## A STUDY ON CUSTOMER SATISFACTION TOWARDS AMPERE ELECTRIC BIKE WITH SPECIAL REFERENCE TO COIMBATORE CITY

## Dr. D. Sivasakthi

Associate Professor, Department of Commerce with Professional Accounting, Dr. N.G.P. Arts and Science College, Coimbatore

## Geethanjali.P

Student of III B.Com (PA), Department of Commerce with Professional Accounting, Dr.N.G.P Arts and Science College, Coimbatore

#### ABSTRACT

India is the second largest producer and manufacture of Two wheelers in the world. The face of auto industry that was redefined with the invitation of fuel efficient technology is all set to see dawn of new era in two wheeler industry. Its not petrol or diesel or any other fuel, but it is electricity that has initiated a revolution in two wheeler industry in India .India two wheeler industry embraced new concept of Electric bikes and Scooters that are very popular mode of transport in the developed countries like China, America and Japan. Global warming is the major concern all over the world. Electric bikes are environment friendly as air pollution, noise pollution are much reduced. Electric bikes are battery operated vehicle with low maintenance cost and very economical also. **KEYWORDS:** Electric bike, fuel economy, Pollution.

#### **INTRODUCTION**

The E-bikes are originated in Japan in the early 1980s. Improved battery and motor technology , component modularity ,as well as economics of scale improvements have meant E-bikes can now travel longer distances , are faster, and more affordable then ever. In the past decade more than 150 million E-bikes have been sold , the largest and most rapid uptake of alternative fuelled vehicles in the history of motorisation. The E-bikes are highly advanced with cruise control technology , theft braking system, Lock braking, International styling , keyless entry , No number plate , No licensee and a lot of other features. E bikes are easy to use, lightweight and maintenance free providing a stress free experience.

### STATEMENT OF THE PROBLEM

People all over the country prefer to travel on bikes, which gives them utility and cost efficient mode for transport. When it come to electric bikes are even better than normal bikes as there is no fuel consumption in electric bikes and in countries like India where there majority are of middle class families who cannot afford high fuel prices.

#### **SCOPE OF THE STUDY**

- The main scope of the study is to analyse the customer satisfaction towards E-bikes with respect to Coimbatore city.
- The study by ascertaining the factors that motivate end user to purchase electric bike is expected to enable respective companies to improve the services, sales promotion etc...,
- The study also aims at analysing the level of customer satisfaction with respect to the Ebikes and their dealers.

## **OBJECTIVIES OF THE STUDY**

- To study the level of the customer satisfaction for Ampere electric bikes.
- To find out the factors influencing the purchase of Ampere electric bikes.



EPRA International Journal of Research and Development (IJRD)

Volume: 5 | Issue: 11 | November 2020

To develop strategies for improving sales of Ampere electric bikes.

➢ To analyse the problems faced by the Ampere electric bike users.

## STATISTICAL TOOL USED

- Simple Percentage Analysis
- Ranking Analysis
- Likert Scale Analysis

## LIMITATION OF THE STUDY

- The survey is based on the respondents chosen at random from Coimbatore city. Hence the results of the study cannot be generalized.
- The sample size has been restricted to 120 respondents.
- The respondent's views and opinions may hold good for the time being and may vary in future.

## **REVIEW OF LITERATURE**

Elliotfishman, Christopher Cherry (2016) says about the E-bikes speaks to one of the quickest developing sections of the showcase. More than 31 million e-bikes was sold in 2012. China drives the world in e-bikes deals, trailed in Netherlands and Germany. The research of e bikes are in earliest stage. As e-bikes utilization keeps on developing , soo too will the requirement for the further Research.

Ashish Aggarwal (2014) says that from the research it can concluded that there is strong potential for growth in the electric vehicle industry but it will take some times in India in kickoff because Customers in India are not ready to pay the high price. Also they very much concerned about the security and quality aspects.

**Bhupendra kumar verma (2011)**<sup>3</sup> in his paper sates that on the basis of this study , the following suggestions can be made to help in sales of electric bike more effective. There is need to bring more awareness of various others feature of electric bike brings to a consumer mind by providing them vouchers and literature in different regional languages. There should be free, fair , justified and honest competition amongst the various electric bike companies.

**Deekshu** (2008)<sup>4</sup> found the most of the customers were satisfied with the mileage of the electric bikes and are convinced about the electric bike benefits and were willing to refer it to their friends. It was found that most of the customers are not satisfied with after sale service. It shows that customers are dissatisfied about their sale service. It was found maximum number of customers feel the speed of electric bike to be very low and where not satisfied with the current speed of the bikes.it was

found that non availability of electric bikes is also a reason for lower market share and consumers not purchasing it.

- Peer Reviewed Journal

# DATA ANALYSIS AND INTERPRETATION

The data collected from the samples have systematically applied and presented in the tables under various heading in the following pages. They were also arranged in such a way that, a detailed analysis can be made so as to present suitable interpretations for the same. The statistical tools namely

- Simple percentage analysis
- Likert scale analysis
- Ranking method

## SIMPLE PERCENTAGE ANALYSIS

The percentage analysis is mainly used to specify the number of respondents in this sample falling in each category. Further, it is also used as a standard for comparison purpose.

A number of respondent's distribution shows the number of frequencies in various classes, which helps to get preliminary ideas with respects to objectives under study. Therefore, as a first step, number of respondents for various variables under this study constructed. To interpret the results comprehensively percentage values are computed.

## FORMULA:

Percentage analysis = Number of respondents -----\*100 Total number of respondents

TABLE SHOWING GENDER OF THE RESPONDENTS

RESI ONDEN IS							
S.NO	PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE				
1	MALE	56	46.6				
2	FEMALE	64	53				
	TOTAL	120	100				

(Source: Primary data)

#### **INTERPRETATION**

From the above table, it is revealed that the 46.6% of the respondents are Male and 53% of the respondents are Female.

## Hence, Majority (53%) of the respondents are Female.

#### LIKERT SCALE ANALYSIS

A Likert scale is a method of measuring attitudes, ordinal scale of responses to a question or statement,



ISSN: 2455-7838(Online)

EPRA International Journal of Research and Development (IJRD)

Volume: 5 | Issue: 11 | November 2020

- Peer Reviewed Journal

ordered in hierarchical sequence from strongly negative to strongly positive. Used mainly in behavioural science and psychiatry. In Likert's scale method, A person's attitude is measured by combining (adding or averaging) their responses across all items.

#### FORMULA

Likert scale =  $\sum (fx) / Total$  number of respondents

- f = Number of respondents
- x = Likert scale value
- $\sum (fx) = Total score$

#### **MID VALUE**

Mid-value indicates the middle most value of the likert scale.

#### TABLE SHOWING NO OF THE RESPONDENTS ARE DO ADVERTISEMENT AFFECTS THE BUYING DECISION OF E-BIKES

	DECISION OF E-DIRES						
S.NO	PARTICULARS	NO OF THE RESPONDENTS	LIKERTS METHOD	TOTAL SCORE			
1	STRONGLY AGREE	12	5	60			
2	AGREE	58	4	232			
3	DISAGREE	16	3	48			
4	STRONGLY DISAGREE	1	2	2			
5	NEUTRAL	33	1	33			
	TOTAL	120	15	375			

(Source: Primary data)

## FORMULA

Likerts scale =  $\sum (fx) / total number of respondents$ 

= 375 / 120 = 3.125

#### **INTERPRETATION**

From the above table, the advertisement affects the buying decision of E-bike shows in likerts scale value is 3.1 which are greater than the mid value (3). Hence, the customers are agree with the advertisement affects to buy the E-bike.

#### **RANKING ANALSIS**

A Rank analysis is any of several statistics that measure an ordinal association. The relationship between ranking of different ordinal variables or different ranking of the same variable. Where a "ranking" is the assignment of the label "First", "second", "third" etc.., to different observations of particular variable. A Rank analysis measure the degree of similarity two rankings, and can be used to assess the significance of the relation between them.

ISSN: 2455-7838(Online)

EPRA International Journal of Research and Development (IJRD)

Volume: 5 | Issue: 11 | November 2020

- Peer Reviewed Journal

	TABLE SHOWING THE RANK OF THE FACTORS									
S.NO	FACTOR	RANK	RANK	RANK	RANK	RANK	RANK	RANK	TOTAL	RANK
		1	II	III	IV	V	VI	VII		
1.	BRAND NAME	7(0)	6(1)	5(7)	4(40)	3(27)	2(30)	1(16)	358	4
		0	6	35	160	81	60	16		
2.	DESIGN	7(0)	6(3)	5(10)	4(45)	3(23)	2(29)	1(10)	385	2
		0	18	50	180	69	58	10		
3.	PERFORMANCE	7(0)	6(4)	5(30)	4(26)	3(19)	2(27)	1(14)	403	1
		0	24	150	104	57	54	14		
4.	DURABILITY	7(0)	6(3)	5(20)	4(16)	3(36)	2(29)	1(16)	364	3
		0	18	100	64	108	58	16		_
5.	PRICE	7(3)	6(2)	5(8)	4(24)	3(31)	2(35)	1(17)	349	6
		21	12	40	96	93	70	17		
6.	BATTERY BACKUP	7(1)	6(8)	5(8)	4(19)	3(37)	2(23)	1(24)	352	5
		7	48	40	76	111	46	24		
7.	LOW WEIGHT	7(0)	6(9)	5(6)	4(23)	3(23)	2(23)	1(37)	328	7
		0	54	30	92	69	46	37		

(Source : Primary data)

## **INTERPRETATION**

The table shows that out of 120 respondents, Performance is in the rank 1, Design is in the rank 2,

## INFERENCE

This is resulted that Performance is in the rank 1 that respondents.

### FINDINGS, SUGGESTIONS AND CONCLUSION FINDING FOR PERCENTAGE ANALYSIS

- ➢ Majority (53%) of the respondents are Female.
- Majority (30.8%) of the respondents under the age group of 19-24 years.
- Majority (56%) of the respondents are Married.
- Majority (48%) of the respondents income are Rs .2,50,001 - 4,00,000.
- Majority (63%) of the respondents are Graduate.
- Majority (28%) of the respondents are Professionals.
- Majority (64%) of the respondents are Nuclear family.
- Majority (27%) of the respondents are aware in Radio & Friends.
- Majority (37%) of the respondents Purchase decision are made by Work group.
- Majority (73%) of the respondents are seen the Advertisement.

Durability is in the rank 3, Brand name is in the rank 4, Battery Backup is in the rank 5, Price is in the rank 6, Low weight is in the rank 7.

- Majority (40%) of the respondents are encouraged to buy only for Weight less.
- Majority (64%) of the respondents have rated Good.
- Majority (77%) of the respondents think the benefits of Ampere E-bike is Easy to drive.
- Majority (93%) of the respondents are Suggest Ampere E-bikes to their Friends.
- Majority (62%) of the customers are satisfied with the E-bike performance level of 61-80%.

## FINDINGS FOR LIKERT SCALE ANALYSIS

- Hence, the customers are agree with the advertisement affects to buy the E-bike
- Hence, the customers are feels the price of Ampere E- bike price is Modrate.
- Hence the customers are satisfied with the Ampere E-bikes.

## FINDINGS FOR RANKING ANALYSIS

This is resulted that Performance is in the rank 1 that respondents.

ISSN: 2455-7838(Online)

EPRA International Journal of Research and Development (IJRD) - Peer Reviewed Journal

Volume: 5 | Issue: 11 | November 2020

#### SUGGESTIONS

- More Advertisement is needed for the vehicle as many people are not aware of Ampere Electric bike.
- Organize Road shows and Exhibitions to educate the people.
- Ampere E-bikes are used only for short distance because of low battery backup capacity, so manufacturers should concentrate on development to increase the capacity of Ampere E-bike.
- Want more different colours in Ampere Ebikes
- $\checkmark$ To increase the speed of Ampere E-bikes, manufacturing can consider using 300 watt power motor instead of 250 watt power which offers a maximum speed of just 25km/ph only.
- ✓ The Ampere E-bikes manufacturing companies may also consider solar energy for E-bikes that may support for long travel and reduce the charging time of the battery.
- Ampere E- bikes should concentrate on improving the features of "Smooth Driving" in case of E-bikes

#### CONCLUSION

The study is based on the customer satisfaction towards Ampere Electric bike. It concludes the respondents are satisfied with the quality, price and performance of the Ampere Ebike, most of the respondents are motivated by work groups to buy the Ampere E-bike and also customers feels the price of Ampere E-bike is Netural. Most of the respondents feels that ampere e-bikes are easy to drive because it is weightless. So the weight of the bike should not increase in future. The study outcomes also indicates that most of the customers were satisfied and customer loyalty of the Ampere Ebikes is also good.

#### JOURNAL REFERENCE

- Elliotfishman, Christopher Cherry (2016) -says 1. about "The e-bikes speaks to one of the quickest developing sections of the showcase'
- Ashish Aggarwal (2014) –says that from "the 2. research it can concluded that there is strong potential growth in the electric vehicle".
- Bhupendra kumar verma (2008)- " His study 3. states that on the basis of this study, the following suggestions can be made to help in sales of electric bike more effective"
- 4. Deekshu (2008) – "A study on customer were satisfied with the mileage of the Electric bike benefits and were willing to refer it to their friends"
- 5. Bamul and simic (2008) –Discussed about the importance of vehicle simulation in designing the hybrid electric vehicle.

- 6 Cherry C., Weinert J., Ma Z. (2007)- "A study on the environmental Impacts of Electric bikes in china'
- 7. Viorel Trifa ., Calin Marginean, Liviu Zarnescu (2007) - A study conducted about " The Implementation of Electric bike used in Reluctant motors '.
- Chris Cherry and Robert Cervero (2006) The 8. study on "Use charateristics and mode choice behaviour of electric bikes in China'
- 9. Viorel Trifa, Calin Marginean, Liviu Zarnesu (2006) - A study on "The Implementation of an Electric bike using Reluctant Motors'
- 10. Jonathan X. Weinert and Chaktan MA (2006)-"A study on the transition to Electric bikes in China, Effects on Travel Behaviour and user safety perception in medium sized city"
- 11. James Belias, Pyrou Chung ,James Macdonald (2003) – "A study on Encouraging e bikes use"
- 12. Mukesh Sharma (2002) "A study on customer Awareness and perception towards Electric bike"