Enhancing Customer Experience in Car Servicing: Insights from Indian Markets

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Abstract. This descriptive research has attempted to assess customers' satisfaction with services offered by car servicing firms in India. The researcher administered a structured questionnaire to 300 company customers, selected using the Systematic Random Sampling technique. Data collected were analyzed using SPSS, applying the analytical tools of Frequency, Percentage, Mean, factor analysis, cluster analysis, Chi-square and Correspondence Analysis. Results of the study have revealed that the caring nature of servicing staff, the quality of services and service personnel, and the convenience and comfort offered to customers have been identified as the most important factors affecting customer satisfaction.

Keywords: Customer Satisfaction, Personnel, Quality, Service, Chi-square

Introduction

Satisfying customers is the core of marketing. Without customer satisfaction, no firm can survive in this highly competitive environment. A clear understanding of how consumers behave is indispensable for any firm to identify its target market and devise an effective strategy to conquer its target customers. However, consumers of different industries behave differently [1].

Many studies have been conducted to explore the impact of different factors such as cost and quality of services, the professed worth of services and contentment of customers on consumer mannerisms and behaviour in various industries such as banking, FMCG, health, fitness and athletics institutes, entertainment, dry cleaning, thematic parks and fast foods [2, 3]. The term "Customer satisfaction" has been defined by [4] as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals". Accomplishing customer satisfaction is considered indispensable for managing and monitoring any business. The business environment is characterized by heavy competition, with firms competing severely to capture customers. Under such a scenario, business firms strive to differentiate themselves from their competitors by serving customers and winning their satisfaction [5]. Satisfied customers become brand ambassadors for the company, and their positive word of mouth is an effective marketing tool to popularise the company and its products. Company employees also become self-directed towards fulfilling customer needs [6]. Despite customer satisfaction being the core of marketing, its significance is inversely related to the bargaining strength of the firm. A firm with abundant bargaining strength needs not to worry much about customers' derived satisfaction as it enjoys an almost monopoly

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situation. Customers will also be left with the few options of choosing among firms, leaving a firm, and switching over to another [7].

Customer satisfaction shall be an indicator to gauge the future market potentials of a firm as only contented customers shall remain loyal to the firm and fetch new customers. Hence, customer satisfaction is vital in market retention and expansion. Customers buy particular products or services to derive two categories of benefits: utilitarian and hedonic. The former benefit relates to functional and influential gains reaped by customers from a product or service, while the latter is derived due to observed, pragmatic and visible product features [9]. The methodology for assessing customer satisfaction is the difference between expectations and the experience of customers [9]. Customer satisfaction is primarily measured in Likert's five-point scale statements [10], wherein the customers are asked to indicate their contentment with a service or product offered by a firm. Assessing customer contentment is crucial for any business firm. Hence, it is indispensable for them to develop a proper methodology to measure customer satisfaction derived from their service or product [11]. ACSI (American Customer Satisfaction Index) has revealed that firms gaining reasonable customer satisfaction derive better financial results from customer loyalty regarding word-of-mouth recommendations and buying intent. ACSI scores have been developed for sectors such as mobile [12], higher education and electronic mail [13]. SERVQUAL or RATER has also provided a practical methodology to measure the difference in customers' expectations and experiences [14].

Studies have been conducted on unearthing the impact of the quality of services and customer contentment on the probable conduct of consumers [15,16]. They have exposed the prevalence of a significant relationship between quality of services and loyalty in terms of recommending the service provider to others using word-of-mouth, while [17] found that demographic profile characteristics of consumers influence their expectations and, consequently, their behaviour.

Business firms providing services to consumers confront great difficulty in identifying and fulfilling such expectations as services possess many distinct characteristics, such as intangibility, perishability, and inseparability. This warrants some more profound analysis of consumer insight about their contentment with services provided by service providers. This study identified and attempted to assess customers' satisfaction with the services provided by the firm. Emphasizing on offering solutions to all problems of vehicles, the firm has expanded as a reputed auto servicing firm throughout the Indian states. Considering the tremendous growth this firm accomplished, the researcher decided to study how customers perceive the services offered by the firm in terms of servicing cars. Based on the above literature review, the researchers formulated the main objectives to identify the critical factors that affect customers' satisfaction with the services offered by car servicing firms. To determine the level of satisfaction of customers derived from the services provided by car servicing firms.

1. Research Methodology

The proposed research is descriptive, based purely on primary data collected by administering a structured questionnaire to 300 customers. For that, the researcher selected the systematic random sampling technique. The sample frame for the study is car servicing firms in India, while the study population shall be the customers who visited the firm. The questionnaire consists of two sections. The

first section consists of questions on the Demographic profile of respondents. In contrast, the second section consists of 21 Likert's five-point scale statements ranging from strongly disagree to strongly agree to measure the level of satisfaction of customers regarding the services offered by the firm. Data collected were analyzed using SPSS, applying the statistical tools of Frequency, Percentage, Mean, Factor Analysis, Cluster Analysis, Chi-square Analysis and Correspondence Analysis. Internal consistency of the data has been established by conducting a Cronbach alpha test. The result shows that the alpha value is 0.831, which is more than the recommended value of 0.60 [18], establishing the internal consistency of the data.

2. Data Analysis

2.1. Demographic Profile of Respondents

Of the 300 respondents selected for this study, 220 are males, and 80 are females; 64 are aged less than 30 years, 105 are aged 31-45 years, 85 are aged 46-60 years and 46 are aged more than 61 years; 55 possess educational qualifications of up to HSE, 159 are Under Graduates, and 86 are Post-graduates; 92 are Government employees, 14 are private employees, 95 are people in business, 35 are housewives, and 64 are pensioners; 52 have a monthly family income of less than Rs.35,000, 160 have income of Rs. 35,000-70,000, 67 have income of Rs. 70,000-100000 and 21 have a monthly family income of more than Rs. 1 lakh; 169 are Single and 131 are Married.

2.2. Factor analysis

Since 21 statements have been used to assess the level of satisfaction among the customers using the services of car servicing firms, it might be challenging to use all these statements for analysis. Factor analysis was used to condense these statements into manageable factors. The first step of conducting factor analysis is checking the data's validity and sample size. The KMO (Kaiser-Meyer-Olkin) and Bartletts Tests were applied in this regard. A KMO value of 0.731 established the adequacy of sample size, and the statistically significant value of KMO established the data validated to be used for Factor Analysis yielded seven factors from the 21 statements depicted in Table 1.

Sl. no	Statement	Extraction
1	Cashiers are friendly and helpful	0.608
2	Service Representatives are professional and act to serve customers in the best manner	0.663
3	Service Personnel fully explain about work done on a car when a customer takes delivery	0.647
4	Service Staff gives small but effective tips to customers for better maintenance of the car	0.627
5	Service staff display adequate promptness in servicing	0.673
6	The service staff explains clearly work done on car and break-up of charges to customers	0.539
7	The service staff regularly contacts customers to provide updates during the course of work	0.595
8	The service staff informs customers in advance about any delay in work	0.719
9	Service Personnel are highly knowledgeable and competent	0.652
10	All complaints are noted and attended by the service in charge	0.711

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11	It is quite easy to get an appointment in this firm for servicing	0.684
12	The firm has convenient working hours	0.649
13	The firm ensures prompt Delivery	0.623
14	The firm promptly informs customers once the work is done	0.663
15	Quality of work performed in this firm is good	0.658
16	Time taken to attend queries is less	0.753
17	The firm makes all customers feel valued	0.668
18	All problems get fixed completely here	0.709
19	The vehicle is perfectly clean and good looking at the time of delivery	0.808
20	Customer lounge in the station is clean and comfortable	0.737
21	I would strongly recommend this service station to my friends and relatives	0.629

Table 1. Communality Test for Customer Satisfaction

Table 1 depicts that the communality values concerning all 21 statements exceed the threshold limit of 0.5, suggesting that all 21 statements are well condensed down to 7 factors.

Total Variance Explained								
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings	
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	4.974	23.685	23.685	4.974	23.685	23.685	3.116	14.836	14.836
2	2.245	10.691	34.376	2.245	10.691	34.376	2.273	10.822	25.658
3	1.899	9.045	43.421	1.899	9.045	43.421	1.834	8.733	34.391
4	1.405	6.689	50.110	1.405	6.689	50.110	1.759	8.378	42.769
5	1.272	6.055	56.165	1.272	6.055	56.165	1.735	8.263	51.033
6	1.150	5.475	61.639	1.150	5.475	61.639	1.665	7.928	58.960
7	1.070	5.096	66.735	1.070	5.096	66.735	1.633	7.775	66.735
8	.832	3.964	70.699						

Table 2. Total Variance Explained

Using the Varimax Rotation Method, Principal Component Matrix Analysis of the extraction method was applied to condense the 21 statements into 7 factors. The 7 factors extracted explain 66.739 per cent of the total variance, adequately representing the 21 statements. Hence, the 7 factors may be used as an adequate representative of the 21 statements for further analysis.

Statement	**Factors**						
	1	2	3	4	5	6	7
Service Personnel fully explain about work done on a car when a customer takes delivery	0.748						
Service Staff gives small but effective tips to customers for better maintenance of the car	0.735						
Service Representatives are professional and act to serve customers in the best manner	0.690						
Service staff display adequate promptness in servicing	0.664						
The service staff explains clearly work done on car and break-up of charges to customers	0.653						
Cashiers are friendly and helpful	0.617						
All problems get fixed completely here		0.807					
I would strongly recommend this service station to my friends and relatives		0.749					
The firm makes all customers feel valued		0.694					
Quality of work performed in this firm is good			0.778				
All complaints are noted and attended by the service in charge			0.679				

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Service Personnel are highly knowledgeable and competent			0.585				
It is quite easy to get an appointment in this firm for servicing				0.732			
The firm has convenient working hours				0.693			
The vehicle is perfectly clean and good looking at the time of delivery					0.886		
Customer lounge in the station is clean and comfortable					0.724		
Time taken to attend queries is less					0.500		
The firm ensures prompt Delivery						0.767	
The firm promptly informs customers once the work is done						0.671	
The service staff informs customers in advance about any delay in work							0.821
The service staff regularly contacts customers to provide updates during the course of work							0.723

Table 3. Rotated Component Matrix

Table 3 displays the formation of 7 factors as representative of the 21 statements and the statements fitting into the respective factors using the Principal Component Matrix method of Extraction. The first factor consists of six statements relating to the caring nature of service staff. In comparison, the second factor consists of three statements related to the firm's quality of service. The third factor consists of three statements relating to the quality of staff. In comparison, the fourth factor consists of two statements relating to the convenience the firm offers its customers. The fifth factor consists of three statements relating to the comfort provided by the firm to its customers. In comparison, the sixth factor consists of two statements regarding promptness of delivery. The seventh and final factor consists of two statements relating to the accuracy of information the firm provides to its customers.

2.3. Level of Customer Satisfaction towards Services Offered by car servicing firms

The satisfaction level of customers towards services provided by car servicing firms is shown in Table 4.

Sl no	Domain	Mean	Std. Deviation	Rank
1	Caring for service staff	3.1250	0.94065	6
2	Quality of service	3.2411	1.03417	4
3	Quality of staff	3.2500	1.00616	5
4	Convenience to customers	3.3900	1.00062	3
5	Comfort to customers	3.0600	0.95228	7
6	Promptness of Delivery	3.8383	0.96061	1
7	Accuracy of information	3.6317	0.86467	2

Table 4. Customer Satisfaction towards Services of car servicing firms

Table 4 shows the values of Mean, Standard Deviation and the ranks assigned to each factor according to the level of satisfaction of customers. Table 4 shows that customers are most satisfied with the promptness of delivery of the vehicle after completing servicing, followed by the accuracy of the information, convenience to customers, quality of service, quality of staff, care of service staff, and comfort to customers.

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2.4. Grouping of Customers According to their Satisfaction Level

Based on customers' satisfaction level towards services provided by car servicing firms, customers have been grouped using Cluster Analysis, and the results are shown in Table 5.

Factor	C1	C2	C3	F	Sig.
Caring of service staff	3.68	3.02	2.49	52.02	0.00
Quality of service	3.94	2.78	2.86	58.05	0.00
Quality of staff	4.00	2.56	3.10	92.21	0.00
Convenience to customers	4.00	3.40	2.54	74.90	0.00
Comfort to customers	3.45	2.97	2.65	19.59	0.00
Promptness of Delivery	4.15	4.40	2.67	191.80	0.00
Accuracy of information	4.02	3.49	3.28	22.03	0.00
Aggregate	3.891	3.231	2.798		
No. of Cases	113	106	81		

Table 5. Segmenting Customers Based on Their Level of Satisfaction

Table 5 displays the results of the Cluster Analysis conducted using the K-Means cluster. The table portrays the formation of three distinct clusters based on the level of satisfaction derived by the customers from the firm's services. The table showcases the significant contribution of all 7 factors to the clusterization process, as the F values of all the factors are statistically significant at one per cent. Hence, it may be said that all 7 factors play a significant role in segmenting the customers based on their level of satisfaction towards the services provided by car servicing firms. Based on the mean values of the three groups concerning the 7 factors, the clusters have been designated as "Highly Satisfied Group", "Moderately Satisfied Group", and "Low Satisfied Group", each encompassing 113, 106 and 81 customers, respectively. 37.66% of customers are highly satisfied, 35.33% are moderately satisfied, and 27% have low satisfaction.

2.5. Association between Clusters Formed Based on Satisfaction Level and Demographic Profile

Demographic characteristics of clusters formed based on customer satisfaction towards services offered by car servicing firms have been exposed using Chi-square analysis, and the results are portrayed in Table 6.

Sl. No	Variables	Value	df	Sig.	Significant/not
1	Age	16.099	6	0.013	Significant
2	Gender	0.323	2	0.851	Not Significant
3	Marital Status	0.922	2	0.631	Not Significant
4	Education	18.737	4	0.001	Significant
5	Monthly Income	9.051	6	0.171	Not Significant
6	Occupation	39.384	8	0.000	Significant

Table 6. Prevalence of Significant Association between the Clusters and Demographic Characteristics of Customers

Table 6 exposes the prevalence of significant association between the clusters formed based on customer satisfaction and occupation, education, and age of customers. The nature of such association has been explored using Correspondence Analysis, and the results are portrayed in Figures 1-3.
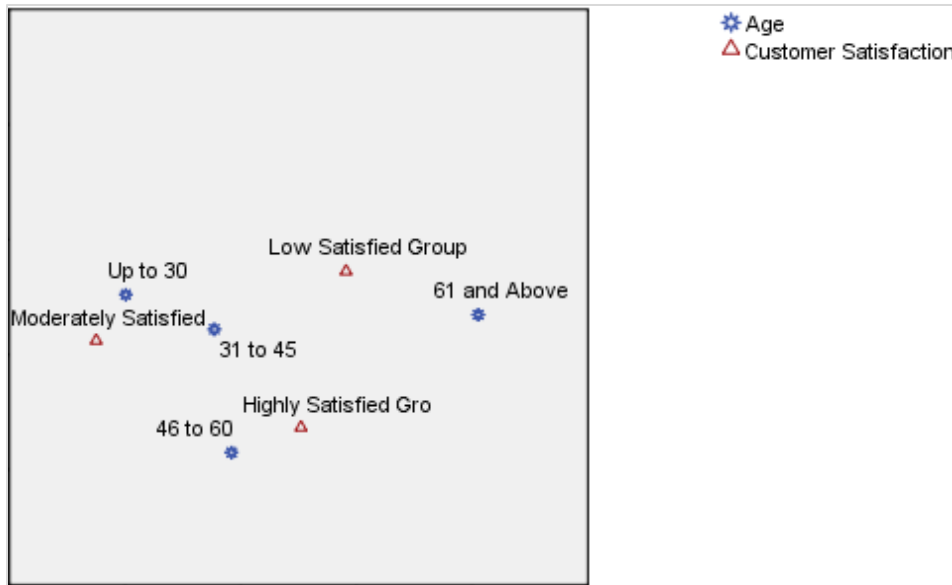
Figure 1: Association between Age and Clusters (Customer Satisfaction)

Figure 1 shows that customers aged 46-60 are highly satisfied while those aged up to 30 years and those aged 31-45 are moderately satisfied, and those aged 61 years and above are low satisfied.
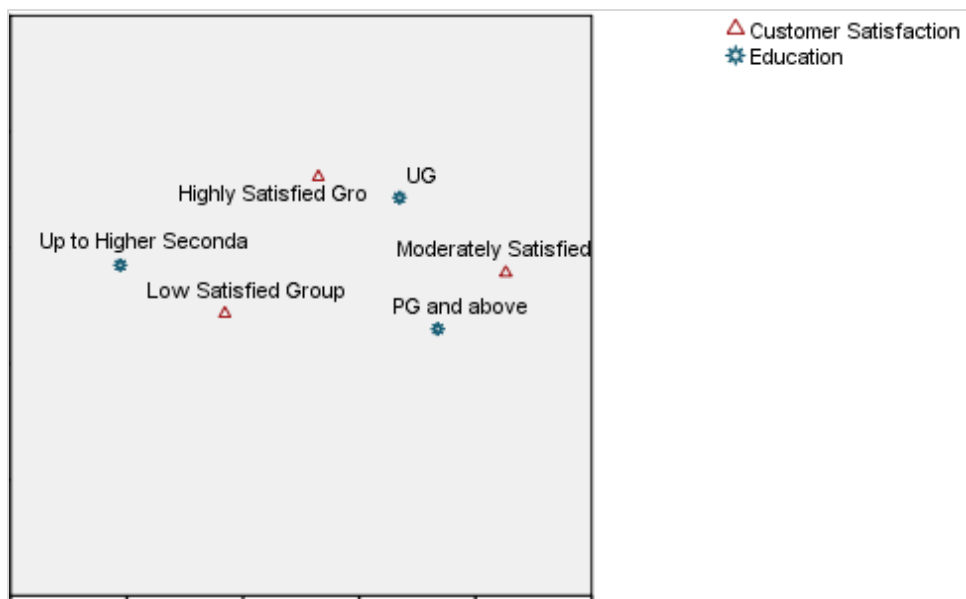

Figure 2: Association between Education and Clusters (Customer Satisfaction)

Figure 2 shows that under-graduates are highly satisfied. At the same time, customers with educational qualifications up to higher secondary level are lowly satisfied, and customers with post-graduation and above educational qualifications are moderately satisfied.
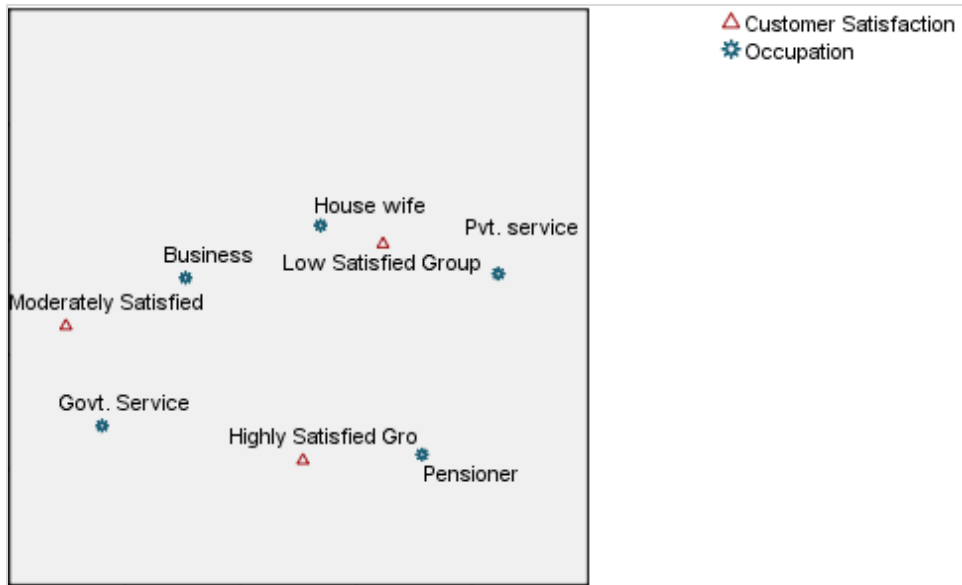
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Figure 3: Association between Occupation and Clusters (Customer Satisfaction)

Figure 3 showcases that pensioners and Government employees are highly satisfied businessmen and housewives and private employees are moderately satisfied.

3. Inferences from the Study

This empirical research has attempted to study customers' satisfaction with the auto servicing industry, with particular reference to the services provided by car servicing firms. The study has identified seven major factors influencing customers' satisfaction towards services provided by auto servicing firms. The factors so identified according to their importance are the caring nature of service staff, followed by quality of service provided by the firm, quality of staff, convenience offered by the firm to its customers, comfort provided by the firm to its customers, promptness of delivery and accuracy of updated information provided by the firm to its customers about servicing status of the vehicle. These factors shall be essential factors influencing contentment derived by customers from services of any service-providing firm in general and auto servicing firms in particular. Customers of car servicing firms are most satisfied with the prompt delivery of the vehicle after completing servicing, followed by the accuracy of the information, convenience to customers, quality of service, quality of staff, care of service staff and comfort offered to customers. Promptness of delivery and accuracy of information are the last two important factors, but these two factors have captured the maximum satisfaction of the firm's customers.

The caring nature of servicing staff, followed by the quality of services and quality of servicing personnel, convenience and comfort offered to customers have been identified as the most important factors affecting customer satisfaction. However, caring for servicing staff has caught customers' satisfaction at a low level. Hence, it can be observed that customers of car servicing firms have a low or average level of satisfaction with essential factors that have a bearing on customer satisfaction. In contrast, they have a good level of satisfaction with factors that are not all that important among the seven identified factors. 37.66% of customers are highly satisfied, 35.33% are moderately satisfied, and 27% are dissatisfied with the firm's services. More than one-quarter of the customers have a low level of satisfaction with

the firm's services, which is quite a large number and bad news for the firm. Any business's critical target market is privately employed people and youngsters. Unfortunately, private employees are not satisfied with car servicing firms' services. At the same time, the younger customers have only a moderate level of satisfaction, which is not good news for the firm.

4. Limitations of the Research

This research is restricted to customers of Capital Honda in India and the result may not be generalized to regions and countries with different cultural backgrounds. Researchers collected data from 300 respondents in this study, but the sample size was insufficient due to the larger geographical areas. The researcher even focused on several factors to predict customer satisfaction. Some important factors like technological advancements and availability of parts are not included.

5. Directions for Future Research

In future, the researchers can include a different region and possibly compare urban and rural customer satisfaction levels. Researchers can do longitudinal studies, which would help to understand how customer satisfaction evolves over and the impact on long-term service quality improvements. In future research, researchers can include additional factors such as technological advancements and availability of parts to get a more comprehensive understanding of customer satisfaction.

Conclusion

Customer satisfaction is the only mantra for the success of any business firm. Firms providing services need to follow this mantra without even a slight deviation. This study has exposed the importance of people's role in capturing the satisfaction of customers for firms engaged in providing services. Any business firm involved in providing services must recognize the importance of capturing the satisfaction of customers through qualitative and responsive personnel and the best services. If firms fail in these aspects, they will be out of the market. Hence, firms should be able to recognize danger alarms as early as possible and rectify their errors to win the satisfaction and loyalty of their customers.

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