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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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WEBSITES

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CUSTOMERS PERCEPTION TOWARDS ELECTRIC TWO WHEELER VEHICLES IN BANGALORE CITY: A STUDY ON GO GREEN BATTERY OPERATED VEHICLES

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ABSTRACT

The study is based on Customers perception towards Electric vehicles (2-wheelers) in Bangalore City with respect to GO Green BOV. The basic objectives of the study are to analyze consumer perception towards Electric two wheelers and develop strategies for improving B2B sales of Electric Two wheelers and to identify the means to enhance the consumer awareness level towards electric vehicles. An Exploratory research was conducted with a sample of 100 respondents conveniently selected from Bangalore City. A structured questionnaire was administered to capture the primary data from the selected respondents. The data was further analyzed using the SPSS package using the Factor analysis, Co-relation, Regression and Cross-tabulation statistical tools. The study revealed that, there is complete lack of awareness about the Electric Bikes even in a city like Bangalore. Most of the respondents are not convinced about the product benefit as they perceive the product to be of Inferior quality and majority of the existing customers are facing problem with after sales servicing and support. The study suggests the company to educate the people about the product and potential benefits. Improve the product quality as well the battery life. The study concludes that that people's perception about the product is negative but with the support coming forward from the Central govt. and ever increasing prices of petrol, sooner or later the electric bike industry is going to grow drastically

KEYWORDS

awareness, consumer perception, electric vehicles, strategies.

INTRODUCTION

 Go GreenBOV is the leading manufacturer of Electric two wheeler and three wheeler based out at Bangalore with headquarters in J P Nagar. Go GreenBOV was started in 2007, with an aim to reduce carbon emission and give an eco-friendly environment to the world. Customer base of the company is in entire south at present, but looking for Pan India presence in near future. The parent company of Go GreenBOV ACTD .ACTD was born with a vision to revolutionize policies and create innovative products for the improvement of the sector and the country. Go Green BOV electric two-wheelers 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 feature. Go GreenBOV operates throughout Karnataka with a very strong Dealership network. Go Green BOV has the highest number of variants in its product portfolio than any other electric vehicle company in India. Apart from being light on pocket and light on conscience GO Green BOV bikes are easy to use, lightweight and maintenance free providing a stress free experience.

REVIEW OF LITERATURE

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 time in India in kickoff because Customers in India are not ready to pay the high price. Also they are very much concerned about the security and quality aspect.

Bhupendra Kumar Verma (2011) 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 literatures in different regional languages. There should be free, fair, justified and honest competition amongst the various electric bike companies. Manufacturer/dealer should be given timely information of the governments Changed policies regarding two wheeler sectors.

Deekshu (2008) found that 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 sales service. It shows that customers are dissatisfied about after sale service. It was found that maximum number of the customers feel the speed of the Electric bikes to be very low and were 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.

NEED FOR THE STUDY

The Electric Vehicle (EV) industry is still is nascent stage in India. There is a lot of need to create awareness among the general public to make this alternative model success. While it is for sure that sooner or later the electric vehicle will emerge as a strong component, for the time being there is the need for educating the customers to arouse a need for the product. The objective behind this project is to have a better understanding of the EV market, a SWOT analysis of the EV industry, challenges and opportunities faced by the Industry.

STATEMENT OF THE PROBLEM

A study on Customers perception towards Electric vehicles (2-wheelers) in Bangalore City with respect to GO Green BOV and developing strategies to improve B2B sales of Electric Vehicles.

OBJECTIVES OF THE STUDY

1. To analyze consumer perception towards Electric two wheelers
2. To develop strategies for improving B2B sales of Electric Two wheelers
3. To identify the means to enhance the consumer awareness level towards electric vehicles

HYPOTHESES

H1: There exists a high degree of co-relation between suggesting an e- bike and convinced with Electric bike

H2: There exist a high degree of co-relation between currently used bikes and how convinced is the person about e-bikes

RESEARCH METHODOLOGY

The success of any event heavily depends upon the way chosen for its execution. This includes ensures of some basic question to the specific focus on constraints as well. In other words they can call the methodology as the backbone of any research. It also includes research or study method. Thus when they talk of methodology they not only talk of methodology they not talk of methods but also consider the logic behind the methods they use in the context of their study objective and explain way use are using them so that Study results are capable of being evaluated logically.

RESEARCH TYPE

Exploratory research

SAMPLE SIZE

100

SAMPLING AREA

Bangalore city

SAMPLING TECHNIQUE

Convenient sampling

DATA COLLECTION TOOLS

Structured questionnaire

STATISTICAL TOOLS USED

- Chi-square Test
- Co-Relation
- Factor Analysis

STATISTICAL PACKAGE

SPSS Package 17.0

RESULTS AND DISCUSSIONS**1. Demographic attributes****TABLE 1**

Sl no.	Attributes	No. Of respondents	Percentage of respondents
1.	Gender Male	35	35
	Female	65	65
2.	Age 13- 18	32	32
	19-25	12	12
	26-40	24	24
	41-60	16	16
	Above 60	16	16
3.	Monthly income 10000 – 20000	29	29
	20000 – 34999	42	42
	Above 35000	13	13
	Below 100000	4	4
	Not applicable	12	12
4.	Occupation Student	23	23
	Salaried	23	23
	House wife	21	21
	Business	21	21
	others	12	12

2. How did you come to know about Electric Bikes?**TABLE 2**

	Frequency	Percentage
Friends	20	20
Internet	20	20
News paper/Magazines	28	28
TV	21	21
Others	11	11

3. How will you rate your level of awareness towards Electric Vehicles?**TABLE 3**

	Frequency	Percentage
Poor	19	19
Average	7	7
No option	32	32
Good	18	18
Excellent	24	24

4. Which bike are you using presently?**TABLE 4**

	Frequency	Percentage
Conventional Bike	73	73
Electric Bike	27	27

5. Which of the factors do you think that prevents you from making the decision of purchasing the electric bikes?

TABLE 5

	Frequency	Percentage
Expensive	27	27
Lack of awareness	12	12
less km/hour	14	14
Non availability	22	22
Benefit	25	25

6. How is after sales service availability affecting your purchasing decision of electric bikes?

TABLE 6

	Frequency	Percentage
least Important	3	3
Less	30	30
Neutral	12	12
Important	16	16
Very Much Important	39	39

7. How much are you convinced about the benefits of Electric bikes?

TABLE 7

	Frequency	Percentage
Very low	20	20
Low	15	15
Moderate	25	25
High	13	13
Very High	27	27

8. How likely that you would suggest an electric bike to your friend?

TABLE 8

	Frequency	Percentage
Very low	14	14
Low	20	20
Moderate	38	38
High	10	10
Very High	18	18

9. Did advertisement influence your buying decision?

TABLE 9

	Frequency	Percentage
Very low	14	14
Low	20	20
Moderate	38	38
High	10	10
Very High	18	18

10. To identify the factors that is affecting the sales of Electric Bikes.

TABLE 10

COMPONENT MATRIX ^a		
	Component	
	1	2
Appearance	.806	.079
Price	-.478	.619
Durability	.825	.231
Uncertainty of Technology	.269	-.547
Battery Life	.241	.783
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Since KMO value is equal to .549, the Factor Analysis is accepted.

Since KMO value is equal to .549, the Factor Analysis is accepted.

From the above factor analysis following 2 factors is being extracted:

DURABILITY & BATTERY LIFE

Inference: Therefore Durability of the bike in the long run, and the small battery life are the two major concern expressed by our respondents.

11. Rate the Following Parameters of an Electric Vehicle on a scale of 1 to 5 in comparison with a Petrol Vehicle.

TABLE 11

KMO AND BARTLETT'S TEST		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.585
	Approx. Chi-Square	104.535
	Df	21
	Sig.	.000

Since KMO value is equal to .585, the Factor Analysis is accepted.

TABLE 12

COMPONENT MATRIX ^a		
	Component	
	1	2
Performance	.564	-.356
Mileage / cost per km	-.581	.003
Safety	-.305	.705
Design	.701	.287
Price of the vehicle	.606	.218
After sales Service	.645	.453
Extraction Method: Principal Component Analysis		
a. 2 components extracted		

From the above factor analysis following 2 factors is being extracted:

DESIGN & SAFETY

Inference: Therefore Design of the bike and how safe is it while riding, is the two important factors considered by the respondents while comparing with petrol bike.

12. H1: There exist a high degree of co-relation between suggesting an ebike and convinced with ebike

TABLE 13

CORRELATIONS			
		How likely that you Would suggest an electric bike to your friend?	How much are you convinced about the benefits of Electric bikes?
How likely that you would suggest an electric bike to your friend?	Pearson Correlation	1	.110
	Sig. (2-tailed)		.276
	N	100	100
How much are you convinced about the benefits of Electric bikes?	Pearson Correlation	.110	1
	Sig. (2-tailed)	.276	
	N	100	100

Since sig 2 Value 0.276 is greater than .05 (5% level of significance) hence **H1 is accepted**.

From the above data it is evident that, Highly positive Pearson correlation exist between two variables, when two variables post sales service and responsiveness towards the enquiry in the same direction, the correlation between the two variables is high, if one variable increases by 100, the other variable also increase by 110 according to the results in the table.

13. H2: There exist a high degree of co-relation between currently used bike and how Convinced is the person about e-bikes.

TABLE 14

CORRELATIONS			
		Which bike are you using presently?	How convinced are you about the Electric Bike benefits?
Which bike are you using presently?	Pearson Correlation	1	.027
	Sig. (2-tailed)		.792
	N	100	100
How convinced are you about the Electric Bike benefits?	Pearson Correlation	.027	1
	Sig. (2-tailed)	.792	
	N	100	100

Since sig 2 Value .792 is greater than .05 (5% level of significance) hence **H2 is accepted**.

From the above data it is evident that, Highly positive Pearson correlation exist between two variables, when two variables post sales service and responsiveness towards the enquiry in the same direction, the correlation between the two variables is high, if one variable increases by 100, the other variable also increases by 127 according to the results in the table.

FINDINGS

- There is more no. of petrol vehicles in the market than the Electric ones.
- Media awareness towards electric bikes is very low.
- There is a lack of awareness amongst respondents about the benefits of electric bikes.
- Female customers are now the biggest target segment of EV Industry.
- Purchasing decisions of an electric bike is not much influenced by the advertisements.
- Durability of the bike in the long run, and the small battery life are the two major concern expressed by our respondents.
- Design of the bike and how safe is it while riding, is the two most important factors considered by the respondents while purchasing an electric bike.
- Majority of respondents believe that Electric bikes are expensive.
- Existing customers are highly unsatisfied with the after sales servicing as spares are not readily available.
- There are no well established players in the market, with a good brand name.
- Lack of regulatory authority and safety Standards are a major concern for the industry in the long run.
- High Charging time, Lower Mileage, low Speed, Less battery life, Durability are the major technical issues faced by the electric bike industry.
- Lack of government support in the form of subsidy and infrastructure development, is affecting the industry.

SUGGESTIONS

- The first major concern for the company is to take concrete steps to improve the level of awareness among the people. Therefore company has to first educate the people about the product by following methods:
 - Visit the school and colleges to teach the students on the need to go for a greener Technology.
 - Educate the parents and children about the benefits of having a bike with slow speed, as it makes them a balanced rider.
 - Organize Road Shows and Exhibitions to educate the people.
 - Team Up with Environment Protection Groups, NGOs to promote the concept of Go Green.
 - Highlight the economic viability of the product against the rising fuel price.
- To fully charge an Electric Bike it takes around 6-8 hours, which is very long and it is practically impossible to charge on the go.

- To eliminate such problems the Company has to start investing on R&D more focus must be on developing Indigenous technology rather than going for Technology Transfer from foreign countries.
- Improve the Mileage of the Bikes by using batteries that is having higher capacity.
- Use ultra Capacitors to reduce the wastage of energy in the process of Motor on & off.
- Development of market strategy to improve the sales:
- To ride a Petrol bike it is necessary to have a Driving License, hence it is more suited for the age-group of 18-60.
- In order to tap the Market Company shall not only compete with this segment but also focus on the 13-17 age group and above 60 people, who might otherwise do not have a DL.
- Focus on the Home-Delivery segment of Hotels, restaurants and pharmacies to educate about the cost –viability.
- Provide finance option, EMI by collaborating with any Private sector bank or financial Institution.
- Use Buy-Back Feature; organize Exchange Melas, where people can exchange their petrol bikes for the electrical ones.
- Installation of charging station in strategic locations across the city.
- Providing Discounts on Bulk Purchases and providing free pick and drop services.

CONCLUSIONS

Electric Bike industry is in nascent stage still in India, with lots of apprehension about its durability and quality being offered. While doing this study it became more and more clear that lack of awareness, regulatory authority, quality issues are some of the biggest challenges in front of the industry. But with ever increasing Petrol prices and high pollution, sooner Electric Bikes are going to put a serious challenge to the Petrol Bikes. At this stage the primary focus of the company shall lie on R&D, improving quality and educating people. So with Government support in the form of developing the necessary infrastructure and subsidy to the end customer, there is possibility of Electric Bike Industry is getting ready for a golden future.

LIMITATIONS

Some of the limitations of the study may be summarized as follows

- An underlying assumption for entire project is that the details and feedback received from population are true.
- It was difficult to find respondents as they were busy in their schedules and collection of data was very difficult. Therefore study had to be carried out based on availability of respondents.
- Some of the respondents were not ready to fill the questionnaire and some of them not ready to come out openly.
- Also the sample size of 100 may not truly represent whole population.

SCOPE FOR FURTHER RESEARCH

The current study focused only on the perception and the behavioural aspect of the customers towards the electric two wheelers in Bangalore city. The study can be extended throughout the state and further the entire country in order to have clear picture about the market potential for the electric two wheelers in the country. The study can also be done to assess the customers' expectations towards the performance and productivity of electric two wheelers.

REFERENCES

1. Ashish Aggarwal, (2014) in Market Analysis of Electrical Toys. Journal Of Engineering & Management Sciences, Volume 4 Issue, Page 27-38.
2. Bhupendra Kumar Verma, (2014), a study on electric bikes, Vol-4, Issue-40, (2013), Pages 54-63.
3. Deekshu, (2008) in a study on Customer Satisfaction towards electric bikes, The Iup journal of marketing, Vol 4,, Page 1-14.
4. Dr.D.Sreeramulu, (2009) in a study on Consumer satisfaction in Ebikes, The Business Review Cambridge, Vol- 13, Pages 170-177.
5. Kotler philip, "Marketing Management" New Delhi, Prentice hall of India, 2003
6. Stanton William J, Etzel Michael J, Walker Bruce J, Fundamentals of Marketing- Mc Graw Hill International Singapore-1998
7. Tamilmozhi, (2013), a study on customer satisfaction and perception towards bikes, International journal for management, volume no. 1, issue no. 6, Pages 98-107

WEBSITES

8. Basic information of electric bikes, retrieved from [http:// www.shodh.net](http://www.shodh.net) on 21/05/2015.
9. Go Green BOV, retrieved from <http://www.EVfuture.com/forum.html> on 22/05/2015.
10. Go Green BOV, retrieved from <http://www.iaeme.com/ijmhrm.html> on 22/05/2015.
11. Products and plans, retrieved from <https://WWW.GoGreenBOV.com/home> on 17/06/2015.

ANNEXURE

QUESTIONNAIRE

Dear sir/madam,

We are conducting a survey on "Consumer Perception towards Electric Bikes". We request your free and genuine response to the following questionnaire. Information provided by you will be kept confidential and used for academic purpose only.

PART A

Personal Details:

Name:

Gender:

- a. Male b. Female

Age Group:

- a. Below 25 b. 25 – 40 c. 40 – 60 d. Above 60

Monthly Income:

- a. Below 10,000 b. 10000-20000 c. 20000-35000 d. Above 35000

PART B

1. Are you aware of Electric Bikes?

- a. Yes b. No

2. How did you come to know about Electric Bikes?

- a. News paper/magazine
b. Television
c. Internet

- d. Friends
e. Others (specify)
- 3. Which bike are you using presently?**
a. Electric bike
b. Conventional bike
- 4. Which of the following factors encouraged you to buy Electric bikes?**
a. Environment friendly
b. Less running cost
c. Safety
d. No registration
e. Others (specify)
- 5. Did advertisement influence your buying decision?**
a. Strongly agree
b. Agree
c. Neutral
d. Disagree
e. Strongly disagree
- 6. What do you feel about price of the Electric Bikes?**
a. Very high
b. High
c. Moderate
d. Low
e. Very low
- 7. What is your opinion towards mileage of Electric Bikes as compared to conventional bikes?**
a. Very good
b. Good
c. Average
d. Bad
e. Very bad
- 8. What is your opinion towards speed of Electric Bikes as compared to conventional bikes?**
a. Very high
b. High
c. Moderate
d. Low
e. Very low
- 9. Are you convinced about Electric Bike benefits?**
a. Yes b. No
- 10. Would you like to suggest electric bike to your friends?**
a. Yes b. No
- 11. Is the present promotional activity about Electric bike sufficient enough for you to make the purchasing decision?**
a. Yes b. No
- 12. Which of the following factors do you think are responsible for lower market share of Electric Bike as compared to Conventional bike?**
a. Appearance
b. Speed
c. Battery life
d. Uncertainty of electric bike technology
- 13. Which of the factors do you think that prevents you from making the decision of purchasing the electric bikes?**
a. Expensive
b. Unaware
c. Not convinced
d. Non availability
e. Others (specify)
- 14. Is after sales service availability affecting your purchasing decision of electric bikes?**
a. Yes b. No
- 15. Are you aware of electric bike benefits?**
a. Yes b. No
- 16. How did you came to know about this brand—**
a. Through friends
b. Advertisement
c. Publicity
d. Family members
- 17. Are you satisfied with its overall performance?**
a. Fully satisfied
b. Moderate
c. Average
d. Less satisfied
e. Poor
- 18. After knowing benefits of electric bike are you willing to purchase it in future?**
a. Yes b. No
- 19. If no why**
-

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With sincere regards

Thanking you profoundly

Academically yours

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