Advances in Consumer Research
https://acr-journal.com/
Volume-3 | Issue-7 |July: 2026
Original Researcher Article

Determinants Of Customer Satisfaction With Electric Two-Wheelers: Evidence From Emerging Markets

Ms. Vani Saini [1], Dr. Bindoo Malviya[2]
[1]Research Scholar, Dept. Of Management ,TMIMT ,Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India
Email : Krishnvani5741@gmail.com
[2]Professor, Dept. Of Management ,TMIMT ,Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email : drbindoomalviya@gmail.com

.

ABSTRACT

The rapid growth of electric mobility has transformed the transportation sector and accelerated the adoption of electric two-wheelers (E2Ws) in emerging markets. However, sustaining this growth requires a comprehensive understanding of the factors influencing customer satisfaction. The present study investigates the impact of Vehicle Performance and Reliability (VPR), Charging Infrastructure Accessibility (CIA), and After-Sales Service and Maintenance Support (ASMS) on Customer Satisfaction (CS) among electric two-wheeler users. Primary data were collected from 290 respondents comprising college-going students and office-going individuals using a structured questionnaire based on a five-point Likert scale. Reliability analysis, descriptive statistics, Pearson correlation, and multiple regression techniques were employed for data analysis. The findings reveal that all three determinants exert a positive and significant influence on customer satisfaction, with Vehicle Performance and Reliability emerging as the most influential factor. The study contributes to the existing literature on sustainable mobility by providing empirical evidence from emerging markets and offers managerial implications for manufacturers, service providers, and policymakers aiming to enhance customer experiences and promote electric mobility....

Keywords:: Electric Two-Wheelers, Customer Satisfaction, Vehicle Performance and Reliability, Charging Infrastructure Accessibility, After-Sales Service and Maintenance

INTRODUCTION:

Rising environmental concerns, fuel prices, and supportive government policies have accelerated the shift toward sustainable transportation. Electric two-wheelers (E2Ws) have emerged as a viable alternative to conventional vehicles due to their lower operating costs, energy efficiency, and environmental benefits. In India, growing sustainability awareness and favorable policies are further driving this transition.

India has emerged as one of the fastest-growing electric vehicle markets globally. According to the India Energy Storage Alliance (IESA), total electric vehicle sales in India surpassed 2.3 million units in 2025, reflecting significant growth compared with previous years. Among various categories, electric two-wheelers accounted for approximately 1.28 million units, representing nearly 56% of total electric vehicle sales. Furthermore, electric two wheelers contributed approximately 6.3% of overall two wheeler sales in India during 2025, indicating increasing consumer acceptance and market penetration.

The Indian electric two-wheeler market has witnessed remarkable expansion over recent years. Industry estimates suggest that the market was valued at approximately USD
1.45 billion in 2024 and is expected to grow at a compound annual growth rate (CAGR) of around 28–30% during 2025–2034. Electric scooters and mopeds constitute nearly 88% of the segment, while lithium-ion batteries account for more than 80% of battery installations. These developments indicate the increasing maturity and technological advancement of the electric mobility ecosystem.

From an economic perspective, electric two-wheelers are more cost-effective, with operating costs of about **₹1.48/km** compared with **₹2.46/km** for petrol vehicles. Government initiatives such as **FAME-II** and state incentives have further improved EV affordability and charging infrastructure.

Despite the rapid growth of EVs, long-term sustainability depends on **customer satisfaction and post-purchase experiences**. Satisfaction encourages continued use, recommendations, and market growth. Key factors influencing satisfaction include **vehicle quality, battery performance, reliability, charging accessibility, and**

effective after-sales service and maintenance.

Although EV research largely focuses on adoption and purchase intentions**,** customer satisfaction with electric two-wheelers remains underexplored**, especially in** emerging markets. Limited studies examine the combined effects of Vehicle Performance and Reliability, Charging Infrastructure Accessibility, and After-Sales Service and Maintenance Support on satisfaction. This study addresses this gap among college students and office-going consumers**,** offering insights for manufacturers, service providers, and policymakers to promote customer-centric strategies and sustainable mobility.

2. Literature Review

Customer satisfaction is vital for the sustainable growth of the EV industry and is influenced by vehicle performance, charging infrastructure, and service quality**. While** VPR, CIA, and ASMS have been widely studied**, their** combined impact on customer satisfaction in emerging markets remains underexplored**.**

Vehicle Performance and Reliability and Customer Satisfaction

Vehicle Performance and Reliability constitute one of the most important factors influencing customers' postpurchase experiences and satisfaction levels. Consumers evaluate electric vehicles based on battery efficiency, driving range, acceleration, durability, and overall operational reliability. Dua et al. (2021) identified technical performance and reliability as important determinants affecting electric vehicle adoption and user experiences. Similarly, Cruz-Jesus et al. (2023) reported that pragmatic and functional attributes positively influence customer satisfaction and continuance intentions among electric vehicle users. Zhao et al. (2023) found that improvements in vehicle quality and reliability significantly enhance user satisfaction across different electric vehicle segments.

Liang et al. (2024) identified battery performance and driving quality as key determinants of EV customer satisfaction, while Rehman et al. (2024) linked satisfaction with continued EV usage. Feng et al. (2025) further found that performance attributes influence satisfaction and repurchase intentions. Thus, better vehicle performance and reliability are expected to enhance customer satisfaction. Accordingly, the following hypothesis is proposed:

H11: Vehicle Performance and Reliability has a significant effect on Customer Satisfaction.

Charging Infrastructure Accessibility and Customer Satisfaction

Charging infrastructure accessibility is crucial for EV adoption and user satisfaction. **Adequate and convenient charging facilities reduce range anxiety, enhance consumer confidence, and improve ownership experiences** (Kumar et al., 2021; Jia & Chen, 2021).

Liu et al. (2021), Khan et al. (2021), Rempel et al. (2024), and Hao et al. (2025) highlight that **charging accessibility, reliability, and availability** enhance consumer convenience, confidence, and EV adoption. Thus, charging infrastructure accessibility is a key determinant of customer satisfaction. Accordingly, the following hypothesis is proposed:

H12: Charging Infrastructure Accessibility has a significant effect on Customer Satisfaction.

After-Sales Service and Maintenance Support and Customer Satisfaction

After-sales service and maintenance support significantly shape post-purchase experiences, satisfaction, and loyalty. Effective service, timely maintenance, and prompt complaint resolution strengthen customer relationships. Balinado et al. (2021) and Chawla and Singh (2022) confirmed the positive impact of after-sales service quality on customer satisfaction and relationships.

Gupta and Raman (2022) highlighted that positive aftersales experiences enhance trust and customer evaluations.

Sheu et al. (2022) found that service quality positively affects customer satisfaction and loyalty, while Amro (2025) confirmed its role in enhancing engagement and loyalty in the automotive sector. Thus, effective after-sales service and maintenance support are expected to improve EV customer satisfaction. Accordingly, the following hypothesis is proposed:

H13: After-Sales Service and Maintenance Support has a significant effect on Customer Satisfaction.

Customer Satisfaction

Customer satisfaction reflects the extent to which products and services meet or exceed consumer expectations and promotes loyalty, positive word-of-mouth, and repurchase intentions. Uzir et al. (2021) identified service quality, perceived value, and trust as key determinants, while Goic et al. (2021) linked satisfaction with customer retention and long-term relationships.

Manyanga et al. (2022) reported that customer experience positively affects satisfaction and loyalty intentions. Molinillo et al. (2022) found that positive retail experiences enhance customer loyalty through customer satisfaction.

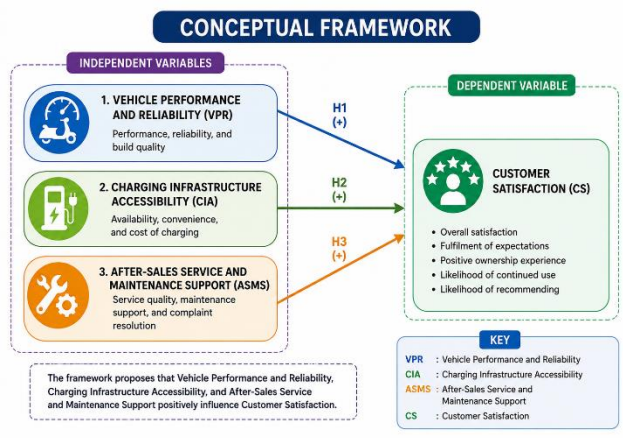
García-Salirrosas et al. (2022) highlighted perceived value and customer experience as key drivers of satisfaction, while Phan Thi Hang et al. (2024) confirmed the positive relationship between service quality, satisfaction, and loyalty. Thus, customer satisfaction is a key indicator of consumer experience and sustainable growth in the E2W market.

Author(s) & Year	Variables/Focus	Major Findings	Implications
Dua et al. (2021)	EV adoption, vehicle performance	Performance and reliability influence user experience and adoption intentions.	Technical attributes are critical for EV satisfaction.
Kumar et al. (2021)	Charging infrastructure	Accessibility of charging infrastructure promotes EV usage.	Charging facilities are essential for sustainable mobility.
Jia and Chen (2021)	EV ownership and charging accessibility	Convenience of charging affects ownership experience.	Charging infrastructure influences post-purchase perceptions.
Balinado et al. (2021)	Service quality and customer satisfaction	Quality after-sales service improves customer satisfaction.	Service support enhances customer experiences.
Uzir et al. (2021)	Service quality, trust and satisfaction	Service quality and trust positively influence customer satisfaction.	Customer satisfaction depends on perceived value and trust.
Chawla and Singh (2022)	After-sales services	Supportive after-sales services improve satisfaction.	Service support creates positive customer perceptions.
Gupta and Raman (2022)	Service experiences and satisfaction	Positive service experiences enhance customer trust.	Maintenance support is important for customer retention.
Manyanga et al. (2022)	Customer experience and loyalty	Customer experience positively affects satisfaction and loyalty.	Satisfaction leads to favorable behavioral intentions.
Molinillo et al. (2022)	Customer experience and loyalty	Positive experiences improve customer loyalty.	Customer satisfaction acts as a mediator of loyalty.
García-Salirrosas et al. (2022)	Purchase experience and satisfaction	Perceived value influences customer satisfaction.	Value perception affects postpurchase behavior.
Cruz-Jesus et al. (2023)	EV satisfaction and continuance intention	Functional benefits significantly influence satisfaction.	Vehicle performance affects continued usage.
Rehman et al. (2024)	EV adoption and satisfaction	Customer satisfaction contributes to continued adoption.	Satisfaction supports sustainable mobility.
Rempel et al. (2024)	Charging infrastructure reliability	Reliable charging stations improve customer confidence.	Charging infrastructure affects user satisfaction.
Feng et al. (2025)	EV repurchase intention and satisfaction	Vehicle performance strongly affects repurchase intentions.	Performance remains the strongest predictor.
Amro (2025)	Service quality and customer engagement	Service quality enhances customer loyalty.	After-sales support improves long-term relationships.

Research Gap

Although previous studies have extensively examined electric vehicle adoption, purchase intentions, and sustainable mobility, limited attention has been devoted to customer satisfaction with electric two-wheelers, particularly in emerging markets. Most studies have focused primarily on adoption behavior and environmental concerns rather than post-purchase experiences. Moreover, empirical evidence regarding the combined influence of Vehicle Performance and
Reliability, Charging Infrastructure Accessibility, and After-Sales Service and Maintenance Support on Customer Satisfaction remains scarce. Furthermore, studies focusing on younger and working populations, particularly college-going students and office-going individuals, are relatively limited. Therefore, the present study attempts to bridge this gap by investigating the determinants of customer satisfaction with electric twowheelers in the context of emerging markets.

Figure 1. Conceptual Framework



3. Research Methodology

3.1 Research Design and Sample

The present study adopts a quantitative and descriptive research design to examine the determinants of customer satisfaction with electric two-wheelers in emerging markets. A cross-sectional survey approach was employed to collect primary data from electric two-wheeler users. The target respondents comprised college going students and office-going individuals, including private and government employees, who regularly use electric two-wheelers for commuting purposes.

A purposive sampling technique was adopted to ensure that respondents possessed adequate experience with electric two-wheelers. A total of 290 valid responses were collected and used for the analysis. The sample consisted of 170 college-going students, 90 private employees, and 30 government employees. The sample size was considered sufficient for conducting multiple regression analysis and hypothesis testing.

3.2 Instrument Development and Measurement

Primary data were collected through a structured questionnaire administered through both online and offline modes. The questionnaire consisted of demographic information and statements relating to the study variables. A five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) was used to measure respondents' perceptions.

The study incorporated three independent variables, namely Vehicle Performance and Reliability (VPR), Charging Infrastructure Accessibility (CIA), and AfterSales Service and Maintenance Support (ASMS), along with Customer Satisfaction (CS) as the dependent variable. A total of 25 items were included in the questionnaire. Vehicle Performance and Reliability was measured through seven items, Charging Infrastructure Accessibility through six items, After-Sales Service and Maintenance Support through five items, and Customer Satisfaction through seven items.

3.3 Research Objectives and Hypotheses

1. Examine the impact of Vehicle Performance and Reliability on Customer Satisfaction.
2. Investigate the influence of Charging Infrastructure Accessibility on Customer Satisfaction.
3. Analyze the effect of After-Sales Service and Maintenance Support on Customer Satisfaction.

The present study aims to examine the influence of Vehicle Performance and Reliability, Charging
Infrastructure Accessibility, and After-Sales Service and Maintenance Support on Customer Satisfaction among electric two-wheeler users. Accordingly, the following hypotheses were formulated:

H01: Vehicle Performance and Reliability has no significant effect on Customer Satisfaction.

H11: Vehicle Performance and Reliability has a significant effect on Customer Satisfaction.

H02: Charging Infrastructure Accessibility has no significant effect on Customer Satisfaction.

H12: Charging Infrastructure Accessibility has a significant effect on Customer Satisfaction.

H03: After-Sales Service and Maintenance Support has no significant effect on Customer Satisfaction.

H13: After-Sales Service and Maintenance Support has a significant effect on Customer Satisfaction.

3.4 Analytical Framework

The collected data were analyzed using Statistical Package for Social Sciences (SPSS) Version 26. Reliability analysis using Cronbach's Alpha was performed to assess the internal consistency of the measurement scales. Descriptive statistics were employed to summarize respondents' perceptions, while Pearson correlation analysis was used to examine the relationships among the variables. Multiple regression analysis was conducted to determine the impact of Vehicle Performance and Reliability, Charging Infrastructure Accessibility, and After-Sales Service and

Maintenance Support on Customer Satisfaction.

The proposed regression model is represented as follows: [CS = \beta_0 + \beta_1(VPR) + \beta_2(CIA) + \beta_3(ASMS) + \varepsilon] where:

CS = Customer Satisfaction

VPR = Vehicle Performance and Reliability

CIA = Charging Infrastructure Accessibility

ASMS = After-Sales Service and Maintenance Support

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ = Regression Coefficients

ε = Error Term

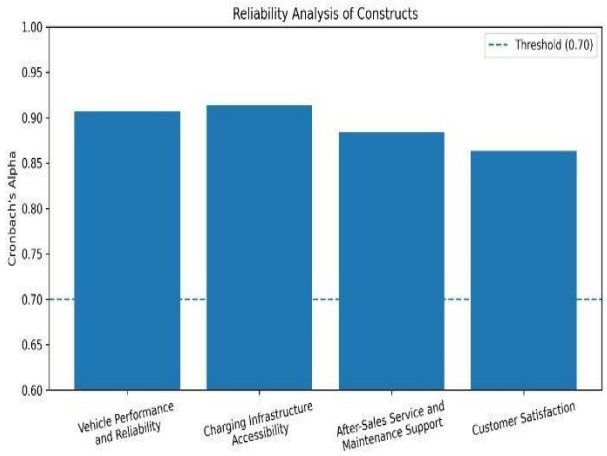
4. Results and Discussion

4.1 Reliability Analysis

Reliability analysis was conducted to assess the internal consistency of the constructs using Cronbach's Alpha coefficient. The results are presented in Table 1.

Table 1. Reliability Analysis

Constructs	Number of Items	Cronbach's Alpha
Vehicle Performance and Reliability	7	0.907
Charging Infrastructure Accessibility	6	0.914
After-Sales Service and Maintenance Support	5	0.884
Customer Satisfaction	7	0.863



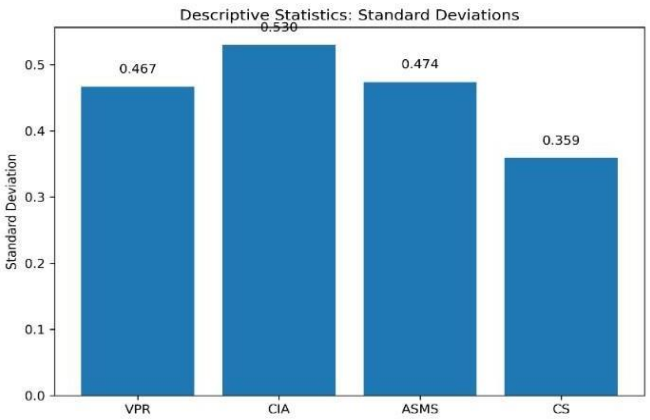
Therefore, the measurement scales exhibited satisfactory are presented in Table 2 and 3.internal consistency and reliability.

4.2 Descriptive Statistics and Correlation Analysis

Descriptive statistics were employed to examine the central tendency and dispersion of the study variables, The Cronbach's Alpha values ranged from 0.863 to 0.914, while Pearson correlation analysis was performed to exceeding the recommended threshold value of 0.70. assess the relationships among the constructs. The results are presented in tables 2 and 3.

Table 2. Descriptive Statistics

Variables	Mean	Standard Deviation
Vehicle Performance and Reliability (VPR)	4.004	0.467
Charging Infrastructure Accessibility (CIA)	3.842	0.530
After-Sales Service and Maintenance Support (ASMS)	3.902	0.474
Customer Satisfaction (CS)	3.936	0.359

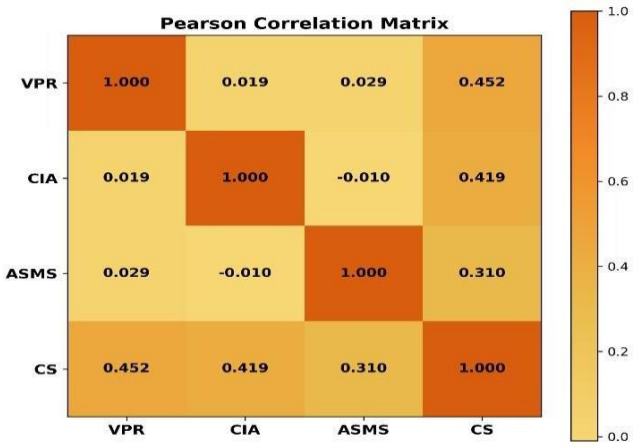


The descriptive statistics indicate that respondents exhibited favourable perceptions towards electric two-wheelers. Vehicle Performance and Reliability recorded the highest mean score (Mean = 4.004), followed by Customer Satisfaction (Mean = 3.936), After-Sales Service and Maintenance Support (Mean = 3.902), and Charging Infrastructure Accessibility (Mean = 3.842). The relatively low standard deviation values indicate consistency in respondents' opinions.

Table 3. Pearson Correlation Matrix

Variables	VPR	CIA	ASMS	CS
VPR	1.000			
CIA	0.019	1.000		
ASMS	0.029	-0.010	1.000	
CS	0.452**	0.419**	0.310**	1.000

Note: Correlation is significant at p < 0.01.



The correlation analysis reveals positive associations between all independent variables and Customer Satisfaction. Vehicle Performance and Reliability exhibited the strongest positive correlation with Customer Satisfaction (r = 0.452), followed by Charging Infrastructure Accessibility (r = 0.419) and After-Sales Service and Maintenance Support (r = 0.310). These findings indicate that improvements in vehicle performance, charging infrastructure, and service support are associated with higher levels of customer satisfaction.

4.3 Regression Analysis and Hypothesis Testing

Multiple regression analysis was performed to examine the influence of Vehicle Performance and Reliability, Charging Infrastructure Accessibility, and After-Sales Service and Maintenance Support on Customer Satisfaction. The results are presented in Tables 4, 5, and 6.

Table 4. Model Summary

R	R Square	Adjusted R Square
0.681	0.464	0.458

The model explains approximately 46.4% of the variation in Customer Satisfaction, indicating a satisfactory explanatory power.

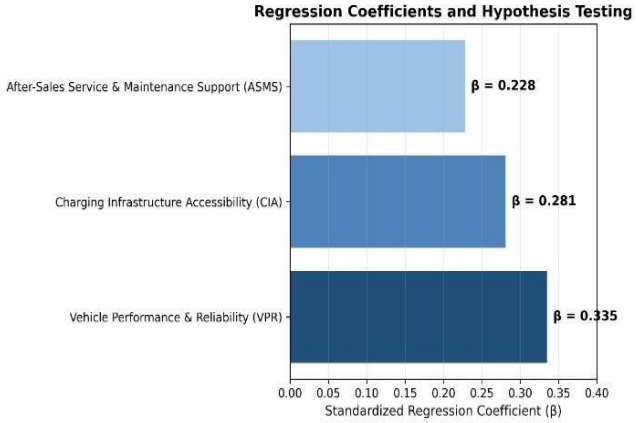
Table 5. ANOVA Results

Source	F-value	Significance
Regression Model	82.413	0.000

The F-statistics is significant at the 1% level (p<0.001), indicating that the regression model is statistically significant and suitable for explaining Customer Satisfaction

Table 6. Regression Coefficients and Hypothesis Testing

Variables	β	t-value	P value	Decision
Constant	0.627	2.903	0.004	Significant
Vehicle Performance and Reliability (VPR)	0.335	7.624	0.000	H11 Supported
Charging Infrastructure Accessibility (CIA)	0.281	6.241	0.000	H12 Supported
After-Sales Service and Maintenance Support (ASMS)	0.228	5.173	0.000	H13 Supported



The regression results indicate that Vehicle Performance and Reliability exerts the strongest influence on Customer Satisfaction (β = 0.335, p < 0.001), followed by Charging Infrastructure Accessibility (β = 0.281, p < 0.001) and After-Sales Service and Maintenance Support (β = 0.228, p < 0.001). Therefore, all alternative hypotheses (H11, H12, and H13) are accepted, while the corresponding null hypotheses are rejected.

4.4 Discussion of Findings

The findings of the study reveal that Vehicle Performance and Reliability is the most influential determinant of Customer Satisfaction among electric two-wheeler users. This result is consistent with the studies of Dua et al. (2021), Cruz-Jesus et al. (2023), Liang et al. (2024), and Zhao et al. (2023), which emphasized the importance of battery performance, driving range, and operational reliability in enhancing customer experiences.

Charging Infrastructure Accessibility was also found to significantly influence Customer Satisfaction. This finding corroborates the studies of Kumar et al. (2021), Jia and Chen (2021), and Rempel et al. (2024), which reported that the availability and reliability of charging facilities reduce range anxiety and improve customer confidence.

Furthermore, After-Sales Service and Maintenance Support exhibited a positive and significant impact on Customer Satisfaction. The findings are in line with those of Balinado et al. (2021), Chawla and Singh (2022), and Gupta and Raman (2022), which highlighted the importance of service quality and maintenance support in improving customer experiences and loyalty.

Overall, the results indicate that customer satisfaction with electric two-wheelers is significantly influenced by technical performance, charging infrastructure, and postpurchase service quality. These findings provide empirical evidence regarding the determinants of customer satisfaction in emerging markets and contribute to the growing literature on sustainable mobility.

5. Conclusion and Implications

Conclusion

The present study examined the determinants of customer satisfaction with electric two-wheelers in emerging markets by investigating the influence of Vehicle Performance and Reliability, Charging Infrastructure Accessibility, and After-Sales Service and Maintenance Support. Using primary data collected from 290 respondents comprising college-going students and office-going individuals, the study employed reliability analysis, descriptive statistics, Pearson correlation, and multiple regression techniques to test the proposed relationships. The findings revealed that all three independent variables positively and significantly influence Customer Satisfaction. Among the determinants, Vehicle Performance and Reliability emerged as the strongest predictor, followed by Charging Infrastructure Accessibility and After-Sales Service and Maintenance Support. The results indicate that improvements in battery performance, driving quality, charging convenience, and service support significantly enhance consumers' overall satisfaction with electric two-wheelers. The study contributes to the existing literature by providing empirical evidence from an emerging market perspective and extends the understanding of customer satisfaction in the electric mobility sector. The findings suggest that customer satisfaction is not merely influenced by technological attributes but also by supporting infrastructure and post-purchase services, which collectively determine consumers' experiences and long term acceptance of electric two-wheelers.

Theoretical Implications

The present study contributes to the growing body of literature on electric mobility and customer satisfaction by examining the combined influence of Vehicle Performance and Reliability, Charging Infrastructure Accessibility, and After-Sales Service and Maintenance Support. Unlike previous studies that primarily focused on adoption intentions, the present study emphasizes post purchase experiences and customer satisfaction among electric two-wheeler users. Furthermore, the study provides empirical evidence from an emerging market context and enriches the literature concerning sustainable mobility and consumer behavior.

Managerial Implications

The findings of the study offer several implications for electric vehicle manufacturers and service providers. First, manufacturers should prioritize improving battery performance, driving range, and vehicle reliability to enhance customer satisfaction. Second, companies and charging service providers should focus on expanding charging infrastructure and ensuring the reliability of charging facilities to minimize range anxiety and increase consumer confidence. Third, automobile companies should strengthen their after-sales service networks by ensuring timely maintenance, efficient complaint resolution, and adequate availability of spare parts. These initiatives can improve customer experiences and foster long-term relationships with consumers.

Policy Implications

The findings also provide valuable implications for policymakers. Government agencies should continue promoting electric mobility through supportive policies and investments in charging infrastructure. Public-private partnerships may facilitate the development of accessible charging networks across urban and semi-urban areas. Furthermore, regulatory authorities should encourage manufacturers to establish efficient after-sales service facilities and improve service quality standards. Such initiatives will enhance customer confidence and contribute to the sustainable growth of the electric vehicle ecosystem.

6. Limitations and Future Research Directions

Despite its contributions, the study has certain limitations. First, the study considered only three determinants of customer satisfaction, whereas other factors such as environmental concern, perceived value, government

incentives, and brand image may also influence customer experiences. Second, the study focused on 290 respondents comprising college-going students and office-going individuals, which may limit the generalizability of the findings. Third, the cross-sectional nature of the study restricts the examination of changes in customer perceptions over time.

Future research may incorporate additional variables and larger sample sizes to obtain more comprehensive insights. Comparative studies between rural and urban consumers and between different emerging economies may also provide valuable findings. Furthermore, advanced analytical techniques such as Structural Equation Modeling (SEM) and mediation or moderation analyses may be employed to develop more comprehensive theoretical frameworks.

Acknowledgement

The authors express their sincere gratitude to all respondents who participated in the survey and provided valuable insights for the successful completion of this study. The authors also acknowledge the support and guidance received during the conduct of this research.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this research.

Funding Statement

The authors received no specific financial support for the research, authorship, and publication of this article.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request..

REFERENCES

1. Ampornklinkaew, C., & Yoopetch, C. (2025). Antecedents of electric-vehicle repurchase intention: The application of customer commitment and anticipated regret. Sustainable Futures, 10, 100913. https://doi.org/10.1016/j.sftr.2025.100913 (MDPI)

2. Amro, A. (2025). Service quality and price perception as catalysts for customer brand engagement and loyalty in the automotive sector. Cogent Business & Management, 12(1). https://doi.org/10.1080/23311975.2025.2514939

3. Balinado, J. R., Prasetyo, Y. T., Young, M. N., Persada, S. F., Miraja, B. A., & Perwira Redi, A. A. N. (2021). The effect of service quality on customer satisfaction in an automotive after-sales service. Journal of Open Innovation: Technology, Market, and Complexity, 7(2), Article 116. https://doi.org/10.3390/joitmc7020116

4. Bhatti, A. R., Salam, Z., Aziz, M. J. B. A., Yee, K. P., & Ashique, R. H. (2024). Electric vehicle charging stations and the employed energy management schemes: A comprehensive review. SN Applied Sciences, 6, 191. https://doi.org/10.1007/s42452-024-06190-9

5. Chawla, B. K., & Singh, B. (2022). Impact of supportive after-sales services on customer satisfaction in automobile industry. Orissa Journal of Commerce, 43(4), 59–72. https://doi.org/10.54063/ojc.2022.v43i04.05

6. Cruz-Jesus, F., Figueira-Alves, H., Tam, C., Pinto, D. C., Oliveira, T., & Venkatesh, V. (2023). Pragmatic and idealistic reasons: What drives electric vehicle drivers' satisfaction and continuance intention? Transportation Research Part A: Policy and Practice, 170, 103626. https://doi.org/10.1016/j.tra.2023.103626 (MDPI)

7. Dua, R., Edwards, A., Anand, U., & Bansal, P. (2024). Are American electric vehicle owners quitting? Transportation Research Part D: Transport and Environment, 133, 104272. https://doi.org/10.1016/j.trd.2024.104272 (MDPI)

8. Dua, R., Hardman, S., Bhatt, Y., & Suneja, D. (2021). Enablers and disablers to plug-in electric vehicle adoption in India: Insights from a survey of experts. Energy Reports, 7, 3171–3188. https://doi.org/10.1016/j.egyr.2021.05.025

9. Feng, F., Yan, K., Zou, J., Guo, Q., Gao, L., & Zhan, X. (2025). The differences and similarities in factors affecting user satisfaction and repurchase intention on battery electric vehicles across cities: Comparative evidence from Beijing and Shenzhen in China's postsubsidy era. Research in Transportation Business & Management, 59, 101293. https://doi.org/10.1016/j.rtbm.2025.101293 (MDPI)

10. García-Salirrosas, E. E., Acevedo-Duque, Á., Marin-Chaves, V., & Del Río-Rama, M. D. C. (2022). Purchase intention and satisfaction of online shop users in developing countries during the COVID-19 pandemic. Sustainability, 14(10), 6302. https://doi.org/10.3390/su14106302

11. Goic, M., Levenier, C., & Montoya, R. (2021). Drivers of customer satisfaction in the grocery retail industry: A longitudinal analysis across store formats. Journal of Retailing and Consumer Services, 60, Article 102505. https://doi.org/10.1016/j.jretconser.2021.102505

12. Gupta, R., & Raman, S. (2022). After-sale service experiences and customer satisfaction: An empirical study from the Indian automobile industry. Research in Transportation Business & Management, 45, Article 100873.

https://doi.org/10.1016/j.rtbm.2022.100873

13. Hao, W., Zhou, S., & Zhang, Z. (2025). Examining the impact of charging infrastructure on electric vehicle diffusion. Transportation Research Record, 2679(5). https://doi.org/10.1177/03611981241304762

14. Hasanah, S. R. (2025). Customer experience and customer loyalty: The mediating role of customer engagement. Journal of Management and Business Insight, 3(2), 26–40. https://doi.org/10.12928/jombi.v3i2.1778

15. Jia, W., & Chen, T. D. (2021). Are individuals' stated preferences for electric vehicles consistent with real-world EV ownership patterns? Transportation Research Part D: Transport and Environment, 93, 102728. https://doi.org/10.1016/j.trd.2021.102728

16. Khan, H. A. U., Price, S., Avraam, C., & Dvorkin, Y. (2021). Inequitable access to EV charging infrastructure. iScience, 24(11), 103240. https://doi.org/10.1016/j.isci.2021.103240

17. Kumar, R. R., Alok, K., & Jain, P. K. (2021). Promoting electric vehicle adoption: Who should invest in charging infrastructure? Transportation Research Part E: Logistics and Transportation Review, 149, 102295. https://doi.org/10.1016/j.tre.2021.102295

18. Kwon, Y., Son, S., & Jang, K. (2020). User satisfaction with battery electric vehicles in South Korea. Transportation Research Part D: Transport and Environment, 82, 102306. https://doi.org/10.1016/j.trd.2020.102306 (Seminal EV satisfaction paper; retain as supporting literature) (KAIST)

19. Liang, C., Zhang, Y., & Wang, Z. (2024). Unveiling consumer satisfaction and its driving factors of electric vehicles through online reviews and machine learning. Humanities and Social Sciences Communications, 11, 1545. https://doi.org/10.1057/s41599-024-04120-z

20. Manyanga, W., Makanyeza, C., & Muranda, Z. (2022). The effect of customer experience, customer satisfaction and word of mouth intention on customer loyalty: The moderating role of consumer demographics. Cogent Business & Management, 9(1), 2082015. https://doi.org/10.1080/23311975.2022.2082015

21. Molinillo, S., Aguilar-Illescas, R., AnayaSánchez, R., & Carvajal-Trujillo, E. (2022). The customer retail app experience: Implications for customer loyalty. Journal of Retailing and Consumer Services, 65, Article 102842. https://doi.org/10.1016/j.jretconser.2021.102842

22. Mugova, S. (2025). The mediating role of customer satisfaction in fostering long-term customer loyalty in a multi-channel retail banking environment. Cogent Business & Management, 12(1), Article 2514937. https://doi.org/10.1080/23311975.2025.2514937

23. Nasri, S., et al. (2025). Global analysis of electric vehicle charging infrastructure and sustainable energy integration. World Electric Vehicle Journal, 16(4), 194. https://doi.org/10.3390/wevj16040194

24. PhamThi, H., & Ho, T. N. (2024). Understanding customer experience over time and customer citizenship behavior in retail environment: The mediating role of customer brand relationship strength. Cogent Business & Management, 11(1), Article 2292487. https://doi.org/10.1080/23311975.2023.2292487

25. Phan Thi Hang, N., Nguyen, T. T., & Nguyen, H. T. (2024). Service quality, customer satisfaction and loyalty: A case study in Vietnamese SMEs. Cogent Business & Management, 11(1), 2377769. https://doi.org/10.1080/23311975.2024.2377769

26. Rehman, S. U., Bresciani, S., Yahiaoui, D., & Klieštik, T. (2024). Customer satisfaction leading the intention to adopt battery electric vehicles with the moderating role of government support and status symbol. Journal of Cleaner Production, 449, 142371. https://doi.org/10.1016/j.jclepro.2024.142371 (IJISRT)

27. Rempel, D., Cullen, C., Matteson Bryan, M., & Cezar, G. V. (2024). Reliability of open public electric vehicle direct current fast chargers. Human Factors, 66(5), 1185–1198. https://doi.org/10.1177/00187208231215242

28. Sheu, P. L., Hsieh, C. M., & Chou, Y. H. (2022). Relationship of service quality dimensions, customer satisfaction and loyalty in digital service environments. Applied Economics, 54(40), 4597–4607. https://doi.org/10.1080/00036846.2021.2008593

29. Tiutiu, M., et al. (2025). The impact of online customer service and store features on customer experience and revisit intention. Humanities and Social Sciences Communications, 12. https://doi.org/10.1057/s41599-025-04383-0

30. Wang, Y. Y., Wang, Y., & Li, L. (2021). Consumer preferences for electric vehicle charging infrastructure based on the text mining method. Energies, 14(15), 4598. https://doi.org/10.3390/en14154598 (MDPI)

31. Zaino, R., Ahmed, V., Alhammadi, A. M., & Alghoush, M. (2024). Electric vehicle adoption: A comprehensive systematic review of technological, environmental, organizational and policy impacts. World Electric Vehicle Journal, 15(8), 375. https://doi.org/10.3390/wevj15080375

32. Zhao, D., Gao, J., & Liu, N. (2023). Exploring user satisfaction and improvement priorities in electric vehicle segments. Transportation Research Part D: Transport and Environment, 125, 103996. https://doi.org/10.1016/j.trd.2023.103996