



# ONLINE REVIEWS IMPACT ON PURCHASING DECISIONS WITH REFERENCE TO ELECTRIC VEHICLES IN INDIA

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## ABSTRACT

The growth of digital platforms and online communication has significantly changed consumer purchasing behaviour in modern markets. Online reviews have become one of the most important sources of information for customers before purchasing products and services, especially high-value products such as electric vehicles (EVs). Consumers rely on digital feedback, ratings, and customer experiences to evaluate product quality, reliability, pricing, battery performance, maintenance costs, and after-sales service. The present study examines the impact of online reviews on consumer purchasing decisions with special reference to electric vehicles in India. The study focuses on how online reviews influence trust, customer satisfaction, and purchase intention. Both primary and secondary data sources were used to understand consumer behaviour patterns. The findings reveal that review credibility, review quality, and positive electronic word-of-mouth communication strongly influence customer decision-making. The study also highlights the importance of digital marketing, online reputation management, and customer engagement in the Indian EV market.

## 1. INTRODUCTION

The Indian automobile industry is currently undergoing a major transformation with the rapid adoption of electric vehicles. Rising fuel prices, environmental concerns, and government support for sustainable transportation have encouraged consumers to shift toward EVs.

At the same time, the growth of the internet and social media has changed how consumers gather information before making purchasing decisions. Customers no longer rely only on advertisements or sales representatives; instead, they depend heavily on online reviews, ratings, and digital feedback shared by existing users.

Online reviews act as electronic word-of-mouth communication that influences consumer attitudes, perceptions, and purchasing intentions. Reviews provide practical insights regarding product quality, battery performance, driving range, charging infrastructure, affordability, maintenance costs, and customer service.

Consumers consider peer reviews to be more trustworthy and transparent than promotional advertisements because reviews are based on real-life experiences. In the EV market, where technology is relatively new and continuously evolving, online reviews help consumers reduce uncertainty and improve decision confidence.

This study aims to understand the relationship between online reviews and consumer purchasing behaviour in the electric vehicle market in India. The research also focuses on the role of digital marketing and customer trust in influencing EV adoption.

## 2. REVIEW OF LITERATURE

Several researchers have examined the influence of online reviews on customer purchasing behaviour in different industries.

Previous studies indicate that review quality, review credibility, and customer satisfaction strongly affect purchase intention. Chevalier and Mayzlin (2016) found that positive online reviews significantly improve customer trust and influence purchasing decisions. The researchers observed that customers depend on online feedback to evaluate product reliability and quality. Brown and Taylor (2017) studied online reviews in the automobile industry and concluded that peer recommendations influence customers more than company advertisements. Negative reviews were found to reduce customer confidence. Lee and Park (2019) emphasized the importance of online reviews in the electric vehicle market. Their study revealed that consumers use reviews to evaluate battery life, charging performance, and vehicle reliability.

Recent studies by Gupta and Jain (2024) and Sharma and Verma (2025) highlighted that detailed and authentic reviews have a stronger impact on consumer trust compared to short reviews or ratings.

## 3. RESEARCH OBJECTIVES

The major objectives of the study are:

- To examine the impact of online reviews on EV purchasing decisions.
- To identify the relationship between review credibility and customer trust.
- To analyze the role of online reviews in reducing customer uncertainty.
- To study how digital feedback influences customer perception regarding EV performance.
- To provide suggestions for improving online customer engagement and digital marketing strategies.



#### 4. RESEARCH METHODOLOGY

The study adopted a descriptive research design to analyze the influence of online reviews on EV purchasing behaviour.

Primary data was collected through structured questionnaires distributed among consumers and potential EV buyers. Secondary data was collected from journals, websites, reports, books, and online articles. The study uses a structured questionnaire administered to 154 respondents.

Convenience sampling was used due to time and accessibility limitations. The sample consisted of respondents who actively use online platforms to gather product information.

The collected data was analyzed using percentage analysis, factor analysis, correlation analysis, and regression techniques. These statistical methods helped identify relationships between review quality, customer trust, and purchase intention.

#### 5. DATA ANALYSIS AND INTERPRETATION

The analysis showed that most respondents regularly read online reviews before purchasing electric vehicles. Consumers preferred reviews that contained detailed explanations and real customer experiences.

Battery performance, affordability, driving range, charging speed, and after-sales service were identified as the most important factors influencing consumer decisions.

Positive reviews increased customer confidence and encouraged purchasing behaviour, while negative reviews created hesitation and reduced trust.

The study also found that social media platforms and YouTube reviews strongly influence young consumers in urban areas. Customers tend to compare multiple reviews before making final decisions.

Regression analysis indicated a strong positive relationship between online review quality and purchase intention

#### FACTOR ANALYSIS

Table 4.2: KMO and Bartlett's Test

| KMO and Bartlett's Test                          |                    |         |
|--------------------------------------------------|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .882    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 482.196 |
|                                                  | df                 | 66      |
|                                                  | Sig.               | .000    |

##### Interpretation

The Kaiser-Meyer-Olkin (KMO) value of 0.882 indicates a high level of sampling adequacy. Since the KMO value is above 0.8, it is considered excellent, meaning the data is suitable for factor analysis and the variables share common factors.

The Bartlett's Test of Sphericity shows a Chi-Square value of 482.196 with df = 66 and a significance level of 0.000, which

is less than 0.05. This indicates that the correlation matrix is not an identity matrix, and there are significant relationships among the variables.

Overall, both KMO and Bartlett's test results confirm that the dataset is appropriate and reliable for conducting factor analysis, and meaningful factors can be extracted from the variables.

Table 4.2.1: Factor 1

| Factor 1                                                                            | Factor Score>0.5 |
|-------------------------------------------------------------------------------------|------------------|
| Positive online reviews increase the likelihood of shortlisting a E-Vehicle dealer. | .556             |
| Safety and reliability reviews shape my perception before contacting the dealer.    | .534             |
| Online reviews influence my confidence while interacting with the distributor.      | .673             |
| Reviews about pricing transparency influence my trust in the distributor.           | .635             |
| Dealer response to online complaints influences my willingness to buy.              | .729             |
| Online reviews help me assess whether the distributor offers value for money.       | .686             |

##### Explanation

The factor analysis results for Factor 1 show that this factor mainly represents the influence of online reviews on customer trust, confidence, and dealer selection in the E-Vehicle market. Among all variables, dealer response to online complaints (Q17) has the highest factor loading (.729), indicating that customers strongly consider how dealers handle complaints and feedback before making a purchase decision. Online reviews helping customers assess value for money (Q18) also show a high loading (.686), highlighting that buyers depend on reviews to evaluate the worth and quality of the distributor's offerings. Similarly, online reviews influencing customer confidence while interacting with

the distributor (Q13) have a significant loading (.673), suggesting that reviews create trust and comfort during communication. Reviews about pricing transparency (Q15) with a loading of (.635) indicate that honest and clear pricing information positively affects trust in the distributor. Positive online reviews increasing the likelihood of shortlisting an E-Vehicle dealer (Q7) and safety and reliability reviews shaping customer perception before contacting the dealer (Q10) also contribute meaningfully to this factor. Overall, the factor explains that online reviews greatly influence customer perceptions, trust, and purchase intentions toward E-Vehicle dealers and distributors.



Table 4.2.2: Factor 2

| Factor 2                                                                                | Factor Score >0.5 |
|-----------------------------------------------------------------------------------------|-------------------|
| Reviews related to vehicle mileage strongly influence my enquiry decision.              | .598              |
| I trust customer reviews more than dealer advertisements while shortlisting a showroom. | .786              |
| Negative reviews about dealer behaviour affect my negotiation and purchase decision.    | .651              |
| Positive service experiences encourage me to post favourable online reviews.            | .563              |
| Distributor engagement with online platforms improves my overall trust in the brand.    | .589              |

### Explanation

The results of Factor 2 indicate that this factor mainly represents the impact of customer experiences, online credibility, and distributor engagement on consumer decision-making in the E-Vehicle market. Among the variables, trusting customer reviews more than dealer advertisements while shortlisting a showroom (Q12) has the highest factor loading (.786), showing that consumers rely heavily on genuine customer feedback rather than promotional advertisements. Negative reviews about dealer behaviour affecting negotiation and purchase decisions (Q14) also have a strong loading (.651), indicating that dealer reputation and customer treatment significantly influence buying behaviour. Reviews related to vehicle mileage influencing enquiry decisions

(Q9) with a loading of (.598) suggest that customers pay close attention to vehicle performance and efficiency before contacting dealers. Distributor engagement with online platforms improving trust in the brand (Q25) with a loading of (.589) highlights the importance of active online communication and digital presence in building customer confidence. Positive service experiences encouraging customers to post favourable online reviews (Q22) with a loading of (.563) further demonstrates that satisfied customers contribute to positive word-of-mouth and strengthen the dealer's online image. Overall, this factor explains that customer reviews, service quality, and online engagement play a major role in shaping trust and purchase decisions toward E-Vehicle dealers and distributors.

Table 4.2.3: Eliminated Variables

| Factor                                                                                     |
|--------------------------------------------------------------------------------------------|
| Online reviews influence my initial interest in visiting a E-Vehicle showroom.             |
| Dealer-specific online ratings affect my choice of authorized distributor.                 |
| Online reviews reduce the time I spend searching for alternative car brands.               |
| Online feedback on sales staff professionalism affects my final purchase decision.         |
| I expect the distributor experience to match what is promised in online reviews.           |
| Post-purchase service reviews influence my decision to continue with the same distributor. |
| Online reviews about service quality affect my satisfaction with the distributor.          |
| Distributor handling of service issues influences my long-term loyalty.                    |
| Online reviews influence my likelihood of recommending the distributor to others.          |
| Overall satisfaction in purchasing E-Vehicle.                                              |

### Explanation

These variables were eliminated because of these factors are less than 0.5

## 6. FINDINGS

The study identified several important findings regarding online consumer behavior in the electric vehicle (EV) market. It revealed that consumers heavily depend on online reviews when making EV purchasing decisions, as review credibility and authenticity significantly influence their level of trust. Detailed reviews that include both positive and negative aspects of a product are generally perceived as more reliable and trustworthy than purely promotional content. The findings also show that consumers place greater trust in the experiences and opinions shared by fellow users than in traditional advertisements. Furthermore, online reputation management plays a crucial role in enhancing brand image and customer satisfaction, as companies that actively engage with and respond to customer reviews tend to earn higher levels of consumer trust. The study

also found that digital platforms such as YouTube, Instagram, Facebook, and automobile-related websites serve as major sources of information, helping consumers gather insights and evaluate electric vehicles before making purchase decisions.

## 7. DISCUSSION

The findings of the study demonstrate that online reviews have become a major factor influencing consumer purchasing decisions in the Indian electric vehicle (EV) market. Consumers view online reviews as an essential source of information that helps reduce uncertainty and provides a better understanding of product quality, performance, and reliability. Since EV technology is relatively new to many customers, they actively seek detailed reviews and user experiences before making significant purchase investments. The study further reveals that customer trust is closely linked to transparency and the authenticity of reviews, with genuine and unbiased feedback having a stronger impact on consumer confidence. Businesses that actively maintain positive online engagement and respond



effectively to customer feedback are more likely to build stronger relationships with consumers and enhance their brand reputation. Additionally, the growing use of digital marketing, social media platforms, and online communities has significantly increased the influence of electronic word-of-mouth (e-WOM), making it a powerful force in shaping customer perceptions and purchasing behavior in the EV market.

## 8. SUGGESTIONS

Based on the findings of the study, several suggestions are proposed to enhance consumer trust and strengthen the market position of electric vehicle (EV) companies. Organizations should strengthen their digital customer support systems to provide timely assistance and improve customer satisfaction. They should also encourage authentic customer reviews and feedback, as genuine user experiences play a crucial role in building trust among potential buyers. Increasing awareness about EV charging infrastructure and its accessibility can help reduce consumer concerns regarding convenience and usability. In addition, companies should enhance their social media engagement and promotional activities to communicate effectively with customers and create greater brand visibility. A strong focus on transparency, honest communication, and customer relationship management is essential for developing long-term customer relationships. Finally, improving after-sales service quality and maintenance support can increase customer confidence, satisfaction, and loyalty, thereby supporting the overall growth of the EV market.

## 9. CONCLUSION

### FACTORS INFLUENCING EV PURCHASE DECISIONS

| Factor                | Influence Level | Consumer Impact                |
|-----------------------|-----------------|--------------------------------|
| Online Reviews        | High            | Builds trust and confidence    |
| Battery Performance   | High            | Improves product evaluation    |
| Price & Affordability | Moderate        | Supports buying decisions      |
| Brand Reputation      | High            | Enhances customer loyalty      |
| After-Sales Service   | Moderate        | Improves customer satisfaction |

The study concludes that online reviews play a significant role in influencing purchasing decisions in the Indian electric vehicle (EV) market. Consumers increasingly rely on digital feedback and customer reviews to assess the quality, performance, reliability, and overall satisfaction associated with EV products before making a purchase decision. Positive online reviews help build trust, improve brand perception, and increase customers' intention to buy, whereas negative reviews can reduce confidence and create hesitation among potential buyers. With the rapid growth of digital platforms, social media, and e-commerce channels, electronic word-of-mouth (e-WOM) has become a powerful factor shaping consumer behavior in the automobile industry. Therefore, EV manufacturers and marketers must prioritize effective online reputation management, actively engage with customers, and implement strong digital marketing strategies to enhance customer trust, strengthen brand image, and maintain a competitive advantage in the evolving electric vehicle market.

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