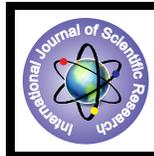


Measuring Service Quality of Indian Railway



Management

KEYWORDS : Service Quality, Indian Railway

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ABSTRACT

Indian Railways serves the passengers in a big way, and hence there is a need to integrate passenger concerns in the operation, planning and other processes that impact passenger services and its quality in bigger way. A study of the service quality address passenger concerns more effectively and at the same time it also effectively monitor the creation and maintenance of a good quality services. By using non-probability convenience sampling a survey of 200 passengers of Indian Railway in Ahmedabad was carried out using a structured questionnaire. Analysis was carried out using Factor Analysis & One Way Anova. This paper is intent to measure the service quality of Indian Railway.

INTRODUCTION

The Indian Railways network is providing economic and reliable transport to Indians. While the freight traffic generates bulk of the revenue for the railways, passenger transport is the more visible face of the railways as it touches directly the lives of millions who avail of the passenger transport services. Accordingly, Indian Railways have been making efforts over the past few years to enhance the services being provided to their passengers.

LITERATURE REVIEW

According to Eboli and Mazzulla (2007), Network design, Service planning, reliability and Comfort are found to be the important factors of the service quality. Further, a study of Ngatia et al. (2010) stipulates that safety and travel cost are the significant variables of service quality in Travel Industry. Allen and DiCesare (2008) considered that quality of service for public transport industry and it was found that , it consists of speed, reliability, comfort, convenience, safety, special services and innovations.

Robert et al. (2007) proposed that Service product, Social Responsibility and Service Delivery are the prominent factors of the services provided by public transport Industry. Vanniarajan & Stephen (2008) studied that the intangible aspects of service performance such as assurance and reliability of Indian railways have a strong direct and positive effect on the passenger's favourable attitude and image. Geetika & Nandan (2010) viewed that Refreshments and behavioral factors are found to be the most important factors of service quality.

RESEARCH METHODOLOGY

Objectives

- To identify factors of service quality offer by Indian Railway
- To study the difference in perception of customer towards the service quality of Indian Railway based on demographic variables.

Sampling Frame

- Sample Size: 200
- Sampling Unit: Passengers Travel by Indian Railway
- Collection Method: Personal Contacts
- Primary Data: Structures Questionnaire
- Secondary Data: Journals and Research Paper
- Sampling Technique: Non Probability Convenience Sampling
- Research Design: Descriptive Research
- Statistical Tools: Factor Analysis & One Way ANOVA

ANALYSIS & INTERPRETATION

KMO and Bartlett's Test	Level of Significance	Significance Value
	0.05	0.00

Table: 1 KMO and Bartlett's Test

Factors	Variables	Correlation Value
Service Crucially	Visually Appealing	0.327
	Record Keeping	0.764
	Timing of Trains	0.723
	Performs Service Correctly	0.680
	Commitment of Time	0.492
	Safe In Your Travel	0.385
Service Acquaint Ability	Busy To Respond	0.469
	Trust Worthy	0.448
	Convenient To All Passengers	0.407
	It Is Easy To Plan A Railway Journey	0.554
Service Response	Solving Problems	0.628
	Punctuality Of Trains	0.672
	Willing To Help	0.607
Service Intelligence	Knowledgeable	0.633
Service Personalization	Neat In Appearance	0.451
	Individual Attention	0.666
Service Modernization	Modern Looking Equipment	0.401
	Physical Facilities	0.498
	Courteous Way	0.559
Service Limitation	Not Always Willing To Help	0.545
Service Priority	Best Interest At Heart	0.612

Table: 2 Factor Loading

The result of KMO and Bartlett's Test stipulated that $p < 0.05$ which means factor analysis is a suitable statistical tool to analyze the data. Factor 1 is named as Service crucially as it includes the variables mention in the above table with the correlation values corresponding to it. Likewise total eight factors are extracted named as Service Acquaint Ability, Service Response, Service Intelligence, Service Personalization, Service Modernization, Service Limitation and Service Priority respectively.

ANOVA

H0: Gender wise / Age wise / Income Wise / Occupation Wise and Education Wise, there is no significant difference in customer perception towards the service quality of Indian Railway.

H1: Gender wise / Age wise / Income Wise / Occupation Wise and Education Wise, there is no significant difference in customer perception towards the service quality of Indian Railway.

Dependent Variable	Independent Variable	Significant Value
Service Quality	Gender	0.098
	Age	0.000
	Income	0.086
	Occupation	0.003
	Education	0.040

Table 3 (0.05 level of significance)

Significant value of demographic variables such as Age, Occupation and Education is lesser than 0.05 and hence alternate hypothesis is accepted that concludes that age wise, occupation wise and education wise, there is a significant difference in customer's perception towards the service quality of Indian Railway where as Gender and Income has no difference so far as customer's perception towards the service quality of Indian Railway is concern as their values are greater than 0.05.

FINDINGS

- From the first factor, it has been found out that majority of the time, Indian Railways are good at record keeping and accurate in the timings of the train.
- Convenience, trustworthiness and good response are the

variables derived from the factor two whereas punctuality & problem solving are the variables derived from the factor three and all the variables are found to be more important determinant of the service quality of Indian Railway.

- With advent of technology in services of Indian Railway, service modernization is another important factor of the service quality found out during the study.
- Age, Occupation and Education are the demographic variables that make a significant difference in customer's perception towards the service quality of the Indian Railway.
- Whereas Income and Gender do not make any difference in forming the customer's perception towards the service quality.

CONCLUSION AND RECOMMENDATION

Findings of the study show that eight factors are derived from the factors analysis that is important determinant of the service quality of Indian Railway. But one factor out of eight highlights the limitation of the Indian Railway and that is Service Limitation. Sometimes employees of the Indian Railway are unable to provide the prompt service to the customer. Moreover, through another objective it was revealed that age, occupation and education are the demographic variables that play an important role in forming the customer perception towards the service quality. So, in order to improve the quality of the service, Indian Railways should throughout implement technology so as to reduce the burden on a part of the employees and they can give more focus in providing prompt service to the customer. Although Indian Railway has come up with mobile and internet service through which customer can book and cancel the ticket and perform many other activity but looking at the no of the traveler Indian Railway should establish bigger technological platform so as to remove the bottleneck of the current technology.

REFERENCE

- Allen and DiCesare (2008), Public Transportation and Customer Satisfaction: The Case of Indian Railways, *Global Business Review* August 2008 9: 257-272. | | Eboli and Mazzulla (2007), Service Quality Attributes Affecting Customer Satisfaction for Bus Transit, *Journal of Public Transportation*, Vol. 10, No. 3, 2007 | | Geetika & Nandan (2010), Determinants of Customer Satisfaction on Service Quality: A Study of Railway Platforms in India, *Journal of Public Transportation*, Vol. 13, No. 1, 2010 | | Ngatia G. J., Okamura T., & Nakamura F. (2010) The Structure of Users' Satisfaction on Urban Public Transport Service in Developing Country: the Case of Nairobi. *The Journal of the Eastern Asia Society for Transport Studies*, 8. | | Naresh Malhotra & Satyabhushan Dash (2011), "Marketing Research", (6th ed.), Pearson Education Inc. | | Robert Y. Cavana, Lawrence M. Corbett, Y.L. (Glenda) Lo, (2007) "Developing zones of tolerance for managing passenger rail service quality", *International Journal of Quality & Reliability Management*, Vol. 24 Iss: 1, pp.7 - 31 | | Vanniarajan & Stephen (2008), Railqual and Passengers Satisfaction: An Empirical Study in Southern Railways, *Asia Pacific Business Review* January 2008 4: 64-75. | | Introduction of Railway retrieved from http://irfca.org/~mrial/history_ir.html. |