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# Measuring and improving service quality in Automobile dealership center: SERVQUAL

Lakshmi.R, Jerin Johnkutty

Manufacturing Systems Management (M.tech), Assistant Professor, , Mechanical Engg
Thejus Engineering College, Thrissur, India
lakshmiraveendran31@gmail.com, jerinjohnkutty18@gmail.com

Abstract— SERVQUAL which is a service quality measurement scale is now been extensively used in research in order to measure the quality of various services being provided to the customers. The objective of the paper is to measure and improve the service quality in the Automobile Dealership Centres using the SERVQUAL tool and verify the significance using SPSS (Statistical Package for Social Science). The identified factors under the SERVQUAL exhibit managerial implications. The paper involves the assessment of customers perception and expectation of service quality for the Automobile dealership industry and the study of SPSS software for verifying the significance of the result and thus finding the quality shortfall areas and suggesting corrective measures in order to win competitive advantage.

Keywords—SERVQUAL; service quality; automoile dealership center; SPSS software.

#### 1. Introduction

Today's present world runs on quality and customer satisfaction in the field of providing any kind of service or developing products for the customers. Globalization and competition has taken its toll everywhere. Therefore, it has become necessary to measure and confirm the quality for what is being provided to the customers. The intense competition has made many companies to accept the challenge of improving service quality. In the automobile sector, there has been a tremendous increase in India for the past few years. According to a market study, India is one of the fastest growing economies in the world and sets a perfect market for the automobile industry. In the recent survey, India majorly constitutes of middle society and thus Indian market is chosen by many companies for introducing automobiles targeting them. Therefore, the number of automobile dealership centers has been increased in the country and with so much competition and for maintaining the market it is always required to check on the service quality being provided The automobile dealership centers needs a valid tool to measure these two sides of the service quality construct. Having and using valid measures of quality service will allow management to identify and reward employees, properties, districts or regions who meet or exceed

customer's expectation standards [1]. This paper focus on SERVQUAL tool in order

to measure the service quality for the dealership centers and using SPSS (Statistical Package for Social Science) software for verifying the significance of the result obtained.

### п. Proposed system

Service sector is now becoming a dominant element of the economy around the globe. Service sector involves a variety of enterprises and organizations. In a recent "customer survev. "quality", satisfaction" "identification of what constituted value to the customer" were identified by the respondent companies as either "important" or "very important" [3] .This response illustrates the importance placed on "quality" and "customer satisfaction" by many organizations [3]. For competitiveness, service quality is considered a critical determinant. Attention to "service quality" can help an organization to differentiate itself from other organizations and through it gain a lasting competitive advantage [6]. With increase in the number of competitors, the customers are always likely to migrate to those where they perceive higher service quality. Therefore, it has become very essential for any service providers to keep and maintain the best possible service quality and for the purpose it is necessary to measure and compare their service quality. SERVQUAL methodology is one of the most important and popular tool intended to fulfill the above purpose of any organization.

#### A. SERVQUAL

SERVQUAL is one of the renowned tools to measure service quality. It was developed by Valarie Zeithmal, Parasuraman and Leonard Berry in mid 1980s. It is basically developed to measure the quality in the service sector. The tool has its own advantage of providing better assessment of service quality with more accurate results and has competitive advantage. SERVQUAL is a questionnaire survey methodology which is done by collecting information about the perception and expectation of the customers and the result is utilized to measure the quality of the service being provided by the organization.

SERVQUAL examines five dimensions of service quality:

- Reliability
- Responsiveness
- Assurance
- Empathy, and
- Tangible (e.g. appearance of physical facilities, equipment, etc.)

For each dimension of service quality above, SERVQUAL measures both the expectation and perception of the service on a scale of 1 to 7, 22 questions in total. Then, each of the five dimensions are weighted according to customer importance, and the score for each dimension multiplied by the weighting. Following this, the Gap Score for each dimension is calculated by subtracting the Expectation score from the Perception score. A negative Gap score indicates that the actual service (the Perceived score) is less than what is expected (the Expectation score) [7].

The Gap score is a reliable indication of each of the five dimensions of service quality. Using SERVQUAL, service providers can obtain an indication of the level of quality of their service provision, and highlight areas requiring improvement. SERVQUAL is an effective diagnostic tool to guide management in its service quality improvement efforts by focusing attention in the areas that are most needful [5].

#### B. Identified Factors

Under SERVQUAL, there are five major identified factors on the basis of which, the questionnaire is prepared and with the help, the survey is done. Each identified factor plays an important role in measuring the service quality of an organization. These factors basically cover the most crucial areas of an organization which has managerial implications and helps in obtaining the measure of service quality and provide scope for improvement. Thus, using the tool we can find the strengths and weaknesses of the organization which provides a competitive advantage. The identified factors are:

- Reliability the ability to perform the promised service dependably and accurately.
- Assurance the knowledge and courtesy of employees and their ability to convey trust and confidence.
- Tangibles the appearance of physical facilities, equipment, personnel and communication materials.
- Empathy the provision of caring, individualized attention to customers.

 Responsiveness – the willingness to help customers and to provide prompt service.

### ш. Methodology

This paper aims to measure and compare the service quality of Automobile dealership center for two famous service centers of automobile industry of India namely Volkswagen and Maruti Suzuki. Pheonix and BRD are considered to be the major service dealership centers for Volkswagen and Maruti Suzuki in India. Both the service centers have their branches even in Kerala. It is intended to take the survey of 100 customers from each center by distributing the questionnaire consisting a list of 22 questions under the identified factors and thus collecting the information about the expectation and perception of customers about the service centers. Under SERVQUAL, the perceived quality (P) is the quality originally experienced or received by the customers whereas the expected quality (E) is the quality desired by the customers. The quality will be measured on a scale known to be LIKERT scale. Using the scale, the gap between the perceived quality and expected quality is measured. The rating is done on a seven point LIKERT scale, each point specifying the degree of quality. The LIKERT scale specification of each point involves:

> Likert scale – 7 = outstanding 6 = very good 5 = good 4 = average 3 = poor 2 = very poor 1 = extremely poor

The rating is assessed and the gap is calculated between the perceived quality (P) and expected quality (E).

$$\begin{aligned} \text{GAP SCORE} &= \text{PERFORMANCE} - \text{EXPECTATION} \\ &\text{i.e.} \end{aligned}$$

$$G = P - E$$

(1)

If the perceived quality or performance of the service center has greater rating than the expected, it will produce a positive gap score whereas a negative gap score is produced if the expected quality is greater which denotes customer dissatisfaction of the service quality. Then the result will be evaluated and its significance will be verified using software known to be SPSS i.e. Statistical Package for Social Science.

The questionnaire is prepared and is intended to distribute among 100 customers of both the dealership centers. The prepared questionnaire consists of three sections, Part A where the details of the customer is

collected, Part B involves the 22 questions for which the customers has to rate the quality for both perception and expectation under the identified factors and Part C asks for any complaints or suggestions from the customers. The prepared questionnaire consist the following:

#### Part A

Name of the customer –

How long have you been associated with the service center? –

Vehicle registration number – Phone number –

#### Part B

In this portion, it is intended to rate each question for both perception and expectation by the customer according to the instruction given below.

Kindly indicate the degree of expectation (E) and perception (P) of the service quality received at the service center for the below questions.

'7' Outstanding (o), '6' very good (v.g), '5' good (g), '4' average (avg), '3' poor (pr), '2' very poor (v.pr), '1' extremely poor (e.pr)

#### A. Facilities

1. Spare parts being provided are in quality

Expectation (E) – Perception (P) –

2. Materials and ambience are visually appealing

Expectation (E) – Perception (P) –

3. Service equipment is up to date

Expectation (E) – Perception (P) –

4. Employees are neat in appearance

Expectation (E) – Perception (P) –

- B. Reliability
- 5. When promises to do something, it does so

Expectation (E) – Perception (P) –

6. Services are provided in time

Expectation (E) -

Perception (P) -

7. Shows sincere interest to solve your problems

Expectation (E) – Perception (P) –

8. Performs the services right the first time

Expectation (E) – Perception (P) –

9. Keeps your service records accurately

Expectation (E) – Perception (P) –

- C. Responsiveness
- 10. Keeps you regularly informed about the services

Expectation (E) – Perception (P) –

11. Gives prompt services

Expectation (E) – Perception (P) –

12. Always willing to help

Expectation (E) – Perception (P) –

13. Never too busy to respond to your request

Expectation (E) – Perception (P) –

- D. Assurance
- 14. Employees can be trusted

Expectation (E) – Perception (P) –

15. Complete support from the service staff

Expectation (E) – Perception (P) –

16. Staffs are polite and courteous

Expectation (E) – Perception (P) –

17. Has knowledge to answer your questions

Expectation (E) – Perception (P) –

- E. Empathy
- 18. Gives individual attention

Expectation (E) – Perception (P) –

19. Has operating hours convenient to you

Expectation (E) – Perception (P) –

20. Employees deal with customers in a caring fashion

Expectation (E) – Perception (P) –

21. Employees understand your specific needs

Expectation (E) – Perception (P) –

22. Employees have best interest at heart for you

Expectation (E) – Perception (P) –

#### PART C

Kindly give your suggestions (complaints, if any) regarding the quality of the service

## IV. Future Steps Involved And challenges

The work is completed till the preparation of the questionnaire. The next steps involved are:

- 1. Distribution The prepared questionnaire has to be distributed among 100 customers for each of the service centers in order to collect information about the perceived and expected quality.
- 2. Collecting and Assessing the information The ratings of the perceived and expected quality is evaluated for obtaining the Gap score.
- 3. Study of SPSS (Statistical Package for Social Science) software The next step involved is the study of SPSS software in order to verify the result.
- 4. Calculation of service quality After studying the software, it will be used to analyse the result and thus calculating the service quality. This will enable to identify the quality shortfall areas and thus suggesting the corrective measures.

The challenges being faced are:

- 1. Communication with customers One of the challenges is communication. Not every customer will be acquainted with the terms perceived and expected quality. Therefore, it becomes necessary to make them understand about the different terms involved in the questionnaire.
- 2. Involvement of the customers It may not be necessary that every customer will be able to provide their complete attention while answering the questionnaire due to various reasons such as lack of interest, lesser time.
- 3. Time management Completing the survey within a time frame becomes difficult considering the customers. Finding 100 interested customers for answering the questionnaire of both the service centers and making them understand about the survey and questionnaire consumes much time. Hence, managing the time is yet another crucial challenge which has to be overcome.

#### v. CONCLUSION

SERVQUAL is considered to be the most efficient and convenient tool to measure and assess the service quality. It equally measures the gap between the expectation and perception of a customer pinpointing the specific area of quality shortfall. It tool appears to be a reliable and consistent tool for measuring the service quality in the Automobile dealership industry. The seven point Likert scale chosen is considered to be a reliable and valid measurement scale of customer's expectations and perceptions of the automobile service center.

It is sincerely expected that the questionnaire prepared under the identified factors will be helpful in diagnosing service deficiencies if any, in the core managerial areas and thus enabling to suggest the corrective measures for the quality shortfall areas and hence providing a scope for improvement in the service quality which will definitely ensure a competitive advantage for the automobile dealership centers.

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