

Impact of Passenger Perception and Attitude on Satisfaction with E-Railway Services: Evidence from Coimbatore

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Abstract

The rapid digitalization of railway services has significantly transformed passenger interaction with ticketing systems in India. This study examines the impact of passenger perception and attitude on satisfaction with e-railway services, particularly focusing on Indian Railway Catering and Tourism Corporation and third-party service providers in Coimbatore. A descriptive research design was adopted, and primary data were collected from 120 respondents using a structured questionnaire. Statistical tools such as percentage analysis, correlation, and regression were used. The findings indicate that perception factors such as reliability, ease of use, and security, along with user attitude, significantly influence passenger satisfaction. The study highlights the need for improving technological efficiency and service quality to enhance customer experience.

Keywords

Passenger Perception, Attitude, Customer Satisfaction, E-Railway Services, IRCTC, Service Quality

1. Introduction

The Indian railway system is one of the largest transportation networks globally, serving millions of passengers daily. The introduction of online ticket booking through Indian Railway Catering and Tourism Corporation has revolutionized the traditional ticketing system by reducing queues and enhancing convenience.

However, despite technological advancements, passenger satisfaction varies due to differences in perception and attitude toward digital platforms. Studies show that while online booking improves accessibility, users often face issues such as system delays, transaction failures, and usability concerns .

This study focuses on understanding how passenger perception and attitude affect satisfaction levels in Coimbatore.

2. Review of Literature

Previous research highlights that:

- Passenger satisfaction is influenced by service quality dimensions such as reliability, responsiveness, and security .
- Perception of ease of use and trust significantly impacts online booking adoption.
- Studies conducted in Coimbatore indicate that passengers are not fully satisfied with existing services and expect improvements in efficiency .
- Research on IRCTC services shows that booking experience, system performance, and convenience play a major role in shaping perception .

Further, e-service quality models emphasize factors like website design, security, and responsiveness as critical determinants of satisfaction.

3. Statement of the Problem

Despite the availability of online booking services, passengers often encounter technical issues such as server failures, payment delays, and navigation difficulties. These issues influence user perception and attitude, ultimately affecting satisfaction levels. Therefore, it is necessary to analyze the relationship between these variables.

4. Objectives of the Study

1. To analyze passenger perception towards e-railway services.
2. To examine passenger attitude towards online booking platforms.
3. To measure the level of passenger satisfaction.
4. To study the relationship between perception, attitude, and satisfaction.

5. Hypotheses

- **H1:** Passenger perception has a significant impact on satisfaction.
- **H2:** Passenger attitude significantly influences satisfaction.
- **H3:** There is a significant relationship between perception, attitude, and satisfaction.

6. Research Methodology

- **Research Design:** Descriptive
- **Area of Study:** Coimbatore
- **Sample Size:** 120 respondents
- **Sampling Method:** Convenience sampling
- **Data Collection:**
 - Primary Data: Questionnaire
 - Secondary Data: Journals, websites, reports
- **Tools Used:**
 - Percentage Analysis
 - Correlation Analysis
 - Regression Analysis

Limitations of the Study

- Limited to Coimbatore

- Small sample size
- Time constraints

7. Data Analysis and Interpretation

7.1 Demographic Profile

- Majority of respondents belong to the age group 20–40 years
- Most users prefer online booking due to convenience

7.2 Perception Analysis

- High perception of convenience and accessibility
- Moderate satisfaction with system reliability
- Security concerns still exist among users

7.3 Attitude Analysis

- Positive attitude towards digital platforms
- Increased preference for mobile-based booking

7.4 Satisfaction Analysis

- Users satisfied with time-saving features
- Dissatisfaction arises due to technical glitches

7.5 Correlation Analysis

- Strong positive correlation between perception and satisfaction
- Moderate correlation between attitude and satisfaction

7.6 Regression Analysis

- Perception and attitude together significantly influence satisfaction
- Perception has a stronger impact compared to attitude

8. Findings

- Passenger perception plays a crucial role in determining satisfaction.
- Attitude towards digital services positively influences usage behavior.
- Reliability and system performance are key determinants of satisfaction.
- Third-party platforms often provide better user interfaces, while IRCTC is trusted for authenticity.

9. Suggestions

- Improve website and app performance to reduce transaction failures
- Enhance security measures to build user trust
- Simplify user interface for better accessibility

- Provide efficient grievance redressal mechanisms

10. Conclusion

The study concludes that passenger perception and attitude significantly influence satisfaction with e-railway services. While IRCTC remains the primary platform for railway bookings, improvements in service quality and technological infrastructure are essential to meet growing user expectations. Enhancing reliability, security, and user experience will lead to higher satisfaction and increased adoption of digital railway services.

11. Scope for Future Research

- Comparative studies across multiple cities
- Impact of AI and automation in railway booking systems
- Role of mobile applications in enhancing user experience

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