



POST-PURCHASE BEHAVIOUR AND CUSTOMER SATISFACTION IN THE HYBRID AUTOMOBILE MARKET: EVIDENCE FROM RAJASTHAN

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ABSTRACT:

This study examines post-purchase behaviour and customer satisfaction among hybrid automobile owners in Sri Ganganagar District, Rajasthan. With hybrid vehicles gaining popularity in India, understanding consumer experiences is crucial for manufacturers and policymakers. A quantitative survey of 200 hybrid car owners assesses satisfaction, brand loyalty, and word-of-mouth recommendations. Data were analyzed using Cronbach's Alpha, T-tests, and ANOVA. Results indicate that fuel efficiency and after-sales service drive satisfaction (76% report high satisfaction), but high maintenance costs and limited service centers create challenges. Brand loyalty is evident in 62% of respondents, with 81% recommending hybrids. Addressing service infrastructure and costs is vital for enhancing satisfaction and supporting Rajasthan's hybrid market growth, contributing to sustainable mobility.

KEYWORDS:

HYBRID AUTOMOBILES, POST-PURCHASE BEHAVIOUR, CUSTOMER SATISFACTION, BRAND LOYALTY, WORD-OF-MOUTH, RAJASTHAN, SUSTAINABLE MOBILITY.

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INTRODUCTION

The hybrid automobile market in India is growing rapidly as consumers prioritize fuel efficiency and environmental sustainability. Hybrid vehicles, combining internal combustion engines with electric motors, provide a practical solution for sustainable mobility, especially in Rajasthan, where fuel costs and eco-awareness drive adoption. Post-purchase behaviour, including satisfaction, loyalty, and advocacy, significantly influences market dynamics and brand success. This study focuses on Sri Ganganagar District, a region with increasing automobile ownership, to explore hybrid car owners' experiences. By identifying satisfaction drivers and barriers, the research offers insights for automakers and policymakers to strengthen the hybrid market and promote sustainable transportation in India.

REVIEW OF LITERATURE

Customer satisfaction in the automobile industry depends on vehicle performance, after-sales service, and perceived value (Kotler & Keller, 2016). Post-purchase behaviour, such as repurchasing or recommending a brand, shapes market perceptions (Zeithaml et al., 1996). For hybrid vehicles, fuel efficiency and environmental benefits are key satisfaction drivers, though high maintenance costs can

lead to dissatisfaction (Oliver, 2010). In India, studies emphasize fuel efficiency and service quality as critical factors, with maintenance costs often cited as a concern (Srivastava & Tiwari, 2013). Word-of-mouth recommendations are a significant outcome of satisfaction, particularly in urban markets (Menon, 2012). Safety and brand image influence purchase decisions, with post-purchase satisfaction tied to service quality (Shende, 2014). Brand love fosters loyalty and positive word-of-mouth in the automotive sector (Ghorbanzadeh & Rahehagh, 2021). Income fluctuations can impact satisfaction in smaller car segments, applicable to hybrids (John & Pragadeeswaran, 2019). Service quality is linked to customer value, reinforcing satisfaction (Wang et al., 2004). Effective advertising sustains post-purchase satisfaction, particularly for tech-savvy consumers (Saleem & Abideen, 2011).

RESEARCH METHODOLOGY

This study employs a quantitative design to investigate post-purchase behaviour and customer satisfaction among hybrid car owners in Sri Ganganagar District, Rajasthan. The objectives are:

- (1) to assess satisfaction levels,

(2) to identify factors influencing post-purchase behaviour, and

(3) to explore word-of-mouth recommendations.

HYPOTHESES

- H1: Fuel efficiency and after-sales service significantly influence customer satisfaction.
- H2: High satisfaction levels lead to positive word-of-mouth recommendations.

DATA COLLECTION:

A structured questionnaire was administered to 200 hybrid car owners, selected via convenience sampling, covering brands like Toyota, Honda, and Hyundai. Respondents, aged 25–60 years with varied income levels, were surveyed online and in-person from January to March 2025.

RESEARCH TOOLS

The questionnaire's reliability was confirmed with a Cronbach's Alpha of 0.81. Data were analyzed using:

- T-tests: To compare satisfaction across demographic groups.
- ANOVA: To evaluate variance in satisfaction based on fuel efficiency, service quality, and costs.
- Descriptive Statistics: To summarize trends.

ETHICAL CONSIDERATIONS:

Informed consent was obtained, and respondent anonymity was maintained. Data were securely stored for research purposes only.

LIMITATIONS

The study is limited to Sri Ganganagar District, potentially restricting generalizability. Convenience sampling may introduce bias, and a larger sample could provide broader insights.

DATA ANALYSIS AND INTERPRETATION

DESCRIPTIVE STATISTICS

TABLE 1: RESPONDENT DEMOGRAPHICS AND SATISFACTION LEVELS

Variable	Category	Percentage (%)
Age	25–40 years	53
	41–60 years	47
Income (Annual)	<₹10 lakh	41
	≥₹10 lakh	59
Satisfaction Level	High	76
	Moderate	17
	Low	7

RELIABILITY TEST

Cronbach's Alpha was 0.81, indicating reliable data.

T-TEST RESULTS

A T-test comparing satisfaction between age groups (25–40 vs. 41–60 years) showed no significant difference ($p = 0.34$).

TABLE 2: T-TEST RESULTS

Group	Mean Satisfaction	T-Value	P-Value
25–40 years	4.1	1.00	0.34
41–60 years	4.0		

ANOVA RESULTS

ANOVA assessed the impact of fuel efficiency, after-sales service, and maintenance costs on satisfaction ($F = 11.80$, $p < 0.01$), with fuel efficiency and service quality as primary drivers.

TABLE 3: ANOVA RESULTS

Factor	F-Value	P-Value
Fuel Efficiency	14.80	0.001
After-Sales Service	12.50	0.002
Maintenance Costs	7.90	0.03

ANALYSIS

H1 is supported, as fuel efficiency and after-sales service significantly influence satisfaction ($p < 0.01$). H2 is confirmed, with 81% of satisfied respondents recommending hybrids. High maintenance costs and limited service centers are key dissatisfaction factors, particularly for lower-income owners.

DISCUSSION

The study on post-purchase behavior and customer satisfaction among hybrid car owners in Sri Ganganagar, Rajasthan, provides critical insights into the dynamics of the hybrid automobile market. The findings underscore that fuel efficiency and robust after-sales service are the primary drivers of customer satisfaction, with 76% of respondents reporting high satisfaction levels. These factors not only enhance the ownership experience but also foster strong brand loyalty, as evidenced by 62% of owners expressing commitment to their chosen brands, and 81% actively recommending hybrid vehicles to others. This positive word-of-mouth advocacy, as supported by Menon (2012), plays a pivotal role in shaping market perceptions and driving adoption in a region increasingly prioritizing sustainable mobility.

However, the study identifies significant challenges that temper these positive outcomes. High maintenance costs emerge as a notable barrier, particularly for lower-income owners, aligning with prior research by Srivastava and Tiwari (2013) that highlights cost-related dissatisfaction in the Indian automotive market. Additionally, the limited availability of authorized service centers in Sri Ganganagar exacerbates dissatisfaction, as owners face accessibility issues that undermine the convenience of hybrid

ownership. These findings emphasize the need for automakers to address infrastructure and cost-related concerns to sustain and expand the hybrid market.

To enhance customer satisfaction and support Rajasthan's transition to sustainable mobility, automakers must prioritize expanding service networks and offering affordable maintenance plans. These measures would mitigate the primary pain points identified in the study, ensuring a more seamless ownership experience. By addressing these challenges, manufacturers can strengthen brand loyalty, amplify positive word-of-mouth, and contribute to the growth of the hybrid automobile market in Rajasthan, aligning with India's broader goals for environmental sustainability and reduced fuel dependency.

CONCLUSION

The study on post-purchase behaviour and customer satisfaction among hybrid car owners in Sri Ganganagar, Rajasthan, provides critical insights into the dynamics of the hybrid automobile market. The findings underscore that fuel efficiency and robust after-sales service are the primary drivers of customer satisfaction, with 76% of respondents reporting high satisfaction levels. These factors not only enhance the ownership experience but also foster strong brand loyalty, as evidenced by 62% of owners expressing commitment to their chosen brands, and 81% actively recommending hybrid vehicles to others. This positive word-of-mouth advocacy, as supported by Menon (2012), plays a pivotal role in shaping market perceptions and driving adoption in a region increasingly prioritizing sustainable mobility.

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SUGGESTIONS

The research paper on post-purchase behavior and customer satisfaction in the hybrid automobile market in Sri Ganganagar, Rajasthan, provides actionable suggestions to enhance customer experiences and support market growth. These recommendations address key challenges identified in the study, such as limited service infrastructure and high maintenance costs, while leveraging the strong satisfaction and word-of-mouth advocacy among hybrid car owners.

- 1. Expand Service Networks:** The study highlights limited service centres as a major barrier to customer satisfaction, particularly for lower-income owners. Expanding the network of authorized service centres in Sri Ganganagar would improve accessibility and convenience, reducing downtime and enhancing the ownership experience. This is critical in a region with growing hybrid vehicle adoption, as timely and accessible after-sales service directly influences satisfaction and brand loyalty, as supported by prior research (Kotler & Keller, 2016).
- 2. Affordable Maintenance:** High maintenance costs were identified as a significant concern, deterring some owners despite hybrids' fuel efficiency benefits. Automakers should introduce subsidized maintenance plans or cost-effective service packages to alleviate this burden. Such initiatives would make hybrid ownership more financially viable, particularly for lower-income groups, and align with the study's finding that cost is a key dissatisfaction factor (Srivastava & Tiwari, 2013).
- 3. Customer Awareness:** Promoting the long-term benefits of hybrid vehicles, such as fuel savings and environmental impact, through targeted marketing campaigns can boost adoption and satisfaction. Educational initiatives highlighting hybrids' role in sustainable mobility could resonate with Rajasthan's eco-conscious consumers, reinforcing positive word-of-mouth (Menon, 2012).
- 4. Feedback Systems:** Implementing regular surveys to collect post-purchase feedback allows automakers to monitor customer experiences and address issues proactively. This aligns with the study's emphasis on service quality as a satisfaction driver and would help identify evolving consumer needs, fostering loyalty and advocacy (Zeithaml et al., 1996).

These strategies collectively aim to strengthen the hybrid market in Rajasthan by addressing service and cost barriers while enhancing customer engagement and trust.

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