

A Study to analyze the impact of service quality of automobile sector on customer satisfaction

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Abstract:

Services of automobile industries are very important in today's scenario. It not only affects the satisfaction level of its customers but also its success depends upon the services it provides to its customers. This paper deals with the service quality provided by 7 different four wheeler companies to its customers in Rohtak. Also, it shows how the service quality provided affects the satisfaction level of customers. A random sample of 70 customers of 7 four wheeler companies is used to find results of study. A parasuraman Servqual model questionnaire was used to know service quality and various tools like correlation, regression were used in the study. Study found that all the five factors of service quality viz: reliability, assurance, tangibility, empathy and responsiveness affect the satisfaction level of customers.

Keywords: Automobile sector, Satisfaction, Service quality, Services.

Introduction:

Automobile sector is a growing sector of Indian economy. It has recorded tremendous growth. Indian automobile sector is very developed sector in all over world. It includes various types of vehicles and of various uses. It includes vehicles for personal purpose, also for commercial use. Various companies are in competition whether it's in India or worldwide. All the automobile companies put their efforts to remain in this competition and to get success. It's only in pandemic when its sale shows declining trend but in reality, this sector is very important for any economy and there always remain a point where this sector can improve itself. Various innovations are going on in this sector due to increasing demand from customers and customers will only go for that company which can give him full satisfaction that's why various researches are done by automobile companies on improving its service quality. Service quality is the difference between customer's

expectations and its perceived experience. So, all the companies are making efforts to fulfil expectations of its customers and reduce this difference.

Literature Review:

Justin Roy Balindo et.al.(2021) identified the effect of service quality on customer satisfaction in an automotive after sales service. A sample of 256 customers were selected from Toyota Dasmarias-Cavite and data were collected from them with the help of Servqual Questionnaire. Data were analysed by using SEM. From the analysis researchers found that 2 factors i.e reliability and empathy have significant effect on customer satisfaction.

Ajith James & Jasmin James(2021) in their research paper, "Service quality evaluation of automobile garages using a structural approach" evaluated the service quality of automobile garages on the basis of factors that influence its service quality. Analysis of study shows the interrelations between various factors that influence service quality. Also, a numeric index was made for its evaluation.

Jain, N.K et. al.(2020) evaluated service quality in automobile repair industry. They also investigated its impact on customer satisfaction with the help of structured model. A random sample of 259 users of automobile service centers were used and data were collected from them with the help of structured questionnaire. Study found that there is a positive relationship between all factors of service quality with customer satisfaction. Also customer satisfaction and trust positively affects word of mouth.

Samuel Famiyehet. al. (2018) conducted a study to know the relationship between service quality, customer satisfaction and loyalty of Ghanaian car owners. Primary data were used in this study and data were analysed with SEM. From analyses it was found that service quality dimensions, empathy, assurance, responsiveness and tangibles have positive relationship with customer satisfaction whereas no such relationship exist with reliability dimension. Also, it was found that there exist a positive relationship between customer satisfaction and loyalty.

Objectives of the study:

1. To analyze the service quality of different automobile companies in Rohtak.
2. To identify the relationship between service quality and customer satisfaction.
3. To study the impact of service quality of different automobile companies on customer satisfaction.

Research Methodology

This study is descriptive and analytical. Primary data was collected from a sample of 70 customers of 7 different four wheeler companies (Maruti Suzuki India Limited, Hyundai Motor India Ltd, Mahindra & Mahindra Limited (M&M), Tata Motors Limited, Honda Cars India Ltd., Toyota Kirloskar Motor Private Limited and Renault India Private Limited) i.e. 10 customers from each company in Rohtak. Data were collected by using Servqual Model and collected data was analysed with Pearson's correlation coefficient and regression analysis.

Findings & Analysis of the Collected Data

Company	Tangibi- lity	Reliabi- lity	Responsi- veness	Assura- nce	Empa- thy	Total
Maruti Suzuki India Limited	0.70	-0.12	-0.03	0.63	0.30	0.28
Hyundai Motor India Ltd	0.60	0.04	0.13	0.30	0.34	0.27
Mahindra & Mahindra Limited (M&M)	0.60	0.00	-0.18	0.43	0.24	0.21
Tata Motors Limited	0.40	-0.18	0.15	0.48	0.54	0.27
Honda Cars India Ltd.	0.45	-0.14	-0.18	0.30	0.42	0.17
Toyota Kirloskar Motor Private Limited	0.25	0.12	0.18	0.33	0.34	0.24
Renault India Private Limited	0.63	0.00	0.05	0.05	0.26	0.19
Mean Average	0.52	-0.04	0.02	0.36	0.35	0.23

(Source: self-calculation)

Above table shows the service quality of 7 automobile companies on five dimensions. Maruti Suzuki India Limited, Hyundai Motor India Ltd and Tata Motors Limited are the top three companies in term of overall quality of services they provide to their customers. Maruti Suzuki India Limited has the highest service quality on the tangibility and assurance dimension while lowest on reliability and responsiveness dimension. Hyundai Motor India Ltd has the highest service quality on the tangibility and

empathy dimension while lowest on reliability and responsiveness dimension. On the other hand Tata Motors Limited has the highest service quality on the empathy and assurance dimension while lowest on reliability and responsiveness dimension.

Company	Satisfaction
Maruti Suzuki India Limited	4.01
Hyundai Motor India Ltd	3.83
Mahindra & Mahindra Limited (M&M)	3.77
Tata Motors Limited	3.85
Honda Cars India Ltd.	3.76
Toyota Kirloskar Motor Private Limited	3.84
Renault India Private Limited	3.78
Mean Average	3.83

(Source: self-calculation)

Above table shows the satisfaction level of customers of 7 automobile companies. It shows that customers of Maruti Suzuki India Limited are highly satisfied and customers of Toyota Kirloskar Motor Private Limited are least satisfied with the services of their service providers.

		Satisfaction	SQ
Satisfaction	Pearson Correlation	1	.825**
	Sig. (2-tailed)		.000
	N	70	70

(Source: self-calculation)

** . Correlation is significant at the 0.01 level (2-tailed).

Above table shows the relationship between service quality of automobile companies and customer satisfaction. Pearson correlation .825 shows that there is significant and high correlation between the both.

Table No. - 4 : Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.851 ^a	.724	.703	.09952	1.021

(Source: self-calculation)

a. Predictors: (Constant), Empathy, Responsiveness, Reliability, Tangibility, Assurance

b. Dependent Variable: Satisfaction

Multiple regression analysis between the five dimensions of service quality and satisfaction has been performed. In model 1 there are six predictors i.e. constant, tangibility, reliability, responsiveness, assurance, empathy. But the dependent variable for the above model is only one i.e. satisfaction. Model 1 presents adjusted R square = .703. It means that the model explains the 70.3% of the variation in the satisfaction of customers. In order to fulfil the assumption of multiple regression the value of Durbin-Watson should be between 1 and 3. The value of Durbin-Watson for the model is 1.021.

Table No. - 5 : ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.667	5	.333	33.656	.000 ^b
	Residual	.634	64	.010		
	Total	2.301	69			

(Source: self-calculation)

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Empathy, Responsiveness, Reliability, Tangibility, Assurance

ANOVA table shows that the combinations of the independent variables to predict the dependent variable in above model is statistically significant as the p value for the above model is 0.000, which is less than the significance value 0.05. F value for the above model is $F(5, 64) = 33.656$. All these indicate that model of the study is better in the prediction of dependent variable.

Table No. - 6 : Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.438	.035		97.561	.000		
	Tangibility	.331	.033	.853	10.016	.000	.594	1.683
	Reliability	.307	.038	.672	8.074	.000	.622	1.608
	Responsiveness	.224	.030	.557	7.477	.000	.775	1.291
	Assurance	.292	.027	.952	10.800	.000	.554	1.806
	Empathy	.374	.041	.761	9.083	.000	.614	1.629
(Source: self-calculation)								
a. Dependent Variable: Satisfaction								

Coefficient table exhibits the coefficients (standardized and un-standardized), t-statistics and collinearity statistics. In the above model in the study value of VIF is nearby 1 for all the independent variables, which indicates that there is no multicollinearity issue with the data (Hair et al., 1998). From the table it is cleared that the five dimensions of service quality are significantly contributing toward regression equations for above model as the p (sig.) value for all the predictors are less than 0.05. Regression or predictive Equation for above model is:

$$\text{Satisfaction} = b_0 + b_1 (\text{Tangibility}) + b_2 (\text{Reliability}) + b_3 (\text{Responsiveness})$$

$$+ b_4 (\text{Assurance}) + b_5 (\text{Empathy})$$

$$\text{Satisfaction} = 3.438 + .331 (\text{Tangibility}) + .307 (\text{Reliability}) + .224 (\text{Responsiveness})$$

$$+ .292 (\text{Assurance}) + .374 (\text{Empathy})$$

Conclusion:

From the above study it has concluded that Maruti Suzuki India Limited has the highest service quality and its customers are highly satisfied among the seven selected companies.

Multiple regression analysis shows that there is high correlation between the service quality and satisfaction of customers of automobile companies. So, companies should concentrate on the service quality to improve the satisfaction of its customers and fulfil the needs of its customers so that company can grow and have success.

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