

## A QUALITATIVE STUDY OF RAILWAY PASSENGERS ON CUSTOMER SATISFACTION ON ONLINE PASSENGER RESERVATION SYSTEM

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### ABSTRACT

*Indian railways play a vital role in the transportation facilities of India. India have the second largest population in the world and it is important to satisfy the customer needs and wants. Customer satisfaction is satisfying the needs and desires of customer according to the requirement of the customers. The study is based on identifying the relationship between online passenger reservation system and customer satisfaction. The study concluded that there is significant impact of passenger online reservation system on the customer satisfaction.*

**KEYWORDS:** *Indian Railway, Customer Satisfaction, Transportation Facilities, Online Passenger Reservation.*

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### Introduction

In sense of customer, satisfaction is a meeting the needs degree at the end of purchase. According to Edosomwan (1993) defines "...A customer and market driven enterprise is one that is committed to providing excellent quality and competitive products and services to satisfy the needs and wants of customers in a well-defined market segment. Such an enterprise analyses its market capabilities and provides products and services to satisfy market needs. It considers its customers as the final judges who determine product and services satisfaction level, delivery, price and information...."

Customer satisfaction is the key factor for successful and depends highly on Frontline service providers. Customers should be managed as assets. The comparison of expectation and performance in post purchase stage determines the satisfaction of customers.

- **Promotional Gap:** Promotional gap is due to the expectation that customers have after noticing the product through promotional events.
- **Understanding Gap:** The understanding gap is due to the misunderstanding in identifying the needs and wants of customers by the organisation.
- **Procedural Gap:** The procedural gap is due to the gap in the expectation of the customers into the proper procedures of effective implementation of the product by the organisation.
- **Behavioural Gap:** The behavioural gap is the gap between the expectation of the customer's needs & wants and the performance of the organisation till the last step of delivering the services to customers.
- **Perception Gap:** The perception gap is the difference between customer performance perception and reality.

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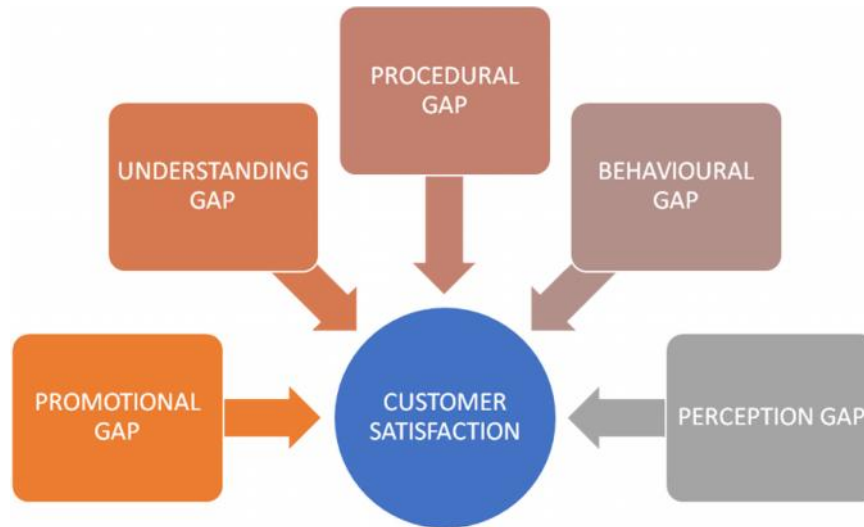


Fig Hill 1996

### Objectives of Customer Satisfaction

- To understand the requirements and needs of the customer.
- To investigate the initiative taken by the organisation in fulfilling or satisfying customer needs.
- Designing a product or services on the basis of the findings drawn from the customers.
- Enables smarter marketing decisions.
- To stay up-to-date with new trends in the market time to time.
- To set objectives for improvement.
- Important for service provider that their services are valued fir morale boost up and positively impacts the relationship of buyer and seller.

### Indian Railways

The Indian Railways introduced in 1853 primarily to serve the interest of British government. Today the railways are the principal node of transportation for Passengers and freight both. It has bound social life and accelerated development.

It is the one of sectors government of India and also known as I.R. It is a vast organization transporting 140 lakh passenger and 14 lakh ton of freight every day and provides employment over 15 lakh staff. It covers almost every side of India and has 63,000-route km (82,000 running track km) and 7,000 stations. This enormous task is attained with the help of 77,00 locomotives, 38,000 passenger coaches and 2,20,000-freight wagon for which required support and production service resides.

The diversity and enormousness of India are joined and managed by the largest and busiest railway network of Asia, which carries more than 22 million travellers and over 3 million ton of freight every day. In 2015-16, an average of 13,313 passenger trains ran daily, carrying an estimated 22 million passengers a day and covering over 7,000 stations. Indian Railways have become the life preserver of the country. There are 9 types of passenger trains, namely

- Passengers/MEMU/DEMU.
- Gatiman Express,
- Mail/Express,
- Yuva /Garibrath Express,
- Shatabdi/Janshabdi Express,
- AC Express,
- Superfast,
- Rajdhani Express,
- Duranto Express,

### Review of Literature

The study conducted by **J. Mahima** on "**A Study on Passengers Satisfaction Railway Services in Kerala**" (2019) focused on the satisfaction of daily t0watas passengers towards the various services offered by the Indian Railway. The main ain of the study is to analyse the factors influencing satisfaction level of daily railway passengers. It has been found that customers are not highly satisfied with the services in the Indian Railways. If the suggestions had considered positively, then it would create a healt1y environment to the passengers and Indian Railways too

**Sathiyamoorthy & Karthikeyan** in their study on "**A Study on Passenger Satisfaction Towards Indian Railway Services**" identified the analysis of managerial aspect of railways rather than technical aspects. The aim of the study is to identify the satisfaction level of passengers travelling through railways. The researcher concluded that there should be improvement in quality of services.

The study conducted by **Johnson, Mon** "**A Study on Passengers' Satisfaction towards Railway Services in Kerala**" is focused on the satisfaction level of passengers towards various services rendered by Indian railways. The aim of the study is to explore the problems faced by the railway passengers and to provide suggestions for facilities to be changed. The study concluded that customers are not satisfied with the services provide by railways.

**Rengarajan et al** in their study on "**A Study on Customer (Passenger) Satisfaction in Transportation Industry - Case of Southern Railways**" described that railway transportation is the best means of transport by which goods & passengers are transported. The purpose of the study is to understand the satisfaction level of passengers and to investigate the experience of passengers travelling from southern railways. The research concluded that few passengers are ready for passengers but it will increase the cost of travelling which will be difficult for middle class people.

**Rosaline Lerma**, "**A Study on Factors that Influence the Passenger Satisfaction in E-Ticketing Experience n Coimbatore**" (2016), This study is defining Coimbatore customer's satisfaction with online purchasing experience using the Technology Acceptance Model (1AM). Customer satisfaction Factors included ease of use, website design. payment security. interactivity and information quality of the website. The objective of this study is to examine the extent to which these five factors effect passenger's satisfaction with Southern Railways

in Coimbatore. The study concluded that Coimbatore Southern Railways customers focus more on ease of use of e-ticket purchases due to a lack of experience in uing railway e-ticketing and being more comfortable with face-10-face interaction with railway ticket counter personnel and the more traditional payment system

The study conducted by **Rajeshwari & kumari** on "**Satisfaction and Service Quality in Indian Railways - A Study on Passenger Perspective**" showed that railways are the best means of transport of all level of people travelling. The main aim of the study is to identify the services provide by railways from Kerala to Delhi. It has been found that passengers are not satisfied with the quality of services offered by Indian railways.

**Anuradha** in her study on "**A Study on Passenger's Satisfaction Towards Railway Services. In Erode Junction**" focused on identifying the satisfaction of passengers towards railway services. The purpose of the study is to measure the level of satisfaction by passengers and to give necessary suggestions. The study concluded that Indian railways need to make necessary changes to improve its services and to increase the level of satisfaction of passengers.

### Objectives of the Study

- To study about Indian railways
- To identify the online passenger reservation system
- To determine the relationship between online passenger reservation system and customer satisfaction.
- To provide required suggestion for improvement in online reservation system.

### Data Collection

Data collection is the use of primary or secondary data for the further research.

- **Primary Data:** Primary data is the data collected fresh for which structured questionnaire method has been used.

- **Secondary Data:** Is the use of data which has already been used earlier. Use of research papers, journals, internet, IRCTC etc
- **Sampling Technique:** Simple random sampling has been used in the study. Questionnaire were distributed amongst 50 respondents and the data has been collected for further testing.

#### Validation of the Data

**Table: Reliability Statistics**

Reliability Statistics		
Variables	Cronbach's Alpha	N of Items
Online Passenger Reservation System	.726	10
Customer Satisfaction	.708	3

Source: Output of IBM-SPSS 22

- **Reliability of Data:** From the above table we can see that Cronbach's alpha is more than 0.700 which indicates a high level of internal consistency for our scale with this specific sample.

**Table: KMO and Bartlett's Test**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		
		.703
Bartlett's Test of Sphericity	Approx. Chi-Square	188.808
	df	78
	Sig.	.000

Source: Output of IBM-SPSS 22

The KMO ranges from 0 to 1 with an accepted index for further study must be over 0.6. Given table shows the KMO measure is greater than 0.60 in the present study which is satisfactory for the sample adequacy and further hypothesis test. The Bartlett's test of Sphericity relates to the significance of the study and must be less than 0.05. It can be seen in given table that Bartlett's test of Sphericity value is less than 0.05, it is actually 0.000 shows significant for the study.

#### Hypotheses Testing

- H<sub>01</sub>:** There is no significant impact of online passenger reservation system on customer satisfaction.  
**H<sub>a1</sub>:** There is a significant impact of online passenger reservation system on customer satisfaction.

**Table: Descriptive Statistics**

Descriptive Statistics			
	Mean	Std. Deviation	N
Online Passenger Reservation System	3.7600	.29207	50
Customer Satisfaction	3.9133	.30721	50

Source: Output of IBM-SPSS 22

**Table: Correlation Analysis**

Correlations			
		Online Passenger Reservation System	Customer Satisfaction
Online Passenger Reservation System	Pearson Correlation	1	.302
	Sig. (2-tailed)		.033
	N	50	50
Customer Satisfaction	Pearson Correlation	.302	1
	Sig. (2-tailed)	.033	
	N	50	50

Source: Output of IBM-SPSS 22

#### Inference

Correlation analysis shows that there is a degree of relationship between Online Passenger Reservation System and Customer Satisfaction. Above analysis shows that Pearson correlation value is 0.302 and sig value .033 which indicates that there is a significant low positive correlation between Online Passenger Reservation System and Customer Satisfaction

## Regression Analysis

**Table: Model Summary**

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.302	.091	.072	.29592	1.891

Source: Output of IBM-SPSS 22

In the Model Summary in above table, where R Square is 0.091 which means that online passenger reservation system explains 9.1% of the variability with significant effect on customer satisfaction.

Above table shows the linear regression model summary and overall fit statistics. It has found that R of our model is .302 with the  $R^2 = .091$ . This means that the linear regression explains 9.1% of the variance in the data. The Durbin-Watson,  $d = 1.891$ , which is between the two critical values of  $1.5 < d < 2.5$ . Therefore, we can assume that there is no first order linear auto-correlation in our multiple linear regression data.

**Table: ANNOVA goodness of fit (GOF)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.421	1	.421	4.808	.033 <sup>b</sup>
	Residual	4.203	48	.088		
	Total	4.624	49			

Source: Output of IBM-SPSS 22

The F-ratio in the ANOVA table tests whether the overall regression model is a good fit for the data. The table shows that different identified variables of online passenger reservation system (independent variables) statistically significantly predict the customer satisfaction (dependent variable). In the above table F sig. value is less than 0.05, which means the regression model is a good fit of the data. The F-test is highly significant; thus, we can assume that the model explains a significant amount of the variance in customer satisfaction.

**Table: Coefficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.720	.546		4.983	.000
	Online Passenger Reservation System	.317	.145	.302	2.193	.033

Source: Output of IBM-SPSS 22

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. From the above table it shows that online passenger reservation system are significant predictors as a sig. value is 0.033, which is less than 0.05 indicate that null hypothesis is rejected. Analysis concluded that that there is a significant impact of online passenger reservation system on customer satisfaction.

### Limitations of the Study

- The study was limited to 50 customers which may not represent the actual data
- The area of research was limited.
- The time of the study was also limited.

### Scope for Further Study

The study is focused on the satisfaction of customers towards online passenger reservation system of Indian railways. More studies related to customer satisfaction of services offered by Indian railways. Studies based on different zones of Indian railways and their connectivity can also be done.

### Findings

Correlation analysis shows that there is a degree of relationship between Online Passenger Reservation System and Customer Satisfaction. The analysis shows that Pearson correlation value is 0.302 and sig value .033 which indicates that there is a significant low positive correlation between Online Passenger Reservation System and Customer Satisfaction.

The ANOVA table tests shows that whether the overall regression model is a good fit for the data. The table shows that different identified variables of online passenger reservation system (independent variables) statistically significantly predict the customer satisfaction (dependent variable).

It has been found that online passenger reservation system are significant predictors as a sig. value is 0.033, which is less than 0.05 indicate that null hypothesis is rejected. Analysis concluded that that there is a significant impact of online passenger reservation system on customer satisfaction.

### Suggestions

Following suggestions are drawn:

- It is suggested that online booking process should be made easier so that it is convenient for old age customers.
- The time limit for tatkal seats is comparatively less it should be increased
- Service charges charged during online booking should be less.
- There should be improvement in the quality of food offered by IRCTC – E catering.

### Conclusions

The study is focused on the customer satisfaction of passenger online reservation system including the services provided by IRCTC.

Nowadays satisfying the demand of customer has become important part of any business. Everything has become so easy with the help of online applications. Booking a train ticket is now just few minutes task by downloading the application just by seating at home passenger can book his/her tickets including the food services.

The research concluded that there is significant impact of passenger online reservation system on the customer satisfaction. Because of decrease in the quality of services offered by Railways it has now become the necessity of old age people to travel by train. There should be change in the level of services offered by railways to attract more and more people.

### References

1. Sathiyamoorthy, D. G., & Karthikeyan, B. (n.d.). A Study on Passenger Satisfaction Towards Indian Railway Services. *INDIAN JOURNAL OF RESEARCH*, 5(7), 96–98. doi: <https://www.worldwidejournals.com/paripex/>
2. Rengarajan, V., Kogila, D. N., VijayAnand, V., Velavan, M., Sripriya, K., & Parthasarathy, A. K. (2018). A Study on Customer (Passenger) Satisfaction in Transportation Industry - Case of Southern Railways. *International Journal of Pure and Applied Mathematics*, 119(10), 1493–1512. Retrieved from <https://ijpam.eu/>
3. Johnson, M. (n.d.). A Study on Passengers' Satisfaction towards Railway Services in Kerala. *International Journal of Business and Management Invention (IJBMI)*, 8(3), 19–23. Retrieved from [https://www.ijbmi.org/papers/Vol\(8\)3/Series-2/D0803021923.pdf](https://www.ijbmi.org/papers/Vol(8)3/Series-2/D0803021923.pdf)
4. Kurusunluoglu, Emel, Customer service effects on Customer satisfaction and customer loyalty, *International Journal of Business and Social Science*, vol.2 No.17
5. Rajeswari, V., & kumari, K. S. (n.d.). Satisfaction and Service Quality in Indian Railways - A Study on Passenger Perspective. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 4(1), 58–66. Retrieved from <https://www.iosrjournals.org/>
6. Anuradha, D. J. (n.d.). A Study On Passenger's Satisfaction Towards Railway Services In Erode Junction, 5(8), 10–15. Retrieved from <http://www.jifactor.com/>
7. <https://www.nbrii.com/customer-survey-white-papers/measuring-and-managing-customer-satisfaction/>

- 56 Inspira- Journal of Modern Management & Entrepreneurship (JMME), Volume 11, No. 02, April-June 2021
8. <https://books.google.co.in/books?id=WsFigUeZO1YC&printsec=frontcover&dq=customer+satisfaction&hl=en&sa=X&ved=0ahUKEwj3uumugoToAhX0xjgGHQ5iAMEQ6AEIVzAF#v=onepage&q=customer%20satisfaction&f=false>
9. Antony, D. and Kumar, A. (2016). Hospitality And Public Health- A Case Study of Indian Railway Catering And Tourism Corporation.(IRCTC). International Journal of Social Science and Economics Invention( IJESSI), 2(9).
10. Antony, D. and Kumar, A. (2016). Hospitality And Public Health- A Case Study of Indian Railway Catering And Tourism Corporation.(IRCTC). International Journal of Social Science and Economics Invention( IJESSI), 2(9).
11. [www.expresstravelworld.com](http://www.expresstravelworld.com)
12. [www.irctc.com](http://www.irctc.com).

