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A STUDY ON FACTORS INFLUENCE ON TWO WHEELER CUSTOMER SATISFACTION WITH REFERENCE TO CHENNAI

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Abstract
A Nations economy is well known from its transport system. For instant and rapid growth in economy, a well-developed and well-networked transportation system is essential. As India's transport network is developing at a fast pace, Indian Automobile Industry is growing too. Also, the Automobile industry has strong backward and forward linkages and hence provides employment to a large section of the population. Thus the role of Automobile Industry is very essential in Indian economy. The first signs of fragmentation of the market were visible even when the Indo-Japanese 100cc motorbikes were introduced. The motorcycle segment which had only 175,250 & 350cc bikes earlier was changed into 100cc, 175 and 350cc.in the 100cc category there was further fragmentation into two stroke engines and four stroke engines which really translated into two different levels of fuel efficiencies and durability. The key objectives of the study are to find out the Predictor Variables for Customers' Satisfaction towards Two Wheelers and to analyze the factors influencing on customer satisfaction towards the two wheeler brand. The sampling technique used in this study is convenience sampling. In this study, we presume that population size is finite and unknown; the formula was applied to know the sample size, and found the sample size is 575 among them 525 customers and 50 dealers meets the requirements. . The overall analysis of this study Hero Honda and Enfield has ranked equally in users satisfaction and rest of the two brands performance is somewhat satisfaction to the users of two wheelers in the emerging Indian two wheeler markets

Key Words: Two Wheeler, Customer Satisfaction

INTRODUCTION

Before independence, British Motor bikes such as BSA, Norton, Hatch less, Ariel and Sunbeam; German motorbikes like BMW; and US motorbikes like Harley-Davidson were a common sight in India. In 1945 Bajaj Auto ltd., was started and in 1948, this company began importing Vespa Scooters and three wheelers from Italy. However [after independence],the government of India banned imports in 1953 based on the recommendations of the Tariff commission which was set up in 1952.The Indian two wheeler industry made a modest beginning in the mid 1950's when Enfield India ltd., entered into technical collaboration with Enfield Cycle Co., UK in 1954 for manufacturing motorcycles up to 350cc in India. The first motorbike the 'Enfield Bullet 350'rolled out in 1955.Around the name time Automobile products of India entered into a technical collaboration with Innocenti SG of Italy for manufacturing Lambretta Scooters and three wheelers in 1955.By 1960 Bajaj Auto ltd., set up the most modern production facilities in collaboration with Piaggio of Italy to manufacture Vespa 150cc scooters [which were later called Bajaj scooters] and three wheelers. Since under the regulated regime, foreign companies were not allowed to operate in India, the waiting period for getting a scooter from Bajaj Auto ltd., was as high as 12 years.The motorcycle segments was no different. There were only three manufacturers: Enfield India ltd., Ideal Jawa and Escorts Rajdoot. This industry was dominated by Enfield with its 350cc in the heavy bike category and by Escorts in the 175 cc medium bike category. Ideal Jawa could only follow them, as in the early years, it could catch the fancy of the urban youth only. Till the early 1980's the two-wheeler industry was essentially oligopolistic in nature. There were only a small number of producers in each segment, vast and growing markets and long waiting lists-all of which led to the consumers getting short changed. He did not get access to any new products, the existing models were technologically the same for decades and prices kept nudging upwards. Demand was entirely supply driven.

REVIEW OF LITERATURE

R K Garg (2011) CRM requires a seamless, single view of the customer with consistent cross-channel interaction models and it is recommend that companies bundle all internal CRM strategies into one comprehensive multi-channel strategy. More over if the two wheeler manufacturer integrate CRM with SCM, then product design and production planning can be aligned with the customer information available, to increase customer loyalty.

Oyama (2012) Honda Motor wants to be number one in the Indian market and the company wanted 30% of Honda's global sales to come from Indian operations by 2020. HMSI have had issues related to production in the past with most of its models having the longest waiting period in the country, this reduced in Honda's penetration in the rural market, which is less than a third of Hero Moto Corp.

Philip Kotler(2012) Harley – Davidson dealers ranging from the CEO to the sales staff, maintain personalized relationships with customers through face to face and social media contact. Knowing customers as individuals and conducting ongoing research to keep up with their changing expectations and experiences which helps Harley – Davidson to define their customers' needs better.

Shashank Srivastava (2012) GM Maruti Suzuki has mentioned that the consumer is price conscious and the brand loyalty is diminishing because of the number of options in each segment moreover the customers are ready to experiment today.

L. Vijay, B. Jayachitra (2012) , study on customer's perception of Hero Honda motorcycles compared to TVS and Bajaj. The objective of this study is to understand about the customer perception towards Hero Honda, Vs TVS and Bajaj motorcycles and to analyze the reasons customers opt for a particular brand. The study was conducted at Southern Auto Centre (SAC), one of the oldest and fastest growing Hero Honda authorized dealer in Chennai. A questionnaire was prepared containing appropriate questions and was distributed to about 300 respondents. The tools used for the study were Chi – square, ANOVA, percentage analysis and weighted average method. According to latest available SIAM figures, Hero Honda controls almost 48% of the two-wheeler market, followed by Bajaj with about 20% and TVS Motor at close to 17% share. So this study focuses on customers' perception towards the three major players in the market.

Kevin Keller(2012) Caterpillar has become a leading firm by maximizing the total customer value with the help of effective CRM , best after sales service in the industry and better trained dealer. This allows the firm to command a premium price of 10% to 20% higher than competitors such as Volvo, Komatsu etc.

STATEMENT OF THE PROBLEM

As the motor cycle sub-segment in the two wheeler segment of the Indian automobile industry identified and introduced new generation vehicles, and also achieved highest rate of increase in production and sales between 1980-81 and 1994-95 this sub-segment was selected for the study. It could be noted that the market share of motorcycles in the overall market for two wheelers in 1975-76 was 33 per cent which declined to 24 per cent in 1980-81, then to 22 per cent in early 1985 and further to 24 per cent by 1989-90.But it picked up to end up with 28 per cent by 1994-95.This increase in market share was possible mainly because of the increased production and sale of 100 cc motorcycles. This achievement by this sub-segment was only because of the introduction of 100 cc motorcycles and that needs a study. Added to this, the changing Indian consumers' preference and perception of 100cc motor cycles have to be analyzed to examine whether the manufacturers meet the expectations of the consumers..

OBJECTIVES

- To study the satisfaction level in associating with manufactures of two wheelers.
- To study the factors influencing the customers' satisfaction towards two wheelers

METHODOLOGY

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The sampling type is convenience sampling which involves deliberating selection of particular units constituting a sample, which represents the universe. Data collected through well structured questionnaires are given to 525 customers and 50 dealers to record their responses and the recorded responses were examined and analyzed.

RELIABILITY

Reliability of an instrument refers to the degree of consistency between multiple measurements of variables. It is extent to which an experiment tests or any measuring procedures yield, the same result on repeated attempts. Reliability was estimated through internal consistency method which is applied to measure the consistency among the variables in a summated scale. In the present study, the Cronbach's Alpha co-efficient of reliability was found based on primary data of the present study and the details are as follows,

Table - 1, Reliability Measures for the Study

No.		No. of items	Alpha
1	Purchase decision	13	0.86
2	Performance factor	7	0.81
3	Reliability factor	7	0.82
4	Finance factor	4	0.85
5	Facilities factor	4	0.84
6	Outlook factor	3	0.81
7	Overall reliability of the study	38	0.87

ANALYSIS

1.0 SATISFACTION IN ASSOCIATING WITH MANUFACTURES OF TWO WHEELERS

Dealers of two wheelers are associated with the manufactures of two wheelers. Selected dealers dealing with two wheelers have expressed their satisfaction towards the association with the manufactures of two wheelers. Testing the significance of various aspects of satisfaction with the manufactures of two wheelers, Friedman's test for k-related samples was applied to study the relationship between various aspects of satisfaction of dealers with the manufactures of two wheelers.

Null hypothesis $H_{0\,1}$: All the aspects of satisfaction of dealers with manufactures of two wheelers are same.

Table - 1.0, Satisfaction in Associating with Manufactures of Two Wheelers

	Mean rank	Chi-square value
Brand	4.21	**37.765** (p< .001)**
Introduction of new model	3.02	
Media promotional support	3.79	
Financial offer	5.01	
Delivery on time	5.78	
Credit facility	3.47	

** significant at 1% level

The result in the table 1.0 shows that the null hypothesis H_0 1 is rejected at 1% level. All the aspects of satisfaction of dealers with manufactures of two wheelers are not same. Further the mean ranks in the table 1.0 shows clearly that "Delivery on time" and "Financial offer" are the main aspects of satisfaction of dealers with manufacturers of two wheelers. "Introduction of new model" and "Credit facility" is the least aspects of satisfaction of dealers with manufacturers of two wheelers.

2.0 PREDICTOR VARIABLES FOR CUSTOMERS' SATISFACTION TOWARDS TWO WHEELERS.

Multiple regression analysis was conducted by taking customers' satisfaction as dependent variable and age, brand, Ownership, satisfaction towards dealers and maintenance of two wheelers as independent variables (shown in the table 2.0)

Table - 2.0, Regression Analysis for Customers' Satisfaction towards Two Wheelers

Independent Variables	R^2	Standard Beta	F-statistics	t- value
Age	0.289	0.766	**12.387****	4.315**
Brand		0.046		1.004
Ownership	**Adjusted R^2**	1.039		3.213**
Satisfaction towards dealers		0.164		1.023
Maintenance of two wheelers	0.275	1.016		3.768**

** Significant at 1% level

It is observed from the table 2.0, the regression model's F value is 12.387 and it is significant at 1% level. The regression model's coefficient of determination (R^2) is 0.289 and its adjusted R^2 is 0.275, which is a healthy coefficient. One unit increase in age leads to an increase of 0.766 units in customers' satisfaction towards two wheelers. This shows that age is one of the main reasons for customers' satisfaction towards two wheelers. One unit increase in ownership leads to an increase of 1.039 units in customers' satisfaction towards two wheelers. This shows that ownership plays important role in improving customers' satisfaction towards two wheelers. Maintenance of two wheelers serves as significant predictor for customers' satisfaction towards two wheelers by improving 1.016 units. Brand and satisfaction towards dealers does not serve as the predictor variables for the satisfaction of customers on two wheelers. The regression equation for customers' satisfaction towards two wheelers

Customers' satisfaction = 2.889 + 0.766 (age) + 1.039 (Ownership) + 1.016 (Maintenance)

Hence age, ownership and maintenance serves as significant predictors for customers' satisfaction on two wheelers.

3.0 MODEL FOR SATISFACTION TOWARDS TWO WHEELERS

Structural equation modeling (SEM) is a statistical technique for testing and estimating causal relations using a combination of statistical data and qualitative causal assumptions. This definition of SEM was articulated by the geneticist Sewall Wright (1921), the economist Trygve Haavelmo (1943) and the cognitive scientist Herbert Simon (1953), and formally defined by Judea Pearl (2000) using a calculus of counterfactuals. SEM allows both confirmatory and exploratory modeling, meaning they are suited to both theory testing and theory development. Confirmatory modeling usually starts out with a hypothesis that gets represented in a causal model. The concepts used in the model must then be operational zed to allow testing of the relationships between the concepts in the model. The model is tested against the obtained measurement data to determine how well the model fits the data. The causal assumptions embedded in the model often have falsifiable implications which can be tested against the data. With an initial theory SEM can be used inductively by specifying a corresponding model and using data to estimate the values of free parameters. Often the initial hypothesis requires adjustment in light of model evidence.

When SEM is used purely for exploration, this is usually in the context of exploratory factor analysis as in psychometric design. A model was developed by using analysis of moment structure (AMOS 16.1). A model is fit to ensure the customer satisfaction towards two wheelers. In this model factors such as Performance, Reliability, Finance, Facilities and Outlook are taken as observed variables (measured through variables and reduced as factors) and Customer satisfaction is unobserved variable. e1, e2, e3, e4 and e5 are error terms (residuals) for Performance, Reliability, Finance, Facilities and Outlook.

Null Hypothesis $H_0$2: The model fitted for customer satisfaction towards two wheelers is good.

Model fit Summary

The model fit Chi-square ¡ ^{2} = 2.134 and the model's p-value is .298 which is insignificant at 5% level, which shows that the null hypothesis "The model fitted for Customer satisfaction towards two wheelers is good" is accepted. The goodness of fit index (**GFI)** is .941 of the model, shows reasonably good fit, and its adjusted goodness of fit (**AGFI)** is .920. The Root Mean Square Error of Approximation (**RMSEA**) is .044, a smaller value indicates better model, and Expected Cross Validation Index (**ECVI)** is .089, which are within the acceptable range indicating a better model fit.

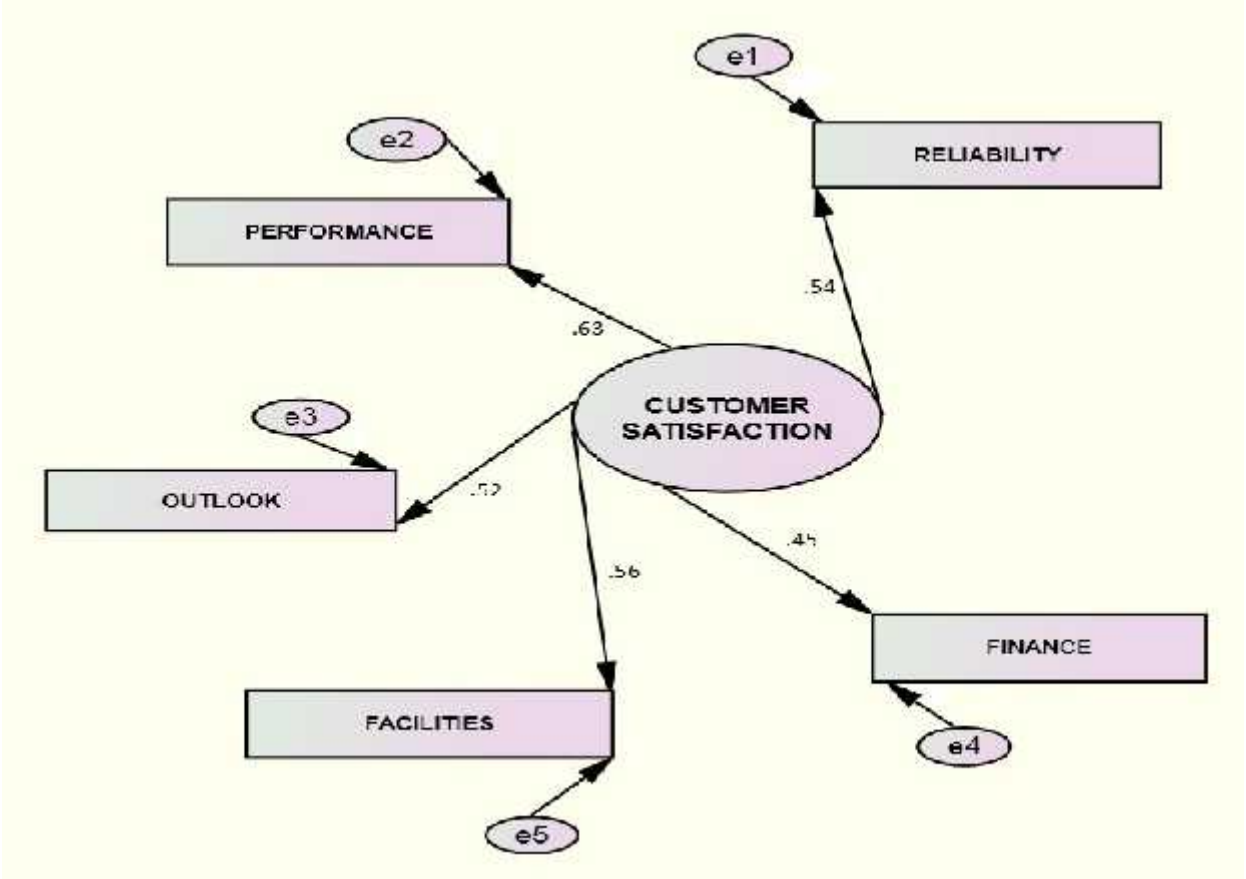

Figure 1: Model for Customer Satisfaction towards Two Wheelers

CONCLUSION

"Safety", "Road Grip" and "Maintenance" are the main factors that determine the purchase decision of two wheelers. "Ignition performance", "Spares availability" and "Warranty / Guarantee" are the least factors that determine the purchase decision of two wheelers. Significant difference between the factors that influence the purchase decision towards the two wheelers is observed. Customers are more influenced by the advertisements

towards the purchase decisions of two wheelers and the customers are less influenced by their spouse towards the purchase decisions of two wheelers.

REFERENCES

1. Browne, M.W and Cudeek, R. (1993). 'Alternative ways of assessing model fit, In Bollen K.A. and Long J.S (ed), Testing Structural Equation Models, Sage, Newbury Park, C.A.
2. Carmines, E.C. and Mclver, J.P. (1981). 'Analyzing models with unobserved variable', In Bohrnstedt G,W. and Borgatta, E.F (ed). Social Measurement: Sage, Beverly Hills.
3. Haavelmo, T. (1943) "The statistical implications of a system of simultaneous equations, " Econometrica 11:1–2. Reprinted in D.F. Hendry and M.S. Morgan (Eds.), The Foundations of Econometric Analysis, Cambridge University Press, 477—490, 1995.
4. Joreskog, K.G. and Sorbon, D. (1984). LISREL-IV Users' Guide. Chicago: Scientific Software.
5. Kurtz David, L., and Boone, E. Louis ., Marketing [The Dryden Press, a divn. Of Holt Rinehart and Wintson,USa,1981] P 135.
6. MCCarthy Jerome,E., and Brogowicz A.Andrew., Essentials of Marketing [Richard A Irwin Inc., Homewood, Illinois, USA,1982} P 12 and 85.
7. Pearl, J. (2000). Causality: Models, Reasoning, and Inference. Cambridge: Cambridge University Press,ISBN 0 521 773628.
8. Reproduced from the Fundamentals of Marketing (10 edn) Stanton J.William,Etzel J.Michael,Walker j.bruce McGraw Hill International,(Marketing and Advertising Services) Singapore,1994.Pp 7-10
9. Wheaton. B., Muthen, B; Alwin, D.F and Summers, G.F. (1977). 'Assessing reliability and stability in panel models', In Heise, D.R. (ed.), pp 84-136, Sociological Methodology, Joessey-Bas, San Francisco.
10. Wilson M.S.Richard, Gilligan Colin and Pearson J.David., Strategic marketing_Management-planning ,implementation and control [butterworth Heinemann ltd., Linacre House,Jordan Hill,Oxford,1992] P 86
11. Wright, Sewall S. (1921). "Correlation and causation". Journal of Agricultural Research 20: 557–85.