Research Paper

EPRA International Journal of Economic and Business Review-Peer Reviewed Journal
Volume - 13, Issue - 11, November 2025 | e-ISSN: 2347 - 9671| p- ISSN: 2349 – 0187

SJIF Impact Factor (2025): 8.862 || ISI Value: 1.433 || Journal DOI URL: https://doi.org/10.36713/epra2012

MARKETING DRIVERS AND CONSUMER LOYALTY IN THE ADOPTION OF ELECTRIC AND HYBRID ELECTRIC VEHICLES IN KERALA

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ABSTRACT DOI No: 10.36713/epra24838 Article DOI: https://doi.org/10.36713/epra24838

In order to address environmental issues and promote sustainable transportation, the shift to electric vehicles (EVs) and hybrid electric vehicles (HEVs) is essential. The purpose of this study is to assess EV and HEV marketing tactics in the state of Kerala, which is known for its fast urbanisation and environmental awareness. This study will examine the marketing Drivers and the elements affecting customer happiness and loyalty, and the primary drivers of EV and HEV adoption through a thorough literature analysis and a mixed-methods approach combining surveys and interviews. Analysing marketing tactics, looking into consumer happiness metrics, looking into loyalty intentions, and figuring out the main adoption trigger are some of the goals. The expected benefits include practical information for optimising marketing strategies, increasing consumer satisfaction, promoting loyalty, and hastening the adoption of EVs and HEVs in Kerala. This study adds to our understanding of consumer behaviour in the context of sustainable transportation and lays the groundwork for future research in this expanding topic.

KEY WORDS: ***Hybrid Electric Vehicles, Marketing Strategies, Consumer Satisfaction***

INTRODUCTION

The car industry is being changed to reduce the emissions, environmental damages, and reliance on fossil fuels. This shift to sustainable mobility is being led by Electric Vehicles (EVs) and Hybrid Electric Vehicles (HEVs) due to the combined efforts of governments across the entire world and the technology, along with advertising. India is in favor of the transition towards electric vehicles (EVs) and hybrid electric vehicles (HEVs) through a number of special programs and initiatives. The most significant ones are Faster Adoption and Manufacturing of Electric Vehicles (FAME) scheme and the National Electric Mobility Mission Plan (NEMMP). Such programs also involve incentives and support to both manufacturers and consumers, and the idea of reducing the original price of EVs and HEVs and initiate the demand. Kerala has several factors that put it in a favorable position to embrace EV and HEV technology adoption. They are high population density, and high urbanization, increased pollution level, increased economy, and environmental consciousness among the inhabitants, and availability of amiable government policies. All this is put together to create a favorable environment towards the development of electric cars and hybrid cars in the state. In addition, the latest trends and advancements in battery technology are also helping to speed up the consumption of EVs and HEVs among consumers. These shifts in such critical areas as the range of driving, a faster process of charging the batteries, and the overall quality of the electric vehicles are helping to conquer the fears of the consumers and make EVs and HEVs a more viable and even appealing option to the drivers. As the technology of batteries keeps on changing, there are more chances that more consumers will adopt these vehicles in the near future. The EVs and HEVs have advanced marketing concepts, which include convenience, reliability, performance, and prestige despite eco-friendliness (Nykvist and Nilsson, 2015).Marketers have turned to exploitation of the consumer aspirations and this has made these vehicles become lifestyle upgrades and depict innovation, status and greenness. It is an indication of the increasing need among the consumers to possess not only the functional benefits but also the symbolic value (Egbue and Long, 2012). The paper is a discussion on the marketing of EVs and HEVs in Kerala where it examines the consumer behavior and satisfaction and loyalty, and drivers of the adoption.

Marketing Strategies for EVs and HEVs

By the year 2025, EV and HEV marketing had moved away to be focused on environmental sustainability to an overall approach that covered the aspects of economics, technology and policy. Even as questions of initial cost, range anxiety, and charging infrastructure remain, marketers are highlighting lifetime cost savings, lower costs of maintenance and fuel efficiency as some of the critical economic advantages (IBEF,

2025; S&P Global, 2025). In the modern context, digital marketing has become of utmost significance in the case of automotive manufacturers. Such firms are currently capitalising on numerous online strategies to marketing of electric cars. A major aspect of this strategy is the use of social media campaigns where the automakers get a chance to communicate with potential customers and respond to their questions. Diversified online advertising is a way of guaranteeing that the correct message is conveyed to the correct group that enhances the effectiveness of the marketing campaign. Virtual tours and online configurators are examples of interactive content that enables a consumer to experience in a more immersive way and thus more clearly grasp the advantages of EVs. These online efforts can help to demystify the technology in electric cars, reducing the worries of customers of the range, charging and performance of a car. Moreover, the increased activities are also focused on the creation of communities of EV supporters, which transforms happy customers into ardent proponents of a brand (Wall Street Journal, 2025). The role of governments in the support of electric vehicle adoption is significant in the world. These marketing strategies that are used by the automakers have been strengthened by a series of supportive policies. Policies like the provision of public charging stations are effective in infrastructure development to ensure that it is convenient to own an EV. Such governmental efforts improve the validity of corporate marketing messages, which prove the desire to make electric vehicles extensive (Times of India, 2025). The automakers are also focusing not on environmental advantages only, but on technological solutions like longer ranges, quick charging, and online communication, which attracts a wider range of the demographic base (Reuters, 2025). Furthermore, more targeted programs such as battery renting programs and quick-charging pledges connect marketing vows with a physical solution to the consumers, and point directly at adoption reluctance (Financial Times, 2025). Therefore, by 2025, the EV and HEV marketing has transformed into an integrated model, merging the consumer education and digital interaction, product innovation, and alignment with regulations as a means of propelling the global shift in mobility towards sustainability. The recent research states that the buyers in India are more likely to consider product reliability, safety, and high functionality in their purchasing decisions, innovation, and performance significantly contribute to the development of long-term brand loyalty (Deloitte, 2025). Nevertheless, the inability to provide post purchase service can also be a major loyalty killer with the recurring problems of delays in repair service, unavailability of service centers and failure to support battery or software problems as a major frustrator to customers (Economic Times, 2025).The difference between the expectation of hassle-free mobility and the reality of after-sales service may be further emphasized by negative ownership experiences aired in consumer forums and through social media (Reddit, 2025). Such results imply that although environmental consciousness, economic benefits, and social status remain motivators of the first adaption, the lasting commitment in the EV and HEV market is dependent on the continuous post-purchase satisfaction, efficient service support, and the development of a clear ownership experience.

SIGNIFICANCE OF THE STUDY

Electric and hybrid vehicles play a significant role in reducing environmental problems and creating new ways of moving in cities, especially in areas such as Kerala. This paper reviews how effective marketing strategies have been in shaping consumer perception, satisfaction and loyalty towards EVs and HEVs in Kerala. It has practical implications to reduce emissions, save money for households and improve health outcomes. Ultimately, this study hopes to contribute to more sustainable mobility in emerging markets by providing evidence-based guidance for decision-makers, marketers and manufacturers, which can be used to help build consumer confidence and reach for a sustainable, economically viable, and socially inclusive transportation system. This study provides an analysis of sustainable mobility, through a regional market perspective. Kerala's market share for EVs increased to above 11% and more than 230,000 EVs were registered between 2022 and 2025 (ETAuto.com). Despite these developments, EV sales fell from 75,808 units sold in 2023 to 60,345 units in 2024, due to factors including high prices, red tape, a lack of charging infrastructure and higher taxes (New Indian Express, 2025) . National EV sales could potentially hit 5.9 million by 2040, which could double to 18-20% by 2027 (Bloomberg NEF/Economic Times Auto, 2025) with hybrids following suit (HSBC Global Research, 2025; Times of India, 2025). Considering the overlap of fast-track benefits, infrastructure constraints, and policy reactions, this study provides regionally specific insight for policymakers and marketers in Kerala's distinctive EV vechicles.

STATEMENT OF THE PROBLEM

The transition from internal combustion engine (ICE) vehicles to electric vehicles (EVs) and hybrid electric vehicles (HEVs) has gained significant traction worldwide. In India, the Government of Kerala has been proactive in promoting green mobility, with various subsidies and policy interventions. Despite these efforts, the pace of adoption remains uneven. Consumers are often constrained by perceptions of high upfront costs, inadequate charging infrastructure, and uncertainties regarding performance and resale value. Moreover, while promotional campaigns and incentives are rolled out aggressively, their effectiveness in shaping consumer perception and driving adoption remains underexplored. This raises the need to analyze whether sales promotion strategies and satisfaction levels significantly influence consumer loyalty and adoption of EVs

OBJECTIVES OF THE STUDY

The objectives of the present study are:

1. To investigate the influence of sales promotion tactics on consumers' perceptions of EVs and HEVs in the marketing stage.
2. To examine the key drivers of customer satisfaction among EV and HEV users.
3. To analyze the factors affecting consumers' intentions to remain loyal to EV and HEV brands.
4. To identify the most significant determinant influencing the adoption of EVs and HEVs in Kerala.

HYPOTHESES OF THE STUDY

Based on the objectives and review of literature, the following hypotheses were formulated:

H1: Sales promotion tactics significantly influence consumers' perceptions of EVs and HEVs.

H2: Customer satisfaction is significantly associated with the usage of EVs and HEVs.

H3: Consumers' loyalty intentions are significantly influenced by satisfaction and perception of EVs and HEVs.
H4: A specific set of factors (sales promotion, satisfaction, and loyalty) significantly predict the adoption of EVs and HEVs.

RESEARCH DESIGN AND METHODOLOGY

The Present Study Takes a Descriptive Survey Research design on the consumers of passenger cars in Kerala. The population of the study is the EV/HEV owners in three geographical areas (Calicut, North, Kochi, Central and Trivandrum, South). Two hundred people were sampled with equal regional and brand representation (Tata EV, Hyundai EV, MG Hector EV, Toyota Hyryder HEV and Maruti HEV). Structured questionnaires were used to gather data which was analyzed with statistical procedures such as correlation analysis, regression analysis and factor analysis.

LITERATURE REVIEW

The intentions and behaviors of EV and HEV adoption have been extensively studied, and scholars have focused on the connections between marketing tactics, consumer behaviour, satisfaction, and loyalty. According to research, the conventional selling factors of EVs and their environmental credentials are quickly losing ground to the new selling points, which are affordability, performance, safety, and ease of integration into daily life. Together, the studies indicate that the transition to EVs and HEVs requires a diversified marketing approach which considers not only the environmental benefits but also customer satisfaction, economic worth, technological reliability and cultural suitability. The present research contributes to the body of knowledge about how targeted marketing strategies can facilitate sustainable modes of mobility and enhance customer loyalty particularly in a context such as Kerala where urban density and unique socioeconomic conditions play an important role. Bohnsack, Ciulli and Kolk (2020) argue that EV manufacturers are building customer trust and profit-oriented business models that are required to balance sustainability and profitability. However, as discussed by Hardman, Chandan, Tal and Turrentine (2021), global adoption drivers such as incentives, better performance and development of infrastructures are changing the marketing narratives.Also, the significance of consumer psychology has been addressed. While Nunes and Bennett (2020) reveal campaigns that offer economic and technological benefits appeal to a broader consumer base than environmental ones, Rezvani, Jansson and Bengtsson (2020) confirm that social norms, environmental values and lifestyle compatibility play a critical role in consumer intentions; Chua and Tay (2021) show that after-sales service, charging convenience and vehicle reliability are key in repurchase intentions, thus driving long term loyalty. Further evidence on the dynamics of adoption is based on empirical studies of the behaviour of adoption within specific regions, In China and India, government support and trust in technology affect how satisfied people are with the products and how often they use them. According to Khurana and Jain, 2022, challenges include lack of infrastructure for charging and an additional cost in India while the possibilities include internet marketing, financing choices as young populations are more demanding. Sierzchula and van den Hoed (2021) provide international comparisons of local socioeconomic situations that demonstrate the influence of local characteristics (e.g., infrastructure availability and brand trust) on adoption and brand loyalty. Research results reveal that EV consumers are recommended to pay more attention to the performance of the vehicle and the reliability of the battery, as they are directly related to the satisfaction level for consumers (Zhang & Zhao, 2023). Moreover, with the advent of influencer marketing and internet platforms transforming consumer-brand interactions and improving transparency and post-purchase assistance in the EV industry in India, consumer satisfaction and trust are trending upwards (Gupta and Singh 2024).

Research Gaps :The study was limited to Kerala, and comparisons were made from the south, central and north regions of Kerala. Although this gives a good snapshot at the state level, consumer adoption trends may vary within Indian states due to differences in socioeconomic, cultural, and infrastructural factors. Further research can be done on a pan-India level or cross state level, which would lead to a more results for the impact of EV adoptions. The sample size for this study is 200 respondents, which may not reflect the entire consumer base in Kerala, but is still a valuable piece of data. The findings were derived from self-reported responses to a survey, which are subject to response set and other biases that can affect social desirability. It also examined marketing strategies, consumer satisfaction, consumer loyalty and adoption accelerators; however, it did not consider other critical factors such as sociocultural norms, psychological ownership and technical trust. As briefly mentioned by Bhatnagar and Rathore (2021), cross-state analyses would enable taking a broader look at the factors that affect EV uptake in various regions. Second, the sample of 200 respondents is representative, but it might not be representative enough to reflect the diversity of the consumer base in Kerala, especially with reference to urban, semi-urban and rural population. The larger and stratified is required when the external validity is greater (Gupta and Arora, 2020). Third, self-report survey data compounds the hazard of response bias and social desirability that can be removed by using longitudinal designs or actual data of customer purchase and customer usage (Podsakoff et al., 2003).Researchers have previously studied EV adoption through a technological and environmental sustainability perspective; however, a specific marketing and consumer behaviour perspective does not exist. The following research gaps identified with current study from the previous studies.

1. Less research has been conducted to connect promotional offerings to consumer perception.
2. A lack of research on the aspects of customer satisfaction in EV/HEV adoption.
3. Empirical data on the development of loyalty within the EV/HEV business is missing.
4. Lack of an overall analysis of sales promotion, satisfaction, loyalty and adoption.

Statistical Analysis & Interpretation

The study was guided by four major hypotheses developed from the objectives. In this section, a statistical analysis of the survey of consumers (n=200) who buy EV/HEV in South, Central, and North Kerala is provided. Each aim was tested by correlation and regression, and a Multiple Regression Analysis was conducted to establish the joint effect of marketing activities on consumer uptake.

1. Descriptive Statistics (Sample Profile)

Table 1.

Regional and Brand-wise Distribution of Respondents (N = 200)

Region	Tata EV	Hyundai EV	MG Hector EV	Toyota Hyryder HEV	Maruti HEV	Total
Calicut	14	13	13	13	14	67
Kochi	13	14	13	13	13	66
Trivandrum	13	13	14	14	13	67
Total	40	40	40	40	40	200

Interpretation: The sample is equally balanced across regions and brands, ensuring representativeness. Respondents were mostly middle-class families' car owners using EVs/HEVs for daily commute and family travel.

Objective 1 To investigate the influence of sales promotion tactics on consumers' perceptions of EVs and HEVs in the marketing stage.

H1: Sales promotion tactics significantly influence consumers' perceptions of EVs and HEVs.

Table 2.

Correlation and Regression between Sales Promotion and Consumer Perception

Analysis	Value	Sig. (p)	Interpretation
Pearson Correlation (r)	0.62	< 0.01	Strong, positive relationship
Regression Coefficient (β)	0.58	< 0.001	Sales promotion significantly improves perception
t-value	8.12	< 0.001	Statistically significant

Interpretation: The use of attractive sales promotion schemes (exchange bonus, charging incentives and low-interest loans) is one of the main factors contributing to positive consumer perceptions of EVs/HEVs in Kerala. H1 is accepted, Sales promotion strategy greatly affects the perception of the consumers towards EVs and HEVs.

Objective 2 – Key Drivers of Customer Satisfaction

H2: Customer satisfaction is significantly associated with the usage of EVs and HEVs.

Table 3

Factor Analysis & Regression of Customer Satisfaction

Factor	β	Sig. (p)	Importance Rank
Driving Performance	0.41	< 0.01	1
Cost Efficiency	0.35	< 0.05	2
After-sales Service & Infrastructure	0.28	< 0.05	3
Technology & Features	0.21	0.07 (ns)	4

Interpretation: Customers of Kerala place the highest importance on performance and cost-efficiency then on after-sales support. Technology attributes are valued but not critical to high satisfaction. The relationship is moderate to strong and statistically significant. Well below.05 (regression) indicates that there is strong positive impact of customer satisfaction on adoption intention. **Conclusion:** H2 is **accepted**. Customer satisfaction has a significant positive relationship with adoption/use of EVs and HEVs.

Objective 3 – Factors Affecting Consumer Loyalty Intention

H3: Consumers' loyalty intentions are significantly influenced by satisfaction and perception of EVs and HEVs.

Table 4.

Regression Analysis of Loyalty Intention

Variable	β	Sig. (p)	Interpretation
Customer Satisfaction	0.49	< 0.001	Strongest driver of loyalty
Service Quality	0.32	< 0.01	Significant contributor
Perception	0.27	< 0.05	Moderate effect
Sales Promotion	0.12	> 0.05 (ns)	Not significant

Customer loyalty stems more from satisfaction and after-sales service than from promotions. Consistent service quality and reliability are key to repeat business and positive recommendations. H3 is supported, as satisfaction, service quality, and perception significantly drive consumer loyalty intention.

Objective 4 – Most Significant Factor Affecting Adoption

H4: A specific set of factors (sales promotion, satisfaction, and loyalty) significantly predict the adoption of EVs and HEVs.

Table 5

Stepwise Regression of Adoption Intention

Variable	β	Sig. (p)	Importance Rank
Vehicle Performance	0.42	< 0.001	1
Price Sensitivity (negative)	-0.31	< 0.01	2
Charging Infrastructure	0.28	< 0.05	3
Promotion	0.10	> 0.05 (ns)	4
Awareness	0.09	> 0.05 (ns)	5

The stepwise regression analysis depicts that there is a significant model to predict the adoption intention. Performance of vehicles is the best predictor (b = 0.42, p <. 001) followed by price sensitivity (b = -0.31, p <). 01) and charging facilities (b = 0.28, p <. 05). Promotion (b = 0.10, p > .05) and awareness (b = 0.09, p >.05) have no significant predictions of adoption. The results show that driving experience, cost, and charging availability are the most critical factors of EV/HEV adoption in comparison with marketing and overall level of knowledge. H4 is accepted. Its idea is supported by a set of criteria, particularly vehicle performance, price sensitivity, and charging infrastructure that is very significant on the intention to adopt. Task promotion and awareness creation are not major forces in Kerala.

Multiple Regression – Overall Factors Influencing Adoption

A multiple regression analysis was performed to give a Overall evaluation of the influencing factors in adoption of EVs and HEVs. Adoption intention was the dependent variable and Sales Promotion, Customer Satisfaction, Service Quality, Price and cost efficiency, Charging Infrastructure, Brand Loyalty were the independent variables.

Table 6.

Multiple Regression Analysis of Factors Influencing Adoption of EVs and HEVs

Predictor Variable	β (Standardized)	t-value	Sig. (p-value)
Sales Promotion	0.18	2.05	0.041*
Customer Satisfaction	0.42	3.97	0.001***
Service Quality	0.27	2.61	0.010**
Price & Cost Efficiency	0.51	5.12	0.000***
Charging Infrastructure	0.39	3.04	0.003**
Brand Loyalty	0.24	2.33	0.021*

Model Summary: $R^2 = 0.64$, $F(6,193) = 57.11$, $p < 0.001$

$p < 0.05$, $p < 0.01$, $p < 0.001$

Interpretation: The multiple regression analysis was performed to investigate the relationship between Sales Promotion, Customer Satisfaction, Service Quality, Price and Cost Efficiency, Charging Infrastructure and Brand Loyalty and the adoption intention of EVs and HEVs in Kerala.

Model Significance

The model is significant: R 2 = 0.64, F(6,193) = 57.11, p = 0.001.64 percent of the variance in adoption intention can be predicted by these predictors, indicating that the overall model fits well.

Key Predictors

1. Price & Cost Efficiency (b = 0.51, p < 0.001):The greatest predictor of adoption. Consumers are very sensitive to prices; fuel/charging prices, and charging prices.
2. Customer Satisfaction (b = 0.42, p < 0.001): Strong satisfaction with prior EV/HEV experience is a strong predictor of adoption intention. This satisfaction is provided by performance, cost-efficiency, and technology features.
3. Charging Infrastructure (b = 0.39, p < 0.01): Presence and easy reach to credible charging stations has a positive impact on adoption decisions.
4. Service Quality (b = 0.27, p < 0.01): Quality of after sales service, maintenance and support moderately increases the intention to adopt.
5. Brand Loyalty (b = 0.24, p < 0.05): Loyal customers to a specific brand will be more willing to use new EV/HEV models belonging to the same brand.
6. Sales Promotion (b = 0.18, p < 0.05): Discounts, exchange bonuses or low interest financing are promotional offers with weak but statistically significant positive impacts on adoption.

Overall Interpretation

The key determinants of EV and HEV adoption in Kerala include price and cost efficiency, customer satisfaction and charging infrastructure. The secondary, supporting effect is on service quality, brand loyalty and sales promotion. Affordability, performance, and infrastructure are the three factors that consumers emphasize more when they are making decisions about the adoption of EVs and HEVs rather than promotional incentives

FINDINGS

1.Sales Promotion Effect: Sales promotion and EVs/HEVs consumer perception had a strong, positive correlation (r = 0.62,

$p < 0.01$). Regression has been applied to prove that the promotional strategies like exchange bonuses, charging incentives, and low-interest loans positively influenced these perceptions (($b = 0.58$, $p < 0.001$)). The results of factor analysis revealed that driving performance, cost efficiency, technology and features and after sales service and charging infrastructure were important dimensions of satisfaction of vehicle performance and vehicle charging have a significant influence on adoption. Regression indicated driving performance ($b = 0.41$, $p < 0.01$) and cost efficiency ($b = 0.35$, $p < 0.05$) to determine adoption closest and then came after-sales service ($b = 0.28$, $p < 0.05$).

2. Modifiers of Loyalty Intention: Customer satisfaction and quality of services are better placed to spearhead the EV and HEV brand loyalty as opposed to the promotions. There is a high influence of customer satisfaction ($b = 0.49$, $p < 0.001$) and quality of service ($b = 0.32$, $p < 0.01$). The medium effect was made on the perception ($b = 0.27$, $p < 0.05$), and promotional tactics alone did not significantly predict loyalty.

3. Meaningful Factors that Modify Adoption: The multiple regression analysis has found that there are six main factors that greatly affect adoption of EVs and HEVs, with six40 percent of the consumer intention to adopt being predicted. Price and cost efficiency was the best predictor among them ($b = 0.51$, $p < 0.001$), as it showed the significance of affordability and the long-term economic gains. The impact on customer satisfaction ($b = 0.42$, $p = 0.001$) and charging infrastructure ($b = 0.39$, $p = 0.003$) were also found to be strong with regard to the positive experiences with ownership and supportive facilities. Other significant but with comparatively less effect were service quality ($b = 0.27$, $p = 0.010$), brand loyalty ($b = 0.24$, $p = 0.021$), and sales promotion ($b = 0.18$, $p = 0.041$). In the multiple regression analysis, six factors came out as strong determinants of EV and HEV adoption that explains 64 percent of the variation. Price and cost efficiency ($b = 0.51$, $p = 0.001$), customer satisfaction ($b = 0.42$, $p = 0.001$) and charging infrastructure ($b = 0.39$, $p = 0.003$) were found to be the most significant predictors, though less significant than the above ones. Generally, the results indicate that economic factors, consumer content, and the presence of infrastructure are the most demanding factors in EV and HEV adoption in Kerala.

Recommendations

According to these results, many useful recommendations are developed. To start with, the marketing strategies must be location specific. North Kerala specifically will need to focus more on digital and experience advertising to keep up with the level of customer responsiveness experienced in South and Central Kerala. Meanwhile, affordable communication must be prioritised in all regions since it concerns all consumers.

1. Marketing Region Specific: Regional Marketing Strengthen digital marketing and more experiential test drives in North Kerala where the adoption readiness is relatively low.

2. To develop favorable impressions of the consumers, the automobile manufacturers need to continue providing attractive financial and non-financial returns (e.g. EMI, subsidies on charges, extended warranties, etc.).

3. The direct contribution to satisfaction and loyalty will be achieved by increasing the number of charging stations and after-sales service facilities in Kerala.

4. To satisfy the consumer expectations, manufacturers will have to highlight the performance, the range, and the benefits of vehicles in terms of their performance, in their marketing campaigns and in terms of their cost of maintenance.

CONCLUSION

The current study examined the marketing and consumer adoption process of Electric Vehicles (EVs) and Hybrid Electric Vehicles (HEVs) among the owners of passenger cars in three of the major urban areas in Kerala namely Calicut, Kochi and Trivandrum. This paper aimed to determine the marketing platforms and consumer adoption patterns of Electric Vehicles (EVs) and Hybrid Electric Vehicles (HEVs) in Kerala. Applying to the research the strong statistical models, tools of correlation, regression and multiple regression based on survey data of 200 respondents in South, Central and North Kerala gives in depth information on the determinants of marketing effectiveness, customer satisfaction, loyalty and adoption catalysts. The marketing approaches in Kerala are shifting their focus toward less ecological appeals to a more realistic, financially-based, and internet-based campaigns. Local and demographic differences also outline the necessity to address local and consumer-specific approaches. The paper has determined that advocacy and positive experience are more closely related to loyalty compared to brand attachment, which underscores the role of encouraging consumer trust and satisfaction.The analysis has revealed that the EV adoption process in Kerala can be optimally furthered by a combination of financial incentives, infrastructural support, digital interaction, and powerful after-sales services. Manufacturers and policymakers should understand that the adoption is a multidimensional process that needs the integrated approach balancing the interests of consumers with the objectives of sustainability. The reinforcement of the pillars would enable Kerala to move its transformation towards sustainable mobility at a faster pace and become one of the most successful states in the EV revolution in India.

The findings have a clear indication that the sales promotion tactics can be effective when developing the consumer perceptions. The use of incentives, including a lower level of interest rates, bonuses, and charging subsidies, had a positive impact on consumer awareness and attitudes to EVs and HEVs. Nevertheless, as much as these promotions generate short term attraction, this does not imply that they guarantee long term consumer loyalty. This result is consistent with the existing body of marketing research that argues that loyalty is better entrenched in the post purchase satisfaction and not pre purchase incentives.Customer satisfaction was determined to be multidimensional, which was affected by driving performance, cost effectiveness, technology and features as well as after sales support. Among them, driving performance and cost efficiency proved to be the most important determinants. This emphasizes the fact that adoption of EV and HEV is not due to environmental awareness or marketing influence but rather functional and economic value perceptions. Kerala consumers like other developing economies would want to have vehicles that are innovative and practical at the same time.Customer satisfaction and service quality were most associated with loyalty intentions. This does not mean that manufacturers and dealers should solely depend on intensive promotional programs, they have to embark on long term service networks, dependable charging infrastructure and uniform quality of ownership experience. The loyalty is based on the trust, convenience and value money and not on the short-

term promotional benefits.Adoption analysis also indicated performance of the vehicle, affordability and charging infrastructure as the most important factors that affect the ultimate purchase by the consumers. Sensitivity to price is still a significant obstacle and this implies that the government can help through tax rebates, subsidies and easy financing to hasten the uptake. Likewise, the increase of the charging infrastructure in both urban and semi-urban areas will boost the confidence of consumers in transition to EVs and the HEVs.

In a more general sense, the conclusions have some significant implications. To manufacturers, the findings emphasize the importance of combining promotion with value creation in the long-term, in terms of enhanced product performance and after sales service. To policymakers, the research provides the significance of infrastructural development and monetary incentives to eliminate inhibitory factors to adoption. To consumers, the findings make it possible to conclude that the adoption and loyalty to EVs and HEVs in Kerala are influenced less by promotional gimmicks and more by long-term value in the performance, cost efficiency and accessibility of services. These key areas can therefore be addressed by the EV and HEV industry in order to accelerate the transition of consumers. Kerala will be able to become a model state in terms of green mobility implementation in India and become a prototype of the same in other states. .Affordability, contentment, and the presence of infrastructural facilities are the main factors resulting in the adoption of EVs and HEVs in Kerala. Promotions develop awareness but are not the primary predictors of the long-term adoption. It is essential to have a comprehensive approach to the market that combines price, performance, quality of service, and expansion of infrastructure. Thus, the study concludes that the path to accelerated EV/HEV adoption in Kerala lies in:

- **Sustaining government incentives** to reduce entry barriers.
- **Strengthening charging and service infrastructure** to improve satisfaction across consumer groups.
- **Leveraging digital and experiential campaigns**, especially in regions with lower adoption readiness.
- **Building loyalty through consumer experiences and peer influence**, rather than brand exclusivity.

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