

Measuring Internal Customers' Perception on Service Quality Using SERVQUAL in Administrative Services

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Abstract- The inherent complexity of the public service environment throws up a number of difficulties and potential conflicts. Different customer or stakeholder groups may well have different expectations of the same service or have different service priorities. Berry, Parasuraman and Zeithaml (1985) identified ten dimensions of service quality. These were later reduced to five. They defined service quality to be perceived as the 'extent of discrepancy between customer's expectations or desires and their perceptions'. It is interesting to study the expectations of the internal customers about the services provided by their offices and their perceptions about the same as their lookout towards the services is completely different from that of the customers. This study tries to analyze the responses of 33 Tehsildars to a SERVQUAL questionnaire and analyze the gap between expectations and perceptions with an aim to provide a small contribution towards improvement in these services.

Index Terms- service quality, SEVQUAL, tehsil, tehsildar

I. INTRODUCTION

In the current socioeconomic scenario the service sector is gaining lots of importance. The public awareness and their demands are increasing. It is always observed that public services are criticized by the public on a number of grounds. Public Services are a mixed kind of services where both face-to-face and backroom components are involved. They differ from 'pure' services where there is high level of customer contact and 'quasi-manufacturing services' where there is less or no consumer contact (Chase, Northcraft and Wolf, 1984). This peculiar nature of public services makes it difficult to assess their quality. Public services, like pure services, also fall within the dimensions of service quality. There are three very important characteristics of service quality-

1. Service quality is more difficult to evaluate than goods quality
2. Quality perceptions emerge from the consumer's expectations and the perception of the actual service
3. Service quality is perceived from the 'gap' between the expectations and the perception of the service experience

The *SERVQUAL* approach (Parasuraman et al. 1985) begins with the assumption that service quality is critically determined by the difference between customers' expectations and their perceptions of the service actually delivered. The *SERVQUAL* model identifies five criteria by which to evaluate service quality:

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

Reliability: The ability to perform the promised service dependably and accurately

Responsiveness: Willingness to help customers and provide prompt service

Assurance: A combination of competence (possession of the required skills and knowledge to perform the service); courtesy (politeness, respect, consideration and friendliness of contact staff); credibility (trustworthiness, believability and honesty of staff); security (freedom from danger, risk and doubt)

Empathy: A combination of access (approachability and ease of contact); communication (keeping customers informed in a language they understand and listening to them); understanding the customer (making an effort to know the customers and their needs).

Perceived service quality can be defined as, according to the model, the difference between consumers' expectation and perceptions which eventually depends on the size and the direction of the gaps concerning the delivery of service quality on the organization's side (Parasuraman, Zeithaml, Berry, 1985). According to Parasuraman, Zeithaml and Berry the *SERVQUAL* model is universal and can be applied to any service organization to assess the quality of services provided.

A. Background of the study

Customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption experience to the product/ service (Yi, 1990). The expectations of the public are increasing day by day. Public demands are high and the normal infrastructure and processes fall short in fulfilling these demands. The reasons are manifold. The gap between the expectations and experience is widening. A general feeling of dissatisfaction among the public (customers) is experienced. This study aims to apply the *SERVQUAL* model to the services provided by the Tehsil offices. The expectations and perceptions of the Tehsildars are studied using a modified *SERVQUAL* questionnaire. Results are analyzed to study the discrepancy between what is and what should be.

The survey question that guided this study was: how to apply the *SERVQUAL* instrument to the services provided by a Tehsil office in order to measure the quality of services and the degree of satisfaction among the external as well as internal customers.

The main objective of the paper is to adapt the *SERVQUAL* scale to public administrative services and to present the results of the application of *SERVQUAL* to a Government organization.

B. Definitions

Some of the terms need clarification before the discussion on this study begins-

- Service: Activities of helping the customer attain value.
- Experience: The feeling or sense of satisfaction/ dissatisfaction a person has after experiencing a service
- Tehsil- In India, each State is divided into Districts and each district is further divided into smaller units of administration called Tehsils or Talukas. The Tehsils are headed by the Tehsildars who are appointed by the State Government as Taluka Magistrates. They look after the land matters, land revenue collection and maintenance of law and order in their jurisdiction. This study is with special reference to the State of Maharashtra.

II. LITERATURE STUDY

Services have been defined in various ways by different experts.. Most of these ways end up concluding that a service experience is the best way to describe what happens to a consumer (R Nargundkar, 2010). A Parasuraman, Leonard Berry and Valanie A Zeithaml have devised the SERVQUAL approach towards measuring the service quality based on a similar assumption. They defined service quality as the degree and direction of discrepancy between consumer's service perception of the service experience and their expectations before the experience (Zeithaml, Parasuraman and Beny, 1990, p. 19). SERVQUAL is a multiple item scale for measuring consumer perception of service quality (Parasuraman A, Zeithaml, Beny, 1988, Journal of Retailing, Vol-64, No.1 pp 12-40). They devised the five factor measurement of service quality. They have identified 22 items to measure the five dimensions universally across service industries. Each dimension is rated against its importance in evaluations the quality of service (Parasuraman, Beny, Zeithaml 1991 b).The concept of service quality as a 5-dimensional construct consisting of Tangibles, Reliability, Responsiveness, Assurance and Empathy has defined consumer satisfaction as a collective outcome of perception, evaluation and psychological reactions to the product/service (Yi Y, 1990).

SERVQUAL is an instrument to measure the difference between the expectations and perception of the customers about the services they experience. They call the difference as 'gap'. They defined four key discrepancies or gaps regarding the executive perception of service quality and the tasks associated with the service delivery to customers. (A Parasuraman, L Berry and V Zeithaml, 1991 c)

The SERVQUAL has been used by many researchers to measure quality of service in the service industries like aviation, banks, hotels, hospitals, fast foods, retail stores, dry cleaning (Babakus and Boller 1992; Brensinger & Lambert, 1990; Carman 1990; Finn & Lamb, 1991; Ford 1990; Hartshorn, 1990 Headley, 1989; Hebert, 1993; Kilkeny, 1992 Steffen, 1992; Walsh, 1992; Webster, 1989; White, 1994; Woodside, Frey & Daly, 1989;). Use of SERVQUAL to study the quality of Administrative services, especially in India has not been very common. References to application of SERVQUAL to Higher Education (Euriene Ferriera, O Oliviera, 2009), Public Transport in India (Ahmed AL Motawa, Kokku Randheer, Prince Vijay J, 2011) have been found. The study on Public Transport has applied the SERVQUAL to transport services in two cities in India. They

have replaced the tangibles from the original model with culture dimension (Alain and Paul, 1996). This study has adopted the original SERVQUAL model developed by Parasuraman et al (1988) as this is a pioneering study. Based on the results of this study the questionnaires shall be modified for further research.

The potential application of the SERVQUAL scale is, it can help other organizations in assessing the perceptions of service quality (Buttle, 1996). It will also help the managers identify the areas of service delivery that need special attention and decide action to be taken to tackle these issues (Kettinger, Lee, 1997).

III. RESEARCH METHODOLOGY

A study of the literature on service quality and especially SERVQUAL helped to set the objectives of this study. The original SERVQUAL questionnaire was adapted to study the peculiar characteristics of the services provided by Tehsil offices. The adapted questionnaire was submitted to a pilot study and with further modifications a final questionnaire with 24 questions was devised.

An importance weight of each dimension was obtained from the internal customers in order to know how much of these features is important to them. They were requested to allocate preferential points to the dimensions so that the total comes to 100. (Table 4). The modified questionnaire with 24 questions was applied to 33 Tehsildars who are the service providers. The expectations of the tehsildars were noted so also their perceptions about the service experience. Out of the 33 Tehsildars two did not fill the importance table. All the Tehsildars filled the other two questionnaires. All the questionnaires were completely and correctly filled The data was tabulated, analyzed and interpreted. The questionnaire was devised on a Likert scale of 1 to 7. The data and the score for each question was collected and tabulated as shown in table 1. As the scale extremities correspond to 1= totally agree and 7= totally disagree the negative difference indicates that there is a big gap between the expectations and the perception. Higher score at the perception level is an indication a higher level of dissatisfaction and a scope for improvement. The Likert scale was arranged in this particular manner because the target group for whom the questionnaire was designed was mostly from rural India. It was easy for them to understand that 1 equals to strong agreement and 7 equals to strong disagreement. The questionnaire was used to analyze the 'gap' in the five dimensions of service quality as shown in the table 2 and the results of the study were presented through the analysis of the data of each dimension and its interpretation. Quantitative data in the form of group interactions was collected as a support to the SERVQUAL data. Quantitative data is used when the solution to a problem is given by an aspect or reality with rigor and generates conclusions that permit generalization (Fleury and Nakano, 1996). Quantitative data helps the researcher establish reliable conclusions based on the quantitative data collected and supported by customer group interviews. The expression of perception gets a broader sense in an open interview as compared to the limited scope of a questionnaire.

IV. PRESENTATION AND DISCUSSION OF RESULTS

In all 33 questionnaires for expectations and perceptions were filled up by the Tehsildars. All were newly recruited officers

with less than two years of service. The results are tabulated in table 1.

The results of the expectations and perceptions of the Tehsildars are compared in table 2 in order to arrive at a parameter for each of the questions as well as for each of the five dimensions. The scores are generated by the difference between the officers' perceptions and expectations. Negative scores indicate that the expectations are higher than the perceptions suggesting a scope for improvement.

Table 3 shows the tabulated results of the un-weighted averages of each dimension. The un-weighted averages were calculated by dividing the average score of dimension divided by the number of statements referring to each dimension.

Table 4 shows the tabulated results of the importance weights allotted by the Tehsildars to each of the dimensions. These importance weights are used to calculate the weighted averages of each dimension. Out of the 33 officers two did not fill this table and hence results are calculated against 31. The three values of gap scores, un-weighted scores and weighted scores are used together to interpret the data.

Questions one to four refer to the **tangibles** dimension of service quality. The dimension obtained an overall score of -1.962. The expectations of the customers are high in case of tangibles but the perceptions are very low. The result indicates that there should be more investment on improvement in the infrastructure and equipment. Better working environment and better infrastructure are a need of the time.

Questions five to nine discuss about the **reliability** dimension. It has received an average score of -2.89. The largest gap score among all the dimensions. The expectations of the Officers are high regarding the reliability of the service but their experience says otherwise. The highest perception score in this dimension and among all the perception scores is for question number seven which refers to the timeliness of the services. The highest perception score indicates that the officers expect their services to be delivered right at the first time and do not want their customers to repeatedly visit the office. The gap score of -3.09 indicates a large scope for improvement. The organization must seriously consider the possibility of investment in training and resources so that the promised deadlines can actually be adhered to. The importance score for this dimension is the highest. This may be an indication that reliability is the most important dimension for the officers.

The **responsiveness** dimension is discussed in questions 10 to 14. The dimension has received an average gap score of -2.85 which is the second largest gap score among all the five dimensions. This is an indication that the perceptions are much below the expectations and there is a big gap for improvement. The largest gap within the dimension is at question number 10 which is regarding the Officer's knowledge about the time needed by them to complete the service delivery. The gap indicates that the organization must take this issue seriously and invest in training and awareness of the officers.

Questions 15 to 19 refer to the **assurance** dimension. It has received a gap score of -2.732, the third largest gap among the five dimensions. This dimension relates to the feeling of safety and security in the mind of the citizens while experiencing the

service. A negative gap suggests that this dimension is important to the Officers and the organization needs to take measures for employee awareness about their job and behavior. Question number 18 in the dimension has received the highest gap score among all the questions indicating a feeling of insecurity in the minds of the consumers which is reflected in the responses. The need of a secure service experience is expected by the customers and the organization has to consider this aspect seriously.

Questions 20 to 24 discuss about **empathy** dimension of service quality. It has received the gap score of -2.248. It is interesting to note here that the question number 22 in this dimension has received the highest expectation score and lowest gap score among all the 24 questions. This does not indicate a high level of satisfaction. On the other hand this indicates that the officers do not believe in a personal service but they believe in equal service to all. This is a welcome sign as it indicates that most of the officers are unbiased towards the customers. The frequency distribution of the question also suggests the same. The highest expectation score of this dimension suggests dissatisfaction about punctuality and availability of the staff at the time of need. This dimension is of utmost importance to the officers. The results indicate a need to inculcate the importance of punctuality and customer understanding among the employees.

The overall SERVQUAL gap average for all the five dimensions was -2.536. All the questions corresponding to the entire five dimensions without an exception have received negative gap scores. As discussed by Parasuraman et al (1991) these gaps suggest a need for- improved vertical and horizontal communication, better customer understanding, proper management commitment, good team work, goal setting and task standardization. The results indicate a great opportunity for the organization to improve the entire service providing mechanism.

V. CONCLUSION

The scientific methods used, a quantitative research method based on a survey instrument and supported by qualitative data, provided conditions to carry out this research. The results generated from the study provided insight into the quality of services provided by the Tehsil office with a considerable degree of applicability.

The quality of the Public Services, especially those provided by the Tehsil offices must be reviewed as the expectations of the internal as well as external customers are ever increasing. Adoption of technology and changing the traditional business strategies is a need of the time.

The negative average gap scores of all the dimensions indicate a discrepancy between the expectations and perceptions. The service experiences are generating unsatisfactory perceptions among the officers. The organization should seriously consider about quality issues and measures to tackle them.

The objective of the study was to apply the SERVQUAL instrument to the services of Tehsil offices and provide a small contribution towards improving the administrative service by analyzing the results of this study. The objective was appropriately met.

Table 1: Tabulation of data

	Totally Agree 1	2	3	4	5	6	Totally Disagree 7
Expectations Data	531	149	56	23	15	8	10
Percentages	67.045	18.813	7.0707	2.904	1.8939	1.0101	1.2626
Perception Data	48	110	157	130	131	128	116
Percentages	6.06	13.38	19.72	16.41	16.54	15.06	14.64

Table 2: Gap Analysis

	Expectations (E)									Perceptions (P)							(P-E)	
	Frequency of Responses									Frequency of Responses								
	1	2	3	4	5	6	7	Average	1	2	3	4	5	6	7	Average		
Tangibility	1	30	6	0	0	0	0	0	1.1	3	8	21	16	20	36	35	4.21	-3.11
	2	23	16	3	0	5	0	0	1.42	3	6	27	28	25	24	14	3.85	-2.43
	3	21	12	15	4	0	0	0	1.57	1	12	30	32	30	12	0	3.54	-1.97
	4	30	3	4	0	0	0	0	1.12	3	10	36	20	30	0	14	3.42	-2.3
								1.30								3.00	-1.962	
Reliability	5	25	8	6	0	10	0	0	1.48	0	10	18	28	10	36	49	4.57	-3.09
	6	26	6	3	0	10	6	0	1.54	0	12	18	24	30	24	35	4.33	-2.79
	7	20	14	9	4	0	6	7	1.82	0	6	15	24	25	36	56	4.91	-3.09
	8	22	14	9	4	0	0	0	1.48	0	14	15	24	20	42	28	4.33	-2.85
	9	27	8	3	4	0	0	0	1.27	4	10	21	12	30	24	28	3.91	-2.64
								1.52								4.41	-2.89	
Responsiveness	10	24	12	6	4	0	0	0	1.39	1	10	21	16	25	24	49	4.42	-3.03
	11	23	14	0	8	5	0	0	1.51	1	8	15	24	25	48	28	4.51	-3
	12	23	8	9	4	10	0	0	1.63	2	10	15	20	15	48	35	4.39	-2.76
	13	22	12	12	0	5	0	0	1.54	3	12	15	20	10	30	49	4.21	-2.67
	14	22	16	6	4	0	0	0	1.45	4	6	15	24	20	36	35	4.24	-2.79
								1.50								4.354	-2.85	
Assurance	15	25	12	3	4	0	0	0	1.33	3	8	12	32	25	24	35	4.21	-2.88
	16	24	14	0	4	0	6	0	1.45	2	8	18	16	40	30	28	4.3	-2.85
	17	23	12	6	4	0	6	0	1.54	2	10	21	4	35	42	28	4.3	-2.76
	18	19	16	9	4	5	0	7	1.18	1	8	15	24	40	6	56	4.54	-3.36
	19	20	10	12	8	0	6	7	1.91	4	12	18	20	25	30	14	3.72	-1.81
								1.48								4.214	-2.732	
Empathy	20	16	18	9	12	5	0	7	2.03	2	4	18	16	45	36	28	4.51	-2.48
	21	22	12	9	4	5	0	0	1.57	3	12	27	16	10	36	21	3.79	-2.22
	22	13	20	9	4	0	12	28	2.61	3	6	21	16	35	36	21	4.18	-1.57
	23	18	12	18	0	5	6	7	2	1	8	12	32	15	42	42	4.61	-2.61
	24	13	22	9	12	10	0	7	2.21	1	6	18	16	45	30	35	4.57	-2.36
								2.084								4.332	-2.248	
Average SERVQUAL gap score = -2.536																		

Format source- Ferreira E C and Oliviera O (2009)

Table 3: Calculations to Obtain Unweighted Servqual Score

Average Tangible SERVQUAL score	-1.962
Average Reliability SERVQUAL score	-2.89
Average Responsiveness SERVQUAL score	-2.85
Average Assurance SERVQUAL score	-2.732
Average Empathy SERVQUAL score	-2.248

TOTAL	12.682
AVERAGE UNWEIGHTED SERVQUAL SCORE (= Total / 5)	-2.5364

Table 4: Servqual Importance Scores

SERVQUAL Dimension	Importance Weight
Average Tangible	19.68
Average Reliability	20.93
Average Responsiveness	19.16
Average Assurance	20.55
Average Empathy	14.68
TOTAL	100 POINTS

Table 5: SERVQUAL Weighted Scores

SERVQUAL Dimension	Score from Table 3 X Importance Weight from Table 4	= Weighted Score
Average Tangible	-1.962 X 19.68	-38.61
Average Reliability	-2.89 X 20.93	-60.49
Average Responsiveness	-2.85 X 19.16	-54.61
Average Assurance	-2.732 X 20.55	-56.14
Average Empathy	-2.248 X 14.68	-33
TOTAL		-242.8
AVERAGE WEIGHTED SERVQUAL SCORE (= Total / 5)		-48.57

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