A STATISTICAL STUDY ON ROYAL ENFIELD MOTOR BIKES

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ABSTRACT
Now a days, most of the youngsters have huge craze on bike, especially on Royal Enfield. The primary objective of this survey is the study of customer satisfaction on Royal Enfield motor bike company. Also their preference towards the different model and suggestion for their improvement. The sampling is administered to 75 respondents of various college students in Coimbatore city through a well-structured questionnaire to collect data. These sampling data are estimated using the statistical tool like Chi-square test, Correlation, Cross tabs, Percentage analysis and Frequency. This survey helps us to understand the customer’s gains and flaws on Royal Enfield Motor Bike

KEYWORDS: Customer’s Satisfaction, Customer’s preferable model, Customer’s flaws, Customer’s Suggestion.

1. INTRODUCTION
Royal Enfield is an Indian Motor Cycle manufacturing company which is tagged as “The oldest global motor cycle brand in continuous production”. Royal Enfield is a unique bike which is always in the trend with continuous production of innovative models in bullet. These Royal Enfield motor bikes came into existence during the British rule itself. Half a century later, still Royal Enfield dominates the India’s big bikes in monthly sales. In addition to that, it takes 5th position in Motor cycle sales in India. They are licensed from the Madras motors. The current news about Royal Enfield is that they launches Bullet trials Works Replica.

2. REVIEW OF LITERATURE
Prof. Mohd. Akbar Ali Khan, and Datrika Venkata Madhusudan Rao³, focused on the activity of the company’s marketing orientation, a research on the consumers’ needs and their satisfaction is of a greater significance, and to develop a suitable strategy leading to a higher consumer’s satisfaction. They conclude that manufacturer has to focus more on Technological Developments, Safety features, and CSR activities, but less on Heritage (Antique) Design Preference and Joint Ventures.

Priyanka Jain⁴, analysed to find the customer satisfaction level towards Yamaha two wheeler vehicles especially research factors such as looks, style, brand image, technology, time delivery of the documents and proper information about the product was considered. They conclude that they are well known for their designs and...
performance and the satisfaction is high towards all other factors except mileage.

G. Gopalakrishnan, R. Rengarajan[5], analysed the service quality in showroom from the customer’s point of view. They conclude that it should not exaggerate its quality of services in order to prevent higher customer expectations of service. Otherwise, customers’ expectations do not match their perceptions and service quality is considerably low. Finally, in order to enhance service quality, customer attraction should be retained, and competitive advantage should be gained, people-based companies have to increase employees’ attitude, training and improve their knowledge of services.

G. Murali Manokari, R.Kanaka Rathinam[6], focused on customer preference which will help us to understand the needs & Wants of the customers towards Royal Enfield. They conclude that the customer preference on Royal Enfield motorcycle revealed that in order to capture the market, the manufacturers have to give the best combination of looks, quality, cost efficiency good features, safety, luxury and performance.

Mr.Faisal.T[7], deals with the analysis of customer perception conducted among customers of Royal Enfield who purchased different brands Royal Enfield. They conclude that that the most customers of Royal Enfield are highly satisfied in almost all areas offered by Royal Enfield. They conclude that by decreasing the lead-time, increasing fuel efficiency, improving service and advertisement and by introducing new models, Royal Enfield can easily make the whole customers into highly delighted customers.

K. Reenareichal[8], analysed on customer’s satisfaction and problems faced by them. They conclude that younger generation and middle age are more interested in Royal Enfield, the buying behaviour is governed predominantly by the need for Power and respect for the unique and classy brand and users are mostly Professional Males, 20-35 years of age, including some students

Ms. Ameer Asra Ahmed, Dr. M.S. Ramachandra, Mr. Siva Nagi Reddy[9], they analysed and concluded that Royal Enfield should concentrate on its advertising campaign to reach the customer the mileage of Royal Enfield Bullet Bikes is very economical and most of them prefer to buy there Bike Brand new from showroom with the spare parts available in market easily. Royal Enfield Bullet has an excellent satisfaction with in the customer for its sound, comfort, and safety.

SR Sony Mariya, Dr. K Amutha[10], they analysed on customers’ satisfaction especially in Coimbatore and concluded that the two wheeler users are very huge in Coimbatore especially the youngsters are most admirable by Royal Enfield. They highly satisfied by company image, model and comfortable.

3. STATEMENT OF THE PROBLEM

Instantly, Royal Enfield Motorcycles has reached the higher position in every aspects. This plays the major role in the youngster’s life. This study has done on the statistical study on customer’s satisfaction of Royal Enfield motorcycles and this study also helps us to analyse preference of variants in the Royal Enfield by the customers.

4. OBJECTIVE OF THE STUDY

- To screen the market nearness of Royal Enfield Motor India Pvt. Ltd.
- To evaluate the dimension of fulfillment among the clients.
- To discover the view of the clients about Royal Enfield Bikes.
- To discover the special cases of the client with respect to quality and administration.
- To discover the effect of advertising on customers’ satisfaction.

5. LIMITATIONS

There we have various confinement on the grounds that the study isn’t hung on the complete populations. A few have been referenced underneath,

- The study has constrained in Coimbatore city.
- The poll has not broad and not more issues have been tended to.
- The reaction may be not exact or one-sided or with no information or in worldwide reasoning.
- The example of the respondents picked for the investigation probably won’t be agent.
- Analysis of the proposed angles may contrast contingent upon the apparatuses and the techniques that have been utilized.

6. SAMPLING DESIGN

- A well-structured questionnaire was developed to perform a survey for primary data collection.
- The sample size of 75 respondents of various college students were chosen in Coimbatore city.
- The survey was conducted for about 2 weeks.
- The survey questions were randomly distributed to the college students in Coimbatore city.
- The data collected in this survey was subjected to Statistical analysis

7. DATA COLLECTION

The data collected for this study was Primary source data, since the data has collected with well-structured questionnaire directly from the respondents of Coimbatore city. The data collection is helpful in analysing and fulfilling our objectives.

8. GEOGRAPHICAL AREA

The primary data has been collected only from the Coimbatore city through the well-structured objective type questionnaire.

9. STATISTICAL CONCEPTS

- Percentage analysis
- Chi-square test
- Cross tabs
- Pictorial Representation
- Correlations

The software used in this study is SPSS.

10. RESULTS AND DISCUSSIONS

A) Chi-Square Test

1) Chi-Square test between the occupation of the respondents and satisfaction on the performance of the vehicle.
TABLE 1: CHI-SQUARE TEST WITH RESPONDENT’S OCCUPATION AND PERFORMANCE SATISFACTION

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asump. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>1.381*</td>
<td>3</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1.352</td>
<td>3</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>0.456</td>
<td>1</td>
</tr>
<tr>
<td>N of valid Cases</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis: There is no significant difference between the occupation and the satisfaction of the performance of the vehicle.

Alternative Hypothesis: There is a significant difference between the occupation and the satisfaction of the performance of the vehicle.

Inference: Since P(0.071)<0.05, we accept null hypothesis. Therefore there is a significant difference between the occupation and the top speed noticed while driving.

TABLE 2: CHI-SQUARE TEST WITH BIKE MODEL AND TOP SPEED NOTICED

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asump. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>8.856*</td>
<td>9</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9.045</td>
<td>9</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>4.553</td>
<td>1</td>
</tr>
<tr>
<td>N of valid Cases</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis: There is no significant difference between the model of the bike and the top speed noticed while driving.

Alternative Hypothesis: There is a significant difference between the model of the bike and the top speed noticed while driving.

Inference: Since P(0.451)>0.05, we accept null hypothesis. Therefore there is no significant model of the bike and the top speed noticed while driving.

B) Correlation

1) The correlation between the age and income of the respondents.

<table>
<thead>
<tr>
<th>Age</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.513**</td>
</tr>
<tr>
<td>N</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

Inference: Correlation between age and income of the respondent is 0.513. It shows the age factor and the income of the respondents is positively correlated.

2) The correlation between the age and speed of the respondents.

<table>
<thead>
<tr>
<th>Age</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.172</td>
</tr>
<tr>
<td>N</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

Inference: Correlation between the age and the speed of the respondents is 0.172. It shows the age factor and the speed of the vehicle is positively correlated.

C) Crosstabs

The Cross tabulation on marital status of the respondents and the model used by them.

TABLE 5: MARITAL STATUS * MODEL CROSS TABULATION

<table>
<thead>
<tr>
<th>Count</th>
<th>Model</th>
<th>Bullet</th>
<th>Classic</th>
<th>Thunderbird</th>
<th>Himalayan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Unmarried</td>
<td>12</td>
<td>27</td>
<td>9</td>
<td>7</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>36</td>
<td>12</td>
<td>13</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

Inference: Among 75 respondents 20 respondents are married, 55 respondents are unmarried. Among 20 respondents who are married 2 uses Bullet, 9 respondents uses Classic 350, 3 respondents uses Thunderbird, 6 respondents uses Himalayan. Among 55 respondents who are unmarried 12 respondents uses Bullet, 27 respondents uses Classic, 9 respondents uses Thunderbird, 7 respondents uses Himalayan.
D) Frequency

1) The frequency of respondents likes different model of Royal Enfield bike.

![Frequency Chart]

**FIGURE 1: RESPONDENTS LIKES IN DIFFERENT MODELS**

*Inference:* From the above table and chart we infer that,

i. 18% of customers like Bullet bikes in Royal Enfield.
ii. 48% of the customers like Classic bikes in Royal Enfield.
iii. 16% of the customers like Thunderbird bikes in Royal Enfield.
iv. 17% of the customers like Himalayan bikes in Royal Enfield.

2) The frequency of respondents to which age group they belongs to

**TABLE 6: RESPONDENTS AND THEIR AGE**

<table>
<thead>
<tr>
<th>Frequenc y</th>
<th>Perce nt</th>
<th>Vali d Percen t</th>
<th>Cumulativ e Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vali d 18-25</td>
<td>55</td>
<td>73.3</td>
<td>73.3</td>
</tr>
<tr>
<td>26-35</td>
<td>12</td>
<td>16.0</td>
<td>16.0</td>
</tr>
<tr>
<td>36-45</td>
<td>6</td>
<td>6.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Above 45</td>
<td>3</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

![Age Chart]

**FIGURE 2: RESPONDENTS AGE**

*Inference:* From the above table and chart we infer that,

i. 73% of the people belong to the age group 18-25.
ii. 16% of the people belong to the age group 26-35.
iii. 6.5% of the people belong to the age group 36-45.
iv. 4% of the people belong to the age group above 45.

3) The frequency of respondent’s satisfaction in the aspect of price.

**TABLE 7: RESPONDENTS SATISFACTION IN PRICE**

<table>
<thead>
<tr>
<th>Vali d</th>
<th>Frequenc y</th>
<th>Perce nt</th>
<th>Vali d Percent</th>
<th>Cumulativ e Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excelle nt</td>
<td>32</td>
<td>42.7</td>
<td>42.7</td>
<td>42.7</td>
</tr>
<tr>
<td>Good</td>
<td>30</td>
<td>40.0</td>
<td>40.0</td>
<td>82.7</td>
</tr>
<tr>
<td>Average</td>
<td>12</td>
<td>16.0</td>
<td>16.0</td>
<td>96.7</td>
</tr>
<tr>
<td>Fair</td>
<td>1</td>
<td>1.3</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

![Price Satisfaction Chart]

**FIGURE 3: PRICE SATISFACTION**

*Inference:* From the above frequency table it is known that,

i. 42.5% of respondents say that the price is excellent.
ii. 40% of respondents say the price is good.
iii. 16% of respondents says that the price average.
iv. 1% of respondents say the price is fair in Royal Enfield bikes.

From this we infer that the price is satisfied among the customers who uses Royal Enfield bikes.

4) The frequency of respondent’s satisfaction in aspect of quality of a bike

**TABLE 8: RESPONDENTS SATISFACTION IN QUALITY**

<table>
<thead>
<tr>
<th>Vali d</th>
<th>Frequenc y</th>
<th>Perce nt</th>
<th>Vali d Percent</th>
<th>Cumulativ e Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excelle nt</td>
<td>30</td>
<td>40.0</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Good</td>
<td>34</td>
<td>45.3</td>
<td>45.3</td>
<td>85.3</td>
</tr>
<tr>
<td>Average</td>
<td>9</td>
<td>12.0</td>
<td>12.0</td>
<td>97.3</td>
</tr>
<tr>
<td>Fair</td>
<td>2</td>
<td>2.7</td>
<td>2.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Inference: From the above frequency table it is known that,

i. 40% of respondents says that the quality of the bike is excellent.

ii. 45% of respondents says that the quality of the bike price is good

iii. 12% of respondents says that the quality of the bike price is average

iv. 2.5% of respondents say that the quality of the bike is fair Royal Enfield bikes.

From this we infer that the customers think bike quality is good in Royal Enfield bikes.

11. SUGGESTION
- The customer gives importance to product quality while purchasing a bike rather than a price. So it should maintain its quality standards.
- We can say that CLASSIC bike of ROYAL ENFIELD is widely purchased by students so they can manufacture some more models which resembles some of the characteristics of CLASSIC.
- HIMALAYAN bike of ROYAL ENFIELD have to improve their style and design to shine more in the market.

12. CONCLUSION
Royal Enfield bikes has become as an angel to most of the people i.e., they never say no the Royal Enfield Bike especially youngsters. Whomsoever may be the boss of company, but customers are the real boss as they judge about any products and they decide which products should shine well in market. Here their satisfaction is mandatory. In this study we analysed the customer’s satisfaction towards price, quality and their preference. They are satisfied on its quality and price. They also expect more different models from Royal Enfield Motorcycles.

REFERENCE