



CUSTOMER SATISFACTION TOWARDS ELECTRIC SCOOTER

Dr. G. R. Joshi, M.Com, M.Phill, Ph.D.

Associate Professor, Department of Commerce, Government First Grade College, Soraba, Shivamogga District

Article DOI: <https://doi.org/10.36713/epra28992>

DOI No: 10.36713/epra28992

ABSTRACT

The Indian automobile industry has experienced rapid transformation with the increasing adoption of electric vehicles, particularly electric scooters. Rising fuel prices, environmental concerns, government incentives, and technological advancements have encouraged consumers to shift from conventional petrol scooters to electric mobility solutions. Among the leading brands in the Indian electric two-wheeler market, TVS and OLA Electric have emerged as significant competitors by offering innovative features, affordability, and sustainable transportation alternatives. This study examines consumer perception and satisfaction towards TVS and OLA electric scooters, focusing on factors such as performance, pricing, battery efficiency, charging infrastructure, design, service quality, and brand trust.

The research adopts a descriptive and analytical approach using both primary and secondary data. Primary data were collected from 100 respondents through structured questionnaires distributed among electric scooter users and potential buyers in urban areas. Secondary data were gathered from journals, websites, company reports, and automobile market studies. Statistical tools such as percentage analysis..

INTRODUCTION

In today's competitive and quick paced world, automobiles play very significant part in individuals' overall life. Be it the efficiency, performance or coping with livelihood issues, vehicles save a significant amount of time and efforts aiding as a bridge between different commuting points. Larger part of Indians depends on two wheelers to cater their portability needs. Travelling has come long way from the days of the strolling to different shapes of cutting -edge transportation of the globalized world. The travelling time of the old times has been decreased definitely with the advancement of the science developments within the field of transport are still advancing. There are huge numbers of vehicles and brands that has been utilized within the nation for the transportation.

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. 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 .India two wheeler industries embraced new concept of Electric scooter 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.

The global electric two-wheeler market was valued at US\$ 35.3 Billion in 2022, and it is projected to grow to US\$ 72.5 Billion by 2028, reflecting a compound annual growth rate (CAGR) of 13.18 percent from 2023 to 2028. The rise in production of electric vehicles and their associated components is expected to elevate the manufacturing sector's contribution to GDP to over 24 percent by the fiscal year 202223(Sebastian ,2022).As reported by the Society of Manufacturers of Electric Vehicles, India experienced a remarkable rise in electric two-wheeler sales, reaching 846,976 units during the 2022-23 fiscal year, marking an increase of more than two and a half times compared to the 327,900 units sold the previous year (SMEV,2020). The journey to introduce electric two-wheelers in India began in the 1990s, with initial models developed by companies such as Bajaj Auto and Scooters India Ltd. Between 2010 and 2012, the Ministry of New and Renewable Energy (MNRE) offered subsidies for electric vehicles, as noted by Niti Aayog. Government data collected by clean mobility shift from the Vahan Dashboard reveals that there were only 72,930 newly registered four-wheeled electric vehicles in India in 2023. While this number is almost double that of 2022, the shift towards e-mobility in the South Asian nation mainly focuses on twowheelers.

Customer satisfaction is a crucial factor for any product or service and plays a significant role in the two-wheeler electric vehicle industry. The EV has gained the more popularity due to its eco-friendly nature, cost effectiveness and easily useable, reliability, comfort, design, features, customer service, colour and also offer numerous advantages over traditional internal combustion engine, produce zero emissions, offer smooth and quiet rides, charging infrastructure etc. Understanding customer satisfaction provides valuable insights into the needs, preferences, and expectations of electric two-wheeler users. This information can help manufacturers and policymakers



improve their products, services, and policies to better meet customer requirements. Customer satisfaction plays a critical role in driving the adoption and growth of electric two-wheelers. Satisfied customers are more likely to promote electric vehicles through positive word-of-mouth recommendations, encouraging others to purchase an electric two-wheeler. By identifying and addressing factors influencing customer satisfaction, the sector can incline towards more customers' adoption and market acceleration. The key aspects influencing customer satisfaction is the performance of the electric vehicle such as acceleration, top speed, range and battery efficiency. Reliability plays an important role in determining the customer satisfaction. Customers expect their electric vehicles should perform good without any unexpected breakdowns or malfunctions, any issues related to the battery, motor or any other components can significantly impact customer satisfaction. Therefore, the manufacturer must ensure the durability and reliability of their vehicles to build confidence in the customer.

Present status of the electric vehicles:

Market Growth: The electric vehicle market has experienced rapid growth in recent years. EV sales have been consistently increasing, due to the factors such as advancements in technology, declining battery costs, government incentives, and environmental concerns. Major automakers have been expanding their electric vehicle offerings, introducing new models with longer driving ranges and improved features.

Increasing Model Variety: The electric vehicle market has become more diverse, offering a wide range of options to consumers. Electric cars, electric SUVs, electric crossovers, and electric pickup trucks are increasingly available from various manufacturers. The expansion of electric vehicle choices caters to different consumer preferences, driving needs, and price points.

Battery Technology Advancements: Battery technology is essential for electric vehicle performance, driving range, and charging speed. Significant advancements in lithium-ion battery technology have led to higher energy density, longer ranges, and faster charging capabilities. Ongoing research & development efforts focus on improving battery efficiency, reducing costs, and enhancing sustainability through new materials and technologies.

Infrastructure Development: The expansion of charging infrastructure is a main factor playing a role in buying the electric vehicles. Governments, private companies, and utilities are investing in the installation of public charging stations, both fast chargers and regular chargers, in urban areas, along highways, and in parking facilities. Efforts are ongoing to establish standardized charging protocols and enhance charging speeds to make EV charging more convenient and efficient.

Government Support and Policies: Governments globally are enacting policies to boost electric vehicle adoption and curb greenhouse gas emissions. Many nations offer financial incentives like purchase rebates, tax credits, and exemptions from tolls or congestion charges to incentivize consumers to opt for electric vehicles.

REVIEW OF LITERATURE

Hussain et al. (2022) found that respondents expressed a high level of satisfaction with the prompt pick-up and drop-off service, pricing, and simplicity of the booking process; they indicated they were "satisfied" with additional aspects such as convenience, speed, and safety. Elements such as convenience, brand reputation, affordability, speed, safety, ease of booking, and timely pick-up and drop-off options play significant roles in influencing a customer's choice to utilize Bykea electric bike services.

Tejesh et al. (2023) discovered that environmental issues, government efforts, and increasing fuel costs are key factors driving the adoption of electric vehicles. It is crucial to tackle challenges such as range anxiety, charging duration, and a limited selection. Survey participants favour EVs with distances between 200 and 350 km, suggesting a promising outlook for the market.

Krithika and Sunil (2024) revealed a predominantly favourable perspective among consumers, influenced by elements like convenience, environmental advantages, and cost efficiency. Nevertheless, it is essential for manufacturers and policymakers to tackle certain issues such as battery range, charging infrastructure, and safety considerations to further improve customer satisfaction and facilitate broader E-bike adoption.

Kumar (2024) provided evidence that socio-economic issues including income, education, and access to charging points have a strong impact on EV uptake in cities. In an analysis of macroeconomic data, Patil (2024) reported a positive impact of GDP, per capita income, and population density on the growth of EVs and a negative impact on them of electricity and fuel prices. These works pointed to the necessity to develop location-specific policies and customized financial incentives.

Tater and John (2025) and **Jain et al. (2025)** also established that performance, environmental sustainability, and price value have a strong impact on adoption. In some cases, older consumers were more worried about the performance of EV than younger consumers. Large cost of purchase and performance dependability was always a key discouraging factor to mass adoption.



Poonam Adsule and M. Manoj (2026), in their study “*An Assessment of Consumer Preferences for Electric Scooters – Case Delhi, India,*” highlighted the variation in individual preferences using a latent class multinomial logit model. Their findings emphasized that financial incentives, loan interest rates, and psychological attitudes significantly influence EV adoption, suggesting the need for targeted policy interventions.

Statement of the Problem

Two-Wheeler industry is one of the largest industries in the automobile sector of global market. 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 choice of preference. In India majority of middle class families who cannot afford high fuel prices, electric scooters are the solution. So the study is related to study on customer satisfaction towards electric scooter in Shikaripura town.

Scope of the Study- The study aims at finding the customer satisfaction towards e-scooter with special reference to Shikaripura town. The study by ascertaining the factors that motivate end users to purchase electric scooter is expected to enable respective companies to improve their services, sales promotions etc. The study also aims at analyzing the level of customer satisfaction with respect to the e-scooter and their dealers. Customer’s expectations are also gauged to help the companies regarding after sales service.

OBJECTIVES OF THE STUDY

- To understand the present status of electric vehicles
- To find out the factors influencing the purchase of electric scooter.
- To study the level of the customer satisfaction for electric scooter.

Methodology:

- Primary Data- The data has been collected through well designed and administered questionnaires filled 100 respondents who are using both electric bikes and conventional bikes.
- Secondary Data- The primary sources of secondary data include various journals and research articles.
- Sampling Method- A random sampling method was used to collect primary data from the respondents.
- Sample Point- In this study the persons who are using both electric bike and regular bikes are chosen as a sample points.
- Sample size-In this study total of 100 samples are collected from Shikaripura Town, Karnataka state.
- Sample description – The Respondents are from diversified background such as students, businessman, workers, housewives.
- Period of study- The study has been conducted for a period of 3 months from January 2026 to march 2026.
- Data collection tool – Questionnaires consisting of 25 different questions were asked to respondents. The data collection was self-administered during the study.

Table No -1 Socio-Economic Characteristics of the Respondents

Particulars		No of Respondents	Percentages
Gender	Male	43	43
	Female	57	57
Age	Below 25 years	32	32
	25-35	41	41
	Above 35 years	27	27
Qualification	SSLC	18	18
	Plus Two	26	26
	Degree	42	42
	Post Graduate	14	14
Occupation	Profession	39	39
	Business	22	22
	Students	39	39
Monthly Income	Below 30,000	28	28
	30,000 to 50,000	32	32
	Above 50,000	40	40

Out of 100 respondents, 43 respondents (43 percent) are male and 57 respondents (57 percent) are female. The respondents were divided into three groups on the basis of age. Majority of the respondents (41 percent) were in the age between 25-35 years, 27 percent were above 35 years and 32 percent were in the age below 25 years prefer electric two-wheeler as their mode of transportation. The education status of the respondents revealed that 42 percent were having undergraduate degree, 26 percent were completed plus two, 14 percent of them were having post graduate degree and 18 percent of them were completed SSLC. The occupation status of the respondents depicted that nearly 39 percent of them were professionals followed by 22 percent of the respondents doing various business and 39



percent of them were students. The monthly income status of the respondents revealed that 32 percent of them had income between Rs 30,000-50,000, 28 percent of them have income below 30,000 and 40 percent of them have income above 50,000.

Table No -2 Satisfaction Level towards Electric Two Wheeler of the Respondents

Particulars		No of Respondents	Percentages
Years of owned electric two wheeler	One Year	46	46
	Two to Three years	25	25
	Above three years	29	29
Satisfaction towards efficiency	Satisfied	59	59
	Neutral	10	10
	Highly satisfied	23	23
Satisfaction towards durability	Dissatisfied	08	08
	Satisfied	33	33
	Neutral	09	09
Satisfaction level on Satisfied EV charging station	Highly satisfied	56	56
	Dissatisfied	02	02
	Satisfied	39	39
Overall satisfaction of electric two wheeler	Neutral	18	18
	Highly satisfied	40	40
	Dissatisfied	03	03
	Satisfied	62	62
	Neutral	03	03
	Highly satisfied	30	30
	Dissatisfied	05	05

From the above table clear that Out of the total respondents 46% are used EV vehicles from one year, in the meanwhile 29% of respondents are used above three years. 59% of respondents are satisfied in respect of efficiency of scooters. 56% of respondents are given their opinion for durability only 2% are dissatisfied. 40% of the respondents are give their good opinion regarding installation of EV charging station in the meanwhile only 3% are dissatisfied. From the table overall performance of E V Scooters is accepted by 30% respondents.

Table No -3 Benefits towards the Usage of Electric Two-Wheeler

Benefits	Scores	Rank
Quick Recharge	22	1
Simple to manage	18	3
Low operating cost	5	7
Less maintenance	2	10
Outstanding resilience	4	8
Smooth and quiet operation	12	4
Relaxing and pleasurable driving experience	9	5
More maneuverable and stable	3	9
Convenient and cost-effective for use	6	6
Availability of colour and design	2	11
Environmental benefits	20	2

In the study the consumers pointed out that benefits availed during the usage of electric two-wheeler they were ranked and discussed. From the above it was observed that from consumer point of view quick recharge (1st rank), environmental benefits (2nd rank), simple to manage (3rd rank) smooth and quiet operation (4th rank), relaxing and pleasurable driving experience (5th rank) convenient and cost effective for use (6th rank), low operating cost (7th rank) outstanding resilience (8th rank) more maneuverable and stable (9th rank) less maintenance (10th rank) and availability of colour and design (11th rank). These are the various benefits afford by the respondents during the usage of electric two-wheeler. 4



Table no- 4 Factors influencing for purchase of E-Scooters

Factors	Options	No. of respondents	Percentage
Price	Very High	16	16
	High	36	36
	Moderate	44	44
	Very Low	04	04
	Low	-	-
Usage	Everyday	34	34
	Twice in a week	36	36
	Weekly once	28	28
	Rarely	02	02
	Occasionally	---	---
Kilometers	20 to 30	48	48
	30 to 40	20	20
	40 to 50	12	12
	50 to 60	12	12
	60 and above	08	08
Purpose	Only local journey	40	40
	For office use	28	28
	For business use	16	16
	For family members use	16	16
Mileage	Up to 30 Kms	10	10
	30 to 40 Kms	15	15
	40 to 50 Kms	20	20
	Above 50 Kms	55	55
Charging Hours	2 To 3 hrs	18	18
	3 to 5 hrs	46	46
	5 to 6 hrs	16	16
	6 to 7 hrs	15	15
	Overnight	05	05

Table No 4 shows that

Shows that Most (44%) of the respondents are generating to buy this E-Scooter of themselves, 36% of the respondents are using the e-scooter. 48% of the respondents using the E- scooter. 40% of the respondents are mainly using the purpose for local journey. 32% of the respondents are satisfied with the mileage of the e-scooter, most 32% of the respondents are satisfied to charge their e-scooter for an hour

SUGGESTIONS

- The companies should reduce the price of Electric scooters so as to increase the sales and also attract the new customers.
- The companies may take certain steps to reduce the overheating the motors and also reduce the battery issues.
- It is advised to the companies to increase the weighting capacity of the scooters.
- The electric bike manufacturers should initiate awareness campaign by highlighting the economic viability of the product against the rising fuel price.

CONCLUSION

The Electric Bike industry is in a nascent stage still in India, with lots of apprehension about its durability and quality being delivered. While doing this study, it became more clear that lack of awareness, quality issues are some of the biggest challenges in the industry. But with ever-increasing petrol prices and high pollution, sooner electric Scooter will put a serious challenge to the Petrol Bikes. At this stage, the primary focus of the company shall lie in R&D, improving quality, and create awareness among the people.

REFERENCES

1. Philip Kotler Gany Armstrong – Principles of Marketing
2. RS.N. Pillai Bagavathi – Modern Marketing principles and Practices
3. C.R. Kothari – Research Methodology
4. Alamelu, R., Anushan, C., & Selvabaskar, S. (2015). Preference of E-bike by Women in India- A Niche Market for Auto Manufacturers. *Business: Theory and Practice*, 16(1), 25–30. doi:10.3846/btp.2015.431



5. *Environmental Impact of Public Charging Facilities for Electric Two-Wheelers Traffic&Transportation*, 31(5), 503-512.
doi:10.7307/ptt.v31i5.3014
6. Fishbein, M.; Ajzen, I. *Beliefs, Attitude, Intention and Behavior: An Introduction to Theory and Research*; Addison-Wesley: Reading, MA, USA, 1975.
7. Huang, F.H. (2019, October). *Understanding Users' Experiences of Riding a Two-Wheeler Vehicle and their Intentions of Purchasing Electric Two-Wheelers*.
8. Mendoza, J., Josa, A., Rieradevall, J., & Gabarrell, X. (2016, February 1).. *Journal of Industrial Ecology*, 20(1), 54-66. doi:10.1111/jiec.12270
9. Sivakotireddy, a study on customer perception on green brands of Electric scooters 2011, (Vol.2, Issue1&2) Thuy, T.T., & Hong, P.T. (2019, June 2). *Attitude to and Usage Intention of High School Students Toward Electric Two-Wheeled Vehicles in Hanoi City*. *VNU Journal of Science: Economics and Business*, 35(2). doi:10.25073/2588-1108/vnueab.4224