Impact of Service Quality on Economy, Premium and Super Premium Car Segments

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Abstract—the purpose of this paper is to analyze the service quality factors influencing on Economy, Premium and Super Premium car segments with reference to after sales service of cars. The conceptual framework describes the influence of Responsiveness, Assurance, Tangibility, Empathy and Reliability to customer satisfaction and customer loyalty among different car segments. The sampling unit is Coimbatore, Tamilnadu, India. Convenient sampling method was used for data collection. The structured questionnaire was used to collect 80 respondents. Chi-square and Discriminant analysis were used to interpret the data. Discrimination found in services among three segment of cars. Premium and super premium car segments were given more importance in providing good service than for Economy car segment...

Index terms -Service Quality, After Sales service, Car Segments

I. INTRODUCTION

The first modern automobile rolled onto the streets of Mumbai during late 1800s. It was one of the initial models of horseless carriages, much prior to Henry Ford's experiment of the iconic Ford Model-T. The Indian automobile industry has come a long way since then. Today, it is one of the fastest growing industries in the world. The automobile industry is one of the major employment and revenue generators for the country.

Almost all major automobile manufactures of the world are competing for a market in the Indian market. The market is segmented on several basis viz. sizes of the car, fuel type, model type, usage, performance, distribution etc each enjoying a strong and tougher competition day by day. The researcher has focused on dividing the segments into terms money value like Economy, Premium and Super premium.

Cars happen to be a luxurious object and for most it holds aspirational value. Having a car in household is a sign of good times. Naturally, one takes extra care to make sure that the product being delivered upto the expectation of the customer. In light of recent rush by automotive giants from across the globe, differentiation holds the key and After Sales service is one important aspects after the product sold which manufacturers makes difference and get noticed thereby result in increased sales. After Sales service should be an integral part of any companies' sales strategy. A good After Sales service can with its excellence help automobile manufactures gain market share and most important of all key to increase customer satisfaction and retention in form of loyalty. Most customers will not make a repeat purchase or continue with a company's services in case of a bad experience.

A recent survey by Nielsen suggests that automakers have opportunities to improve their business performance in the short term focusing more on the customers they already have. Especially in these tough times for the industry, one of the most powerful techniques for converting buyers into loyal customers is providing exceptional after-sales service.

II. BACKGROUND OF THE STUDY

High among the factors that create promoters-and help sustain their loyalty is a strong after-sales service experience. Dealer service is the key point of contact with customers at the critical time when most people are weighing their next vehicle purchase. Owners' brand enthusiasm tends to erode as the vehicle ages and the warranty expires. But it is precisely at this point, about four years after initial sale that the leaders capitalize on their loyalty advantage by using maintenance visits as opportunities to reinforce their ties with promoters and win over detractors. Excellent service not only reinforces relationships with customers who already feel loyal to a brand. It can also defuse ill will that causes disaffected customers to bad-mouth the brand. Indeed, the brand leaders excel especially at turning unplanned repair visits into opportunities to strengthen customer bonds. The entry of multi-branded car repair service providers are slowly growing with good customer service. This would lead to loss of customers for car dealers of their own.

III. OBJECTIVES

- To assess the service quality factors on service level of three car segments
- To analyze the discrimination on services among car segments
- > To provide the suggestions for the improvement in service

IV. REVIEW OF LITERATURE

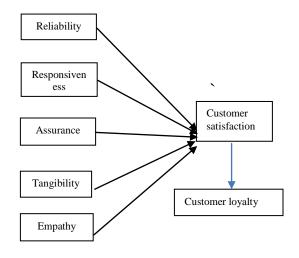
Service quality and corporate image are major factors in determining the satisfaction.(Dr. Muhammad Sabbir Rahman,2012). Internal processes support the delivery of top quality public services using SERVQUAL dimensions (Reliability, Tangibility, Responsiveness, Assurance, and Empathy). Key relationship is being determined by service dimensions and service quality (PrabhaRamseook-Munhurrun, 2010).

Continuous improvement in service quality was necessary to increase customer satisfaction, loyalty, retention, market share and profitability (MinwirAl-Shammari, Ahmad SamerKanina, 2014). Service quality and factors which affect customer satisfaction in Automobile service industries (Mohammad Javed, Dr.Parul Gupta, Dr.VishalSaxena, 2015). Maximizing the quality and easy navigation of website in order to retain a loyal customer in manufacturer's website (Dr.N.Nagaraja, 2012).

The quality and services of Product increases the satisfaction level of customer (PadiriUsha, Dr.KalyanNallabala, 2014). The most effective way to maintain customer loyalty and customer satisfaction is consistent service quality that decreases the cost of attracting new customers and increase sales and market share (HosseinVazifehdust and Sahel Farokhian, 2013). Empirical work relates the business performance (Customer Satisfaction) and productivity and return on investments (Eugene W.Anderson, ClaesFornell, Roland T.Rust, 1997).

The Customer satisfaction and perceived value were also indirectly related to loyalty through commitment (Pin Luarn, Hsin-Hui Lin, 2003).The linkages between relationship marketing and customer loyalty by using customer satisfaction and customer trust as the intervening variables (MohamadRizan, Ari Warokka, DewiListyawati, 2014). customer loyalty is more dependent upon Customer satisfaction in comparison of customer retention (Mohammad Majid MehmoodBagram, ShahzadKhan, 2012).

V. CONCEPTUAL FRAMEWORK



VI. RESEARCH METHODOLOGI			
Research Type	Quantitative research		
Research design	Descriptive cross		
Research design	sectional research		
Data Type	Primary Data		
Sacondary source	Reference material, books		
Secondary source	&e-books, website.		
Data collection	Survey method, personal		
method	visit		
Sampling method	Convenient Sampling&		
&SampleSize	80		
Sampling logation	Coimbatore, Tamilnadu,		
Sampling location	India		
Data collection	Structured questionnaire		
Instrument	Suuctured questionnaire		

VI. RESEARCH METHODOLOGY

VII. ANALYSIS

Table 1: ANOVA table for delighted by this service experience

	Sum of	df	Mean Square	F	Sig.
	Squares				
Between Groups	7.534	3	2.511	5.845	.001
Within Groups	32.653	76	.430		
Total	40.188	79			

Hypothesis:

H₀: There is no significant difference between service experiences

H₁: There is a significant difference between service experiences

Interpretation:

F value calculated based on the statistical run of ANOVA is 5.854. This calculated value is less than the table value of 161.4. This implies Accept Null Hypothesis (H_0). Hence this infers that there is no significant difference between service experiences.

Table 2: Complaints Addressed

	Observed N	Exp N	Residual
Disagree	4	20.0	-16.0
Neutral	15	20.0	-5.0
Agree	50	20.0	30.0

strongly agree	11	20.0	-9.0
Total	80		

Table 3: Test Statistics for Chi-Square

	complaints are
	addressed promptly
Chi-Square	63.100 ^a
Df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20.0.

Hypothesis:

H₀: There is no significant difference between options for complaints addressed

H₁: There is a significant difference between options for complaints addressed

Interpretation:

The Significance (P Value) calculated is 0.000 which is less than the stipulated value of 0.05. So this test is statistically significant to conduct Chi-Square test. The degree of freedom for the test is 3(4-1), the Chi-Square calculated value is 63.100. This is higher than the table value of 7.815. Hence the interference can be stated as reject null hypothesis and accept alternate hypothesis, so there is a significant difference between options for complaints addressed.

> Chi-Square Test Table 4: Service Provider

	Observed	Expected	
	Ν	Ν	Residual
Disagree	2	20.0	-18.0
Neutral	18	20.0	-2.0
Agree	42	20.0	22.0
strongly agree	18	20.0	-2.0
Total	80		

Table 5: Test Statistics

	happy that I have chosen this service provider
Chi-Square	40.800^{a}

Df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20.0.

Hypothesis:

 H_0 : There is no significant difference between selections of service provider

 H_1 : There is a significant difference between selections of service provider

Interpretation:

The Significance (P Value) calculated is 0.000 which is less than the stipulated value of 0.05. So this test is statistically significant to conduct Chi-Square test. The degree of freedom for the test is 3(4-1), the Chi-Square calculated value is 40.800. This is higher than the table value of 7.815. Hence the interference can be stated as reject null hypothesis and accept alternate hypothesis, so there is a significant difference between selections of service provider.

VIII. DISCRIMINANT ANALYSIS

 Table 6: Group Statistics for Car Segment Economy

Group Statistics	Mean	Std.
		Deviation
Solving The Complaints	4.18	0.588
Additional Repairs And Spare Parts		
Replacement	3.77	0.752
Calls Are Handled Promptly	3.91	0.526
Complaints Are Addressed Promptly	3.91	0.526
Replacements And Rectifications Of My		
Car Are Explained Properly	3.73	0.827
Picks Up The Car From My Place And		
Delivers The Same	3.45	1.335
Tips On Periodical Maintenance	3.64	0.902
Behave With Me In A Courteous Manner	4.00	0.756
Good Skills To Identify The Problem		
And Solving It	3.91	0.750
Contacted When The Repair Becomes		
More Expensive Than Estimated	3.73	0.767
Bill Boards, Direction Boards,		
Instructional Signs Are Given Very		
Clearly	3.68	0.716

Buildings, Machineries And Road To		
Service Provider Are Neat And Clean,		
Also In Good Condition	3.86	0.710
Viewing Of Live Service From Waiting		
Room Is Available	3.45	1.011
Views And Interests Are Being		
Considered By The Service Company	3.73	0.631
Opening And Closing Time Of The		
Service Provider Is Flexible	3.55	1.057
Individual Service Manager Is Allotted	3.27	1.077
Attending In A Friendly Way	4.05	0.899
Satisfied With My Decision To Visit This		
Service Provider	4.00	0.535
Happy That I Have Chosen This Service		
Provider	3.95	0.653
Delighted By This Service Experience	3.77	0.685
Come Back To This Same Service		
Provider Even For Small Repairs	3.73	0.703
Recommend The Service Provider To		
The Known People	3.82	0.795
Even If Another Service Provider Offers		
A Lower Rate, I Will Still Do My Service		
With This Service Provider	3.77	0.813

Table 7.	Groun	Statistics	for	Car	Segment	Premium
	Oroup	Statistics	101	Car	Segment	riennum

Group Statistics	Mean	Std.
		Deviation
Solving The Complaints	3.84	0.809
Additional Repairs And Spare Parts	3.67	0.931
Replacement		
Calls Are Handled Promptly	3.73	0.874
Complaints Are Addressed Promptly	3.84	0.809
Replacements And Rectifications Of My Car Are Explained Properly	3.90	0.700
Picks Up The Car From My Place And Delivers The Same	3.71	1.188
Tips On Periodical Maintenance	3.82	0.888
Behave With Me In A Courteous Manner	3.96	0.692
Good Skills To Identify The Problem And Solving It	3.86	0.939
Contacted When The Repair Becomes More Expensive Than Estimated	3.86	0.917
Bill Boards, Direction Boards, Instructional Signs Are Given Very Clearly	3.73	0.918
Buildings, Machineries And Road To Service Provider Are Neat And Clean, Also In Good Condition	3.88	0.739
Viewing Of Live Service From Waiting	3.69	0.905

		1
Room Is Available		
Views And Interests Are Being	3.75	0.688
Considered By The Service Company		
Opening And Closing Time Of The	3.82	0.888
Service Provider Is Flexible		
Individual Service Manager Is Allotted	3.31	0.905
Attending In A Friendly Way	3.98	0.707
Satisfied With My Decision To Visit This	3.84	0.644
Service Provider		
Happy That I Have Chosen This Service	3.96	0.799
Provider		
Delighted By This Service Experience	3.86	0.749
Come Back To This Same Service	3.65	0.934
Provider Even For Small Repairs		
Recommend The Service Provider To	3.80	0.980
The Known People		
Even If Another Service Provider Offers	3.53	0.924
A Lower Rate, I Will Still Do My Service		
With This Service Provider		

Table 8: Group Statistics for Car Segment Super Premium

Group Statistics	Mean	Std.
Group Statistics	Wiean	Stu.
		Deviation
Solving The Complaints	4.14	0.378
Additional Repairs And Spare Parts	3.71	0.488
Replacement		
Calls Are Handled Promptly	3.71	0.756
Complaints Are Addressed Promptly	3.71	0.488
Replacements And Rectifications Of	3.57	0.535
My Car Are Explained Properly		
Picks Up The Car From My Place	3.29	0.951
And Delivers The Same		
Tips On Periodical Maintenance	3.57	0.535
Behave With Me In A Courteous	4.29	0.488
Manner		
Good Skills To Identify The Problem	3.86	0.378
And Solving It		
Contacted When The Repair	4.43	0.535
Becomes More Expensive Than		
Estimated		
Bill Boards, Direction Boards,	3.71	0.756
Instructional Signs Are Given Very		
Clearly		
Buildings, Machineries And Road To	3.71	0.756
Service Provider Are Neat And		
Clean, Also In Good Condition		
Viewing Of Live Service From	3.57	0.535
Waiting Room Is Available		

Views And Interests Are Being	4.00	0.000
Considered By The Service Company	4.00	0.000
Opening And Closing Time Of The	3.57	1.134
Service Provider Is Flexible		
Individual Service Manager Is	3.86	0.378
Allotted		
Attending In A Friendly Way	3.86	0.378
Satisfied With My Decision To Visit	4.14	0.690
This Service Provider		
Happy That I Have Chosen This	3.86	0.690
Service Provider		
Delighted By This Service	3.57	0.535
Experience		
Come Back To This Same Service	3.71	0.951
Provider Even For Small Repairs		
Recommend The Service Provider To	3.86	0.690
The Known People		
Even If Another Service Provider	3.43	0.787
Offers A Lower Rate, I Will Still Do		
My Service With This Service		
Provider		

Table 9: Group Statistics for all Car Segments

Group Statistics	Mean	Std.
- · · r		Deviation
Solving The Complaints	3.96	0.737
Additional Repairs And Spare Parts	3.70	0.848
Replacement		
Calls Are Handled Promptly	3.78	0.779
Complaints Are Addressed	3.85	0.713
Promptly		
Replacements And Rectifications	3.83	0.725
Of My Car Are Explained Properly		
Picks Up The Car From My Place	3.60	1.208
And Delivers The Same		
Tips On Periodical Maintenance	3.75	0.864
Behave With Me In A Courteous	4.00	0.694
Manner		
Good Skills To Identify The	3.88	0.848
Problem And Solving It		
Contacted When The Repair	3.88	0.862
Becomes More Expensive Than		
Estimated		
Bill Boards, Direction Boards,	3.71	0.845
Instructional Signs Are Given Very		
Clearly		
Buildings, Machineries And Road	3.86	0.725
To Service Provider Are Neat And		
Clean, Also In Good Condition		
Viewing Of Live Service From	3.61	0.907
Waiting Room Is Available		

Views And Interests Are Being	3.76	0.641
Considered By The Service		
Company		
Opening And Closing Time Of The	3.73	0.954
Service Provider Is Flexible		
Individual Service Manager Is	3.35	0.929
Allotted		
Attending In A Friendly Way	3.99	0.738
Satisfied With My Decision To	3.91	0.620
Visit This Service Provider		
Happy That I Have Chosen This	3.95	0.745
Service Provider		
Delighted By This Service	3.81	0.713
Experience		
Come Back To This Same Service	3.68	0.868
Provider Even For Small Repairs		
Recommend The Service Provider	3.81	0.901
To The Known People		
Even If Another Service Provider	3.59	0.882
Offers A Lower Rate, I Will Still		
Do My Service With This Service		
Provider		

At each step, the variable that minimizes the overall Wilks' Lambda is entered.

- a. Maximum number of steps is 54.
- b. Minimum partial F to enter is 3.84.
- c. Maximum partial F to remove is 2.71.
- d. F level, tolerance, or VIN insufficient for further computation. Table 10: Summary of Discriminant Functions

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.832	14.189	2	.001

Table 11: Functions at Group Centroids

Car Segment	Function
Economy- Less than 5 lakhs	685
Premium- 5lakhs -15 lakhs	.316
Super Premium –above 15 lakhs	154

IX.FINDINGS

From ANOVA

Hypothesis:

H₀: There is no significant difference between service experiences

H₁: There is a significant difference between service experiences

Interpretation:

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From CHI - SQUARE Test

Hypothesis:

 H_0 : There is no significant difference between options for complaints addressed

 H_1 : There is a significant difference between options for complaints addressed

Interpretation:

The Significance (P Value) calculated is 0.000 which is less than the stipulated value of 0.05. So this test is statistically significant to conduct Chi-Square test. The degree of freedom for the test is 3(4-1), the Chi-Square calculated value is 63.100. This is higher than the table value of 7.815. Hence the interference can be stated as reject null hypothesis and accept alternate hypothesis, so there is a significant difference between options for complaints addressed.

Hypothesis:

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selections of service provider

H₁: There is a significant difference between

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Interpretation:

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From Discriminant Analysis

- The car segment which is getting highest service is "Premium Car" with the calonical factor of 0.316.
- ➤ The next car segment is "Super premium" with the calonical factor of -0.154.
- The last segment of car is "Economy" with a very low calonical value of -0.685.
- This infers that the service provider shows discrimination among three segment of cars and giving priority segment for Premium car segment ignoring Economy car segment.
- This may be the reason of more revenue generation or profit or population of premium car segment. This should be analyzed and investigated by further research.

VI. CONCLUSION

The main aim of this research was to measure current service quality level of an automobiledealership in Coimbatore city. The research was focused on Customer Satisfaction. And the outcome variable is Customer Loyalty. Here the dimensions of SERVQUAL were considered and influence of each dimension towards customer satisfaction was measured. Demographic variables like ageand car segment were taken in account to with respect to customer satisfaction and customer loyalty to understand the significance between them. As the dimensions of service quality were found that it influences the outcome variable at the rate of 40.5% so that each and every service provider should concentrate more in improving the service quality dimensions and especially according to the results the service provider should concentrate on Super Premium and Economy Segment cars.

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