“A STUDY ON CUSTOMER AWARENESS TOWARDS OLA E-VEHICLE WITH SPECIAL REFERENCE TO COIMBATORE CITY”

Dr. C. EAHAMBARAM, M.Com. (CA), M. Phil., PGDCA., Ph.D
Associate Professor, Department of Commerce with Computer Applications
DR. N. G. P Arts and Science College, Coimbatore-48.

MR. P.S. SEKAR
B COM (CA), Department of Commerce with Computer Applications
Dr. N. G. P Arts and Science College, Coimbatore-48.

MR. R. SUHASH KUMAR
B COM (CA), Department of Commerce with Computer Applications
Dr. N. G. P Arts and Science College, Coimbatore-48.

MR. S.U. SURENDRA
B COM (CA), Department of Commerce with Computer Applications
Dr. N. G. P Arts and Science College, Coimbatore-48.

MR. D. ROBINSING
B COM (CA), Department of Commerce with Computer Applications
Dr. N. G. P Arts and Science College, Coimbatore-48.

ABSTRACT

The adoption of electric vehicles (EVs) is a critical step towards reducing greenhouse gas emissions and achieving a sustainable future in the transportation sector. This abstract explores the increasing importance of creating awareness around electric vehicles to accelerate their acceptance and adoption in society. The global shift towards EVs is driven by several factors, including environmental concerns, government incentives, and advancements in technology.
As a cleaner and more energy-efficient alternative to traditional internal combustion engine vehicles, EVs have the potential to significantly reduce carbon emissions, improve air quality, and reduce our dependence on fossil fuels.

**Keywords:** Battery-powered vehicles, Eco-friendly mobility, Zero-emission vehicles.

**INTRODUCTION**

India is the second largest producer and manufacturer of two-wheelers in the world. It stands next to Japan and China in terms of the number of two-wheelers produced and domestic sales. Indian two-wheeler industry has got spectacular growth in the last few years. The face of auto industry that was redefined with the invention of fuel-efficient technology is all set to see dawn of a new era in two-wheeler industry. It’s not petrol or diesel or any other fuel, but it is electricity that has initiated a revolution in two-wheeler industry in India. Indian two-wheeler industries has embraced the new concept of Electric Bikes and Scooters that are very popular mode of personal transport in the developed countries like America, Japan and China. The rising cost of fuel at international level, increasing levels of pollution and congestion in transport system especially in urban areas, higher running and maintenance cost of vehicle, the electrically charged bikes or scooters have very bright future in area of personal transportation.

**SCOPE OF STUDY**

The study which is titled as the study on consumer awareness towards the Electric Bike in Coimbatore City aims at assessing the buying behavior of the people. The study mainly aims to identify the buying behavior of the consumers in purchasing the Electric Bike and various factors that influence the customers to support the same. The customers cost and benefit that are to arise in the using of the Electric Bike is also analyzed. The study is conducted at the one of the industrially supported areas of Coimbatore City in Tamil Nadu. The study is based on the customers awareness towards the use of the electric bikes. It also put down the various driving forces that makes the consumers to purchase the Electric vehicle.

**STATEMENT OF THE PROBLEM**

Two-Wheeler industry is one of the largest industries in the automobile sector of global market. Being the leader in product and process technologies in the manufacturing sector, it has been recognized as one of the drivers of economic growth. An average two-wheeler customer can be described as one who is at active stage of development of the organization. The difference that exists in income, literacy and culture make it a difficult task to Point out the two-wheeler customers and his choice of preference.
As he is living in an active environment, his needs will keep getting altered. With high traffic and not so well-built roads, bikes are the most convenient, efficient and cost-effective mode of transportation in India. People all over the country prefer to travel on bikes, which give them utility and cost-efficient mode for transport.

OBJECTIVES OF THE STUDY

- To find out the awareness of consumer about the electric bike in Coimbatore city.
- To find out the factor influencing the sales of electric bike.
- To find the post purchase experiences of electric bike consumer.
- To find out the market share of different manufacturing companies dealing in electric bike.
- To suggest measures to increase sales of electric bikes.

RESEARCH METHODOLOGY

Primary data

The primary data has been collected through questionnaires filled by 111 respondents who are all using electric bikes and conventional bikes.

Secondary data

The secondary data has been sourced from various journals and websites.

Sampling area and sampling technique

All the respondents have been chosen from the Coimbatore city based on convenient random sampling.

TOOLS USED

- Simple Percentage Analysis
- Ranking Analysis

REVIEW OF LITERATURE

Elliot Fishman, Christopher cherry (2023) talked about that E-Bike speak to one of the quickest developing sections of the vehicle showcase. More than 31 million e-Bikes were sold in 2012. Research has pursued this development and gives a combination of the most relevant subjects rising over the past on the expanding point of e-Bike.

C Simon Washington, Nareiaee Haworth (2022) clarified that there are as of now in excess of 700 urban communities working bicycle share programs. Indicated advantages of bicycle share incorporate adaptable versatility. Physical movement. Emanations and fuel use. Certain or express in the figuring of program benefits are presumptions with respect to the methods of movement supplanted by bicycle share ventures.

James Belies, Pyrou Chung, James Macdonald (2021) led an examination on “Empowering E bike utilize: This report looks at the control of intensity helped bikes in Australia and abroad. The present controls are investigated and purposes behind updating the directions in Australia are plot. The examination investigates
the issues of significance to the encircling of controls covering these vehicles, and recognizes the activities that are expected to empower these vehicles to make a bigger commitment to the urban transport assignment.

Hatwar, N.; Bisen, A.; Dodke, H.; Junghare, A.; Khanapurkar, M. (2020). Projected a new approach in the design of e-bike which consists of hybrid system of battery and super capacitor for increasing speed, and avoid the complaints of long charging time and short lifespan of battery.

Abdullah et al. (2019) has confirmed that the customer preference and their order of importance, price, quality of service, branding are considered to be the important customer dimensions in automobile industry. Knowing these dimensions relative influence may result in better allocation of resources for effective services in electric vehicle industry.

Jennifer dill Geoffrey rose (2018), clarified that Electric Bike are progressively regular in China however are moderately uncommon in the United States. The meetings uncovered a few conceivable statistic markets for e-Bike that could extend the bicycling populace: ladies, more established grown-ups, and individuals with physical impediments. Proprietors of e-Bike noticed their capacity to travel longer separations and over slopes without any difficulty and to touch base at a goal, for example, work. Less damp with sweat and less drained than a customary bike would permit, highlights may beat a portion of the regular hindrances to bicycling for all socio economics.

ANALYSIS AND INTERPRETATION

PERCENTAGE ANALYSIS

The Percentage analysis is used for comparing certain features. The collected data represented in the form or table and graphs in order to due effective population comparison made.

FORMULA

Simple percentage = \( \frac{\text{Number of responses replied}}{\text{Total number of responses}} \times 100 \)
TABLE 1: THE TABLE SHOWING THE REASON FOR BUYING E-VEHICLE OF THE RESPONDENTS

<table>
<thead>
<tr>
<th>S. No</th>
<th>REASON FOR BUYING E-VEHICLE</th>
<th>No. of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Even though high initial cost; long term savings</td>
<td>38</td>
<td>34%</td>
</tr>
<tr>
<td>2</td>
<td>Better for the environment</td>
<td>34</td>
<td>31%</td>
</tr>
<tr>
<td>3</td>
<td>Both</td>
<td>39</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>111</td>
<td>100%</td>
</tr>
</tbody>
</table>

INTERPRETATION

From the above table, we found that 34% of the respondents were preferred high initial cost and long-term savings, 31% of the respondents were preferred better environment, and 35% of the people preferred both.

INFERENACE

Mostly 35% of the people were preferred both.

TABLE 2: THE TABLE SHOWING THE FEATURES OF E-VEHICLE OF THE RESPONDENTS

<table>
<thead>
<tr>
<th>S. No</th>
<th>Features of E-Vehicle</th>
<th>No. of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low Weight</td>
<td>41</td>
<td>37%</td>
</tr>
<tr>
<td>2</td>
<td>Low Running Cost</td>
<td>47</td>
<td>42%</td>
</tr>
<tr>
<td>3</td>
<td>Registration not Required</td>
<td>23</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>111</td>
<td>100%</td>
</tr>
</tbody>
</table>
INTERPRETATION

From the above table we found that 37% of the respondents were Low Weight, 42% of the respondents were Low Running Cost and 21% of the respondents Registration not Required.

INFERENCE

Mostly 42% of the respondents were preferred Low Running Cost.

TABLE: 3 THE TABLE SHOWING THE E-BIKES MANUFACTURER OF THE RESPONDENTS

<table>
<thead>
<tr>
<th>S. No</th>
<th>E-bikes manufacturer</th>
<th>No. of. Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ola vehicle</td>
<td>38</td>
<td>33%</td>
</tr>
<tr>
<td>2</td>
<td>Ather</td>
<td>37</td>
<td>35%</td>
</tr>
<tr>
<td>3</td>
<td>TVS Iqube</td>
<td>36</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>111</td>
<td>100%</td>
</tr>
</tbody>
</table>

INTERPRETATION

From the above table we found that 33% of the respondents were used Ola vehicle, 35% of the respondents were Ather vehicle and 32% of the respondents used TVS Iqube.

INFERENCE

Mostly 35% of the respondents were Ather E-Vehicle.
RANKING ANALYSIS

Under these methods the respondents are asked to rank the choices. This method is easier and faster. Here in this study the respondents are asked to rank various factor based on their usage of Electric Veichile.

TABLE:1 THE TABLE SHOWING THE E-VECHILE RANKING ANALYSIS

<table>
<thead>
<tr>
<th>S. NO</th>
<th>FACTORS</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>TOTAL</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Price</td>
<td>21(5)</td>
<td>23(4)</td>
<td>25(3)</td>
<td>22(2)</td>
<td>20(1)</td>
<td>336</td>
<td>III</td>
</tr>
<tr>
<td></td>
<td></td>
<td>105</td>
<td>92</td>
<td>75</td>
<td>44</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Range</td>
<td>17(5)</td>
<td>18(4)</td>
<td>28(3)</td>
<td>26(2)</td>
<td>22(1)</td>
<td>315</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td></td>
<td>85</td>
<td>72</td>
<td>84</td>
<td>52</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Speed</td>
<td>20(5)</td>
<td>18(4)</td>
<td>27(3)</td>
<td>20(2)</td>
<td>26(1)</td>
<td>319</td>
<td>IV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>72</td>
<td>81</td>
<td>40</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Comfort</td>
<td>31(5)</td>
<td>19(4)</td>
<td>15(3)</td>
<td>22(2)</td>
<td>24(1)</td>
<td>344</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>155</td>
<td>76</td>
<td>45</td>
<td>44</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Safety</td>
<td>26(5)</td>
<td>31(4)</td>
<td>15(3)</td>
<td>20(2)</td>
<td>19(1)</td>
<td>358</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130</td>
<td>124</td>
<td>45</td>
<td>40</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INTERPRETATION

From the above table it shows that Safety ranked 1st with the score of (358), Comfort ranked 2nd with the score of (344), Price ranked 3rd with the score of (336), Speed ranked 4th with the score of (319), Range ranked 5th with the score of (315).

FINDINGS

- Mostly 35% of the people were preferred both.
- Mostly 42% of the respondents were preferred Low Running Cost.
- Mostly 35% of the respondents were Ather E-Vehicle.
SUGGESTIONS

- To implement more models in electric vehicles
- Use of electric vehicle can be good way to not being dependent on fuel
- Electric Bikes are used only for short distance because of low battery capacity, so manufacturers should concentrate on research and development to increase the capacity of Electric Bikes
- Another major problem in Electric Bikes is the need for frequent charging of the batteries, to overcome this problem charging centers should be opened at various places

CONCLUSION

The concept of e-vehile has entered into Coimbatore in the past 4-5 years and the same is gaining momentum, as there are around 10 dealers currently for e-vehile in the city. As an eco-friendly product it is more suitable for city as it can reduce the emission of harmful gases and thereby it can reduce the atmospheric pollution. Due to frequent increase in the fuel prices, the electrically charged vehicles seem to be the cheapest one compared to the traditional vehicles. Electric vechile are more suitable for rural areas where the numbers of petrol bunks are not adequate, so that the rural people can charge the vehicle with the help of electricity.

REFERENCES

2. Bhupendra kumar verma (2018) "His study states that on the basis of this study, the following suggestions can be made to help in sales of electric bike more effective" bike.'
3. Cherry C., Weinert J., Ma Z. (2017)- 'A study on the environmental Impacts of Electric bikes in China
4. Chris Cherry and Robert Cervero November (2015) — The study on "Use characteristics and mode choice behavior of electric vechile.
REFERENCE BOOKS

2. K. Bienias, KBienias A Kowalska- Pyzalska, D.Ramsey, “What do people think about electric vehicles?”

WEBSITES REFERRED

- https://www.wikipedia.org/
- https://www.bikedekho.com/upcoming-scooters/electric