Analysis of Service Quality Gap Using SERVQUAL Model: An Indian Petro Retailing Scenario

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Abstract: *Customer satisfaction plays a vital role in the service industry and service quality became an important aspect to provide best value to the customer. Measure service quality and finding the gap between perceived sand expected service became an important factor to the company to identify the improvement areas and stress upon to make service better. This article uses SERVQUAL model to measure the service quality and perceived service quality gap. The gap analysis provides the areas of improvement for the organization and provides the direction for implementing changes to enhance service quality. This study gives an insight to the companies where they should focus to provide better services to the customer.*
Keywords: *Expectation, Perception, Petro retail outlet RATER Dimension of SERVQUAL Service Quality.*

I. INTRODUCTION

Customer satisfaction plays a vital role in the service industry and service quality became a day to day practice to provide best value to the customer. Earlier Indian fuel retailing primarily dominant by the public sector undertaking and customer used to visit the retail outlet to get the fuel filled. After deregulation of the fuel prices many private entrants enter in to the market and gone are the days when customer did not have much options available and was only concerned to get the fuel filled.

In Such a cut throat competitive environment the service became a prominent feature to get more customers and retain them and buildup a loyalty. Organization bringing new plans and scheme to retain their existing customer base and attract new customer as well. Thus service quality has become an important strategic marketing tool and companies are focusing more on the service quality aspect. Measure service quality and finding the gap between perceived and expected service became an important factor to the company to identify the improvement areas and focus on those areas to make service better.

Various measures have been proposed to measure the service quality and find the service quality gap. SERVQUAL scale is highly valid and reliable and most used service quality measurement tool, which is developed by Parasuraman (1988) of the Marketing Science Institute. This tool is very popular and being used across the different service sectors in the multiple industries to measure the perceived service gap from consumer perspective.

II. OBJECTIVES OF THE STUDY

1. To measure the overall service quality at petro retail outlet
2. To find out the gap between perceived and expected service quality in petro retailing.
3. To identify the areas of improvement in petroleum service sector.

III. METHODOLOGY

This analysis is based on the service quality (SERVQUAL) model, which is basically consider five dimension to measure the perceived and expected quality in the service industry.
Five dimensions of SERVQUAL model (RATER) are given below
1. **Tangibles :** Appearance of physical facilities, equipment, personnel, and communication materials
2. **Reliability :** Ability to perform the promised service dependably and accurately
3. **Responsiveness :** Willingness to help customers and provide prompt service
4. **Assurance :** Knowledge and courtesy of employees and their ability to convey trust and confidence
5. **Empathy :** Caring, individualized attention the firm provides its customers

Service gas is identified for each of the dimension by the formula given below :

$SG_i = \sum (P_{ij} - E_{ij})$

Where SG = Service Gap for individual 'i'

P-Perceived Service Quality for individual 'i' for service attribute 'j' -arrived by the arithmetic average of score obtained in the survey

E-Expected Service Quality individual 'i' for service attribute 'j' -arrived by arithmetic average of score obtained through the survey

  18 Point questionnaire based on RATER dimension are prepared to record the response in 7 point likert scale on expectation and perception and administrated to people who are visiting retail outlet to get fuel filled. In the Likert scale value 1 denotes the strongly disagree while 7 represent the strongly agree response. In the questionnaire serial no 1 to 4 represent the physical (Tangible) aspect of the retail outlet like Fuel dispenser, Metering and safety, employee appearance, display and sign board etc. Serial no 5 to 7 represent the reliability aspect of the fuel outlet which includes delivery time to provide the service, error free measurement of the fuel and how outlet address customer problem. Serial no 8 to 10 represent the responsiveness factor of service outlet to provide prompt care and quick response. Questions from 11 to 14 describe the assurance factor of service quality and describes about the safe service and trust building towards the customer. Question 15 to 18 collectively talks about the Empathy factor of servqual model and emphasizes on services like customer care and individual attention provided to the customer.

IV. SERVQUAL DATA ANALYSIS

  Data collected through survey has been analyzed for each dimension separately and indentified the perceived service quality, expected service quality, weighted and unweighted service quality gap.

Final result has been presented in the tabular form for each dimension individually and separate table also provided for overall weighted and unweighted service quality gap below.

TABLE 1: Servqual quality score for Tangibles factor

S.#	Question for Factor Tangibles of Servqual Model	Perceived Quality(P)	Expected Quality(E)	Service Quality Gap (P-E)
1	Excellent retail outlet should have modern equipment	0.61428571	0.8714286	-0.257142857
2	The physical facilities at excellent retail outlet should be visually appealing	0.6	0.8928571	-0.292857143
3	Employees should be well dressed and neat in their appearance	0.59285714	0.7357143	-0.142857143
4	Materials associated with the service (Display board and direction sign) should be visually appealing	0.65	0.8428571	-0.192857143
	Average service quality gap for Tangibles Factor	**0.61428571**	**0.8357143**	**-0.221428571**

TABLE 2: Servqual quality score for Reliability factor

S.#	Question for Factor Reliability of Servqual Model	Perceived Quality(P)	Expected Quality(E)	Service Quality Gap (P-E)
5	Retail outlet should meet their promised time to deliver the fuel	0.58571429	0.8071429	-0.221428571
6	Retail outlet should address the customer problem immediately	0.69285714	0.85	-0.157142857
7	Retail outlet should provide correct measure of fuel	0.62857143	0.9	-0.271428571
	Average service quality gap for Reliability Factor	**0.4625**	**0.6214286**	**-0.158928571**

TABLE 3: Servqual quality score for Responsiveness factor

S.#	Question for Factor Responsiveness of Servqual Model	Perceived Quality(P)	Expected Quality(E)	Service Quality Gap (P-E)
8	Employee of retail outlet should tell customer exact time of service and give prompt service	0.64285714	0.8285714	-0.185714286
9	Employee of retail outlet should always be willing to help customers	0.62142857	0.85	-0.228571429
10	Employee of retail outlet should never be too busy to respond to customers' requests	0.66428571	0.8642857	-0.2
	Average service quality gap for Responsiveness Factor	**0.44598214**	**0.5928571**	**-0.146875**

TABLE 4: Servqual quality score for Assurance factor

S.#	Question for Factor Assurance of Servqual Model	Perceived Quality(P)	Expected Quality(E)	Service Quality Gap (P-E)
11	Employee of retail outlet should instill confidence in customers	0.69285714	0.8071429	-0.114285714
12	Customers should feel safe in transactions with employee of retail outlet	0.58571429	0.8142857	-0.228571429
13	Employee of retail outlet should be consistently courteous with customers	0.68571429	0.9142857	-0.228571429
14	Employee of retail outlet should have the knowledge to answer customers' questions	0.60714286	0.8428571	-0.235714286
	Average service quality gap for Assurance Factor	**0.59363839**	**0.7839286**	**-0.190290179**

TABLE 5: Servqual quality score for Empathy factor

S.#	Question for Factor Empathy of Servqual Model	Perceived Quality(P)	Expected Quality(E)	Service Quality Gap (P-E)
15	Retail outlet should give customers individual attention	0.67142857	0.8071429	-0.135714286
16	Retail outlet should have operating hours convenient to all their customers	0.56428571	0.8142857	-0.25
17	Retail outlet should have employees who give customers personal service (24*7)	0.66428571	0.8	-0.135714286
18	Retail Outlet should have their customers' best interest at heart	0.62857143	0.8071429	-0.178571429
	Average service quality gap for Empathy Factor	**0.64285714**	**0.8446429**	**-0.201785714**

TABLE 6: Unweighted service quality gap score by servqual method

S.#	Service quality factor for unweighted score	Unweighted Score
1	Average service quality gap for Tangibles Factor	**-0.221428571**
2	Average service quality gap for Reliability Factor	**-0.158928571**
3	Average service quality gap for Responsiveness Factor	**-0.146875**
4	Average service quality gap for Assurance Factor	**-0.190290179**
5	Average service quality gap for Empathy Factor	**-0.201785714**
	Total Score	**-0.919308036**
	Average unweighted servqual quality gap score = Total/5	**-0.183861607**

TABLE 7: Weightage given to each servqual dimension

S.#	Servqual Dimension	Weightage
1	Tangibles factor weightage	**19.2**
2	Reliability factor weightage	**20.5**
3	Responsiveness factor weightage	**19.4**
4	Assurance factor weightage	**19.85**
5	Empathy factor weightage	**21.05**

TABLE 8: Servqual Weighted gap score

S.#	Servqual Dimension	Unweighted score for factor	Dimension weightage	Weighted Score
1	Tangibles factor	-0.221428571	19.2	**-4.251428571**
2	Reliability factor	-0.158928571	20.5	**-3.258035714**
3	Responsiveness factor	-0.146875	19.4	**-2.849375**
4	Assurance factor	-0.190290179	19.85	**-3.777260045**
5	Empathy factor	-0.201785714	21.05	**-4.247589286**
	Total			**-18.38368862**
	Average weighted servqual score	Total/5		**-3.676737723**

V. RESULT & DISCUSSION

From the table and result above it is evident that serious service gap has been identified where overall service quality received is low compare to expected service quality. Service quality identified for all five dimension viz Tangibles, Reliability, Responsiveness, Assurance and Empathy. The maximum gap found is for the tangibles dimension while lowest is for responsiveness factor. The gap analysis provides the areas of improvement for the organization and provides the direction for implementing changes to enhance service quality. This gives an idea where company should focus to provide better services to the customer. It is also evident from the result that customer gives maximum importance to the empathy factor, it clearly shows that customer wants companies to put themselves in their shoes. Indian fuel retailing sector needs a lot of improvement and companies have to take corrective action to make services at par with international standard.

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