) and 0.16 (forced expenses) show a significantly minor difference, which is ignorable and somewhere these variables are influenced by variables of major gaps as shown in Figure 1.

**Figure 1** Performance analysis (see online version for colours)



It was found in this study that few variables such as (-0.76) smart inquiry counter, (-0.98) professional communication by SMS/Whatsapp and (-1.06) professional communication by phone calls indicate that customers are highly satisfied with these services.

Table 4 reveals that the average score of total expectations is more than the normal score of absolute satisfaction bringing about greatest SERVQUAL difference. As for individual SERVQUAL estimations, difference mean values are 0.72, 0.96, 0.99, 0.48, and 0.48 separately for tangibles, reliability assurance responsiveness, and empathy. Clients who purchased the houses or flats in Delhi-NCR is not happy with any of the

components of the SERVQUAL model, as indicated by the distinctions in the above measurements. It is apparent that clients are not happy with the elements of SERVQUAL model to be specific:

- 1 tangibles
- 2 reliability
- 3 responsiveness, which is an indication of discontent.

**Table 4** Service quality gap between customers' expectations and their satisfaction under SERVQUAL measurements scale

		<i>Expectations (mean)</i>	<i>Satisfactions (mean)</i>	<i>Gap (mean difference)</i>
<i>Dimension 1: Tangibles</i>				
1	Smart enquiry counter.	4.71	5.47	-0.76
2	Neat and clean builder office with proper sitting arrangement.	5.78	4.70	1.08
3	Dummy/map of projects.	5.75	5.27	0.48
4	Proper amenities availability.	5.76	4.88	0.89
5	Sample flat.	6.05	4.96	1.09
6	Professional counsellors and help desk.	5.79	5.11	0.68
7	Appealing interior and exterior decorations.	5.81	4.80	1.01
8	Arrangement of tea/coffee/refreshment.	5.61	4.82	0.80
9	Arrangement of safety and security.	5.97	5.02	0.95
10	Kids entertainment and playing area.	5.94	5.01	0.93
	Average score	5.72	5.00	0.72
<i>Dimension 2: Reliability</i>				
1	Investment assistance.	5.72	5.04	0.68
2	Property insurance.	5.69	4.82	0.87
3	Easy mode of payment.	5.79	4.78	1.01
4	Transparency and visibility of transactions.	5.82	4.66	1.16
5	Timely updated about apartment progress.	5.68	4.59	1.09
	Average score	5.74	4.77	0.96
<i>Dimension 3: Responsiveness</i>				
1	Scouting during the visit.	5.83	5.21	0.62
2	On time delivery.	5.73	4.84	0.89
3	Proper customer care handling.	5.79	4.33	1.46
4	Get together meeting/party.	5.60	4.62	0.98
5	Configure and trigger automated communication.	5.25	4.63	0.62
6	Service response based on customer input.	5.70	4.32	1.38
	Average score	5.65	4.66	0.99

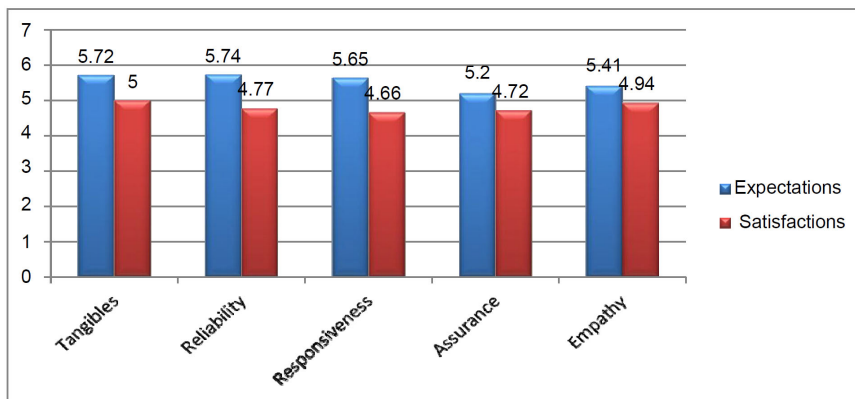
**Table 4** Service quality gap between customers' expectations and their satisfaction under SERVQUAL measurements scale (continued)

		<i>Expectations (mean)</i>	<i>Satisfactions (mean)</i>	<i>Gap (mean difference)</i>
<i>Dimension 4: Assurance</i>				
1	End to end bank assistant.	5.88	5.06	0.82
2	Shifting assistance.	5.38	4.85	0.53
3	Discounts/offers/schemes.	5.86	4.56	1.30
4	Extra construction cost.	4.85	4.54	0.31
5	Hidden cost or expenses.	4.84	4.68	0.16
6	Forced expenses.	4.93	4.77	0.16
7	Alteration in construction plan.	4.88	4.64	0.24
8	Change in said amenities/facilities.	4.95	4.62	0.33
	Average score	5.20	4.72	0.48
<i>Dimension 5: Empathy</i>				
1.	Pick and drop facility to office as well as site visit.	5.64	4.78	0.87
2.	Multi location comfort.	5.61	4.64	0.97.
3.	Multi payment plans/customise plans.	5.77	4.97	0.81
4.	Keeping words and promises (trust worthiness).	5.90	4.82	1.08
5.	Professional communication by SMS/Whatsapp.	4.46	5.44	-0.98
6.	Professional communication by phonecall.	4.68	5.75	-1.06
7.	One to one solution to customer requirement.	5.82	4.16	1.66
	Average score	5.41	4.94	0.48

The outcomes of the above SERVQUAL model studied in Delhi-NCR explains that for each of the dimensions of the SERVQUAL model, the expectations of the customers who bought the houses or apartments are higher than their satisfaction. The discrepancy defined as a difference between the mean score of consumer's expectations (5.65) and their satisfactions (4.66) in the responsiveness dimension (0.99) is noted with the highest gap. Reliability and tangibles also showed a significant gap in mean difference of 0.96 and 0.72, respectively. Both assurance and empathy indicate the minimum gap with a mean difference of 0.48 each. The part of responsiveness is a significant factor where the most extreme gap in the nature of service is noted. Therefore, builders and their associates need to understand that the responsiveness features (such as scouting during the visit, on time delivery, proper customer care handling, get together meeting/party, configure and trigger automated communication and service response based on customer input) of the real estate sectors. Real estate sectors are the fundamental areas where the buyer desires and expectations are supremacy and they need to make a move upon these variables to meet the clients' desires. Real estate players also have to understand about

the noticeable gaps of service quality present in reliability features and tangibles features. In reliability features, such as investment assistance, property insurance, easy mode of payment, transparency and visibility of transactions and timely updated about apartment progress and tangible features such as neat & clean builder office with proper sitting arrangement, dummy/map of projects, proper amenities availability, sample flat, professional counsellors and help desk, appealing interior and exterior decorations, arrangement of tea/coffee/refreshment, arrangement of safety and security and kids entertainment and playing area need to be properly addressed. In reference to above gaps, Delhi-NCR real estate customers are very aware and conscious about the services offered by real estate players and there is no doubt that this is a big decision for them, they want to analyse each and every advantage and disadvantage of the services offered by the real estate players. And in order to turn them into their loyal customers, there is a need to gain their confidence. Assurance dimensions and empathy dimensions of the service quality model indicate the least gap in service quality (0.48), indicating that, although there are differences in other service quality measurements, builders and their associates are as yet ready to keep up their assurance level and empathy through the effective delivery of reliable and high-quality CRM services as shown in Figure 2.

**Figure 2** SERVQUAL comparative analysis (see online version for colours)



The findings of this examination show that each element of the administration quality model, there is a service distinction. Among the five dimensions of SERVQUAL, the mean score for 'responsiveness' was highest in terms of consumer expectations. The owners and managers of these areas are advised to put extra emphasis on providing consumers with the best infrastructural structure. Under the 'responsiveness' it is important to tackle the following issues such as scouting during the visit, on time delivery, proper customer care handling, get together meeting/party, configure and trigger automated communication, service response based on customer input. The government and the related organisations should take an idea to resolve these issues. The real estate players can very well apply the SERVQUAL model in their ventures and planning in order to understand the needs of consumers and can ascertain the value of their services as per Table 5.

**Table 5** SERVQUAL ranking

	<i>SERVQUAL measurement scale 1</i>	<i>SERVQUAL measurement scale 2</i>	<i>SERVQUAL measurement scale 3</i>	<i>SERVQUAL measurement scale 4</i>	<i>SERVQUAL measurement scale 5</i>
	<i>Tangibles</i>	<i>Reliability</i>	<i>Responsiveness</i>	<i>Assurance</i>	<i>Empathy</i>
Average score	0.72	0.96	0.99	0.48	0.48
Ranking	3	2	1	4	4

## 6 Conclusions

The real estate industry is extremely competitive and customers attach an immense emotional and financial value to the decision of buying residential property for themselves. Since the purchase of a house is not an ordinary shopping experience as it involves thorough market research and big investment which is not easily reversible. Therefore, customers take into consideration all pre-sales, sales, and post-sales experiences while deciding if they are satisfied with the services of real estate builders or not. In this present era, where word of mouth marketing and reviews on online forums through existing buyers can create or destroy the reputation of real estate builder, the builders need to identify and improve the variables with maximum difference or gap in expectations and actual deliveries affecting satisfaction level of customers in real estate sector in Delhi NCR. With the help of the SERVQUAL model, the given research paper helps to analyse the various dimensions of service quality such as tangibles, reliability, responsiveness, assurance and empathy and finds out the importance and extent of each in providing customer satisfaction to real estate buyers. As per the analysis, the customers experience a maximum service gap in 'responsiveness' as compared to others as evident. Responsiveness indicates the way the staff and officials respond to the various information and communication needs of customers related to various issues during pre-sales and post-sales activities. The customers have experienced the maximum and the critical gap between customer care handling and service response based on customer input followed by transparency and visibility of transactions as a serious concern in the reliability dimension.

In order to reduce the gap and create a good image among the customers, real estate builders need to build up query database and tools for quick troubleshooting/handling so that customers' queries can be resolved with ease and speed as done by the IT industry.

One of the recommendations is to assign weight to each variable so that the weighted average score for each variable can be calculated and it is easier to decide which variable holds more significance in each quality dimension and better results can be obtained while calculating the gap in service quality.

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