

A Study of Customer Satisfaction in Public Transportation System

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Abstract

The purpose of the study is to examine the factors measuring customers' satisfaction, especially the impact of service quality on customers' satisfaction in public transportation. Regional private transport operators could withstand in the market and variety of new private operators are emerging continuously. The present study throws light on knowing customer satisfaction levels and developing a model for customer choice variables leading to satisfaction. The study tries to establish relation between variables of Empathy, Value added services, Customer Choice with Customer Satisfaction. The study was carried from last decade under different districts of AP, Telangana & Karnataka. The findings of the study are, various independent variables like Value added services, Customer Convenience, Empathy, Reliability, Online, Customer comfort & Choice , Assurance, service value & Enhancers which were identified as reasons for choosing private service operators, even proved to be leading to satisfaction of Customers.

Keywords: Satisfaction, Operators, Empathy, Reliability, Online, Enhancers

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I. INTRODUCTION

India's transport sector is large and diverse. it caters to the needs of 1.1 billion people. The sector contributed about 5.5 percent to the nation's GDP, with road transportation contributing the lion's share. Good physical connectivity in the urban and rural areas is essential for economic growth. Since the early 1990s, India's growing economy has witnessed a rise in demand for transport infrastructure and services. However, the sector has not been able to keep pace with rising demand and is proving to be a drag on the economy. Major improvements in the sector are therefore required to support the country's continued economic growth and to reduce poverty. Roads are the dominant mode of transportation in India today. They carry almost 85 percent of the country's passenger traffic and more than 60 percent of its freight. The density of India's highway network at 0.66 km of roads per square kilometre of land – is similar to that of the United States (0.65) and much greater than China's (0.16) or Brazil's (0.20). However, most roads in India are narrow and congested with poor surface quality, and 33 percent of India's villages do not have access to all-weather roads.

1.1 Objective

The corporation's main objectives are:-

- 1.To provide efficient, adequate, economical, safe and well-coordinated passenger transport service.
2. Through the development of transport facility, development of this virgin Desert Land for our national economy.

II. Literature Review

2.1 K.Rajesh Sam, Dr. S. Suneetha, Dr. I. Lokananda Reddy (2021): A study on customer satisfaction in private operators across interstate transport. It was found that in the presence of all the dependent variables, the factors like 'empathy', 'reliability' 'Assurance' and 'Customer comfort' are found significant with their p value less than 0.05, leading to satisfaction of customers of Private Service operators. The factors like 'value added services' 'convenience', 'customer choice' 'service value' 'Online access are found to be insignificant, couldn't influence much the construct of Customer Satisfaction. The value of regression analysis specifies that all independent constructs put together 48.5% customer satisfaction, left with scope for identifying other constructs

that result into customer satisfaction in. Among the independent variables, value added services, service value etc.

2.2 Rabiul Islam, Mohammed S. Chowdhury, Mohammad Sumann Sarker and 1Salauddin Ahmed (2014): Measuring Customer's Satisfaction on Bus Transportation. To summarize, the present paper tried to reveal the important factors measuring customer satisfaction in Bus transportation services provided by HBR in the city of Sintok located at the province of Kedah, Malaysia. Findings indicate that satisfaction in customers varies in line with the service dimensions which affect total satisfaction. More precisely, the results indicated that customers present a moderate to strong level of satisfaction along the line of service dimensions. The sub criteria route safety, service of personnel, service inside the bus comprises the strong points of the company. The overall result show that service quality attributes influences overall customer satisfaction in using public bus transport. High quality public bus transport not only keep customer to continue using public bus transport to fulfill their travel demand but also attract potential customer. The examination of the literature provide some interested results.

2.3 Rida Khurshid ,Dr. Hummayoun Naeem, Sana Ejaz, Faiza Mukhtar, Taha Batool (2012): Service quality and customer satisfaction in public transport sector of Pakistan. An empirical study customer satisfaction is considered to be the most important factor whether it is meant for a product or a service. In case of failure to satisfy customers, company will be replaced by others and when industries offering various services, have to be more vigilant because there is a special attitude that plays an important role attracting and retaining the customers. Keeping this in view, the researchers intended to highlight the current issues of transport sector in Pakistan. That how service quality effects customer satisfaction. For this purpose, a convenient sample of 120 respondents was selected (60 male and 60 Female) and data collection tool for all the variables (service quality and customer satisfaction) was used from the body of knowledge to check how do they feel about this service. Regression coefficient was used to analyze two independent sets of data. The empirical analysis proved that there was a positive relationship between service quality and customer satisfaction in the public transport sector of Pakistan.

2.4 Dr. V.M. Anitha rajathi, R. Vijaya Kumar (2021): A Study on Customer Satisfaction on Government Buses with Special Reference From Trichy To Chennai. This study discuss about the customer satisfaction on government buses with special reference from Trichy to Chennai. To identify the difficulties faced by the customers in the government buses and measure the satisfaction level, analyse and suggest some measure to improve the service quality in government buses from Trichy to Chennai. This study analysed with 50 respondents were taken in the area Trichy central bus station selected by convenience sampling method. Analysis was made by the use of statistical tools like chi-square, percentage and correlation test. This research undoubtedly shows the level of customer satisfaction towards government buses special reference Trichy to Chennai.

2.5 Mohd Faizun Mohamad Yazid, Aeshah Mohd Ali, Sanusi Abdul Manaf (2020): customer satisfaction in public transport service. This research evaluates customer perceptions towards service quality in the public transport services in Kuala Lumpur, Malaysia. Five dimensions from the service quality were measured to identify which dimensions play essential roles in customer satisfaction. The research uses questionnaires to collect data. 300 questionnaires were distributed among the people who commute daily using public transport. Data collection was done at the selected bus station and based on convenience sampling. 221 usable questionnaires were collected for data analysis using Smart PLS. The results indicated that only reliability and tangibles are significant towards customer satisfaction, while the other three dimensions are not supported. The service provider can use the results to study customer perceptions of their services. It can be used to improve their services and gain more trust from the customer.

2.6 Vinayak Shivaji Salokhe, Prof. (Dr.) Omprakash Haldar (2022): Passenger's perception and satisfaction towards public transport. study on literature review Transportation is an essential component of human life as well as any country's economic life. Commerce, agriculture, and the service industry all rely on it to survive. It aids in the movement of people and objects from one location to another. A well-functioning transportation network is a must for a rising country like India's future economic progress. Public services can be described as the provision of services or meeting the needs of individuals or groups with an interest in the organization while adhering to the organization's rules and procedures. Passenger's perception and satisfaction are associated with each other. Perception is a user's assessment of a service after utilizing it and comparing it to what he expected and experienced previously. People pick, organize, and interpret information to construct a meaningful image of the world through perception. The same stimulus can be perceived differently by various people. And satisfaction is determined by how customers perceive public transport services.

2.7 Khushbu Arora and A. Lenin Jothi (2016): An Empirical Study on User Satisfaction in Public Transport System. With the increase in population in metro cities and specially being the capital of India, Delhi-NCR is facing many problems in adjusting with the increasing population. Public transportation is a conveyance that provides continuing general or special transportation to the public and show that public transportation plays a

significant role as it improves the quality of our day to day life by expediting traffic saves money and creates new jobs. The specific objective of this study are to study the satisfaction level of the various users of public transportation system and identify the most influencing determinants of satisfaction and the impact of gender and age on the level of satisfaction on public transportation system. Sample size of 200 was taken for this research and 192 responses were qualified for research. It is found that satisfaction level between male and female customers of public transport system are significantly different in Staff service. Proper network connection, Adequate service frequency, Convenient time schedule, Safety measures from accidents, Cleanliness of the vehicle and Staff service are the factors for which there is significant difference between different age groups in level of customer satisfaction.

2.8 Adler Hilary Laisak, Anita Rosli & Nurzalikha Sa'adi (2021): The Effect of Service Quality on Customers' Satisfaction of Inter-District Public Bus Companies in the Central Region of Sarawak, Malaysia. Service quality is a vital factor that influences customer satisfaction. For profit organizations such as public bus companies, high customer satisfaction is a sign for business success and the ability to create long-term relationships with their customers. This research is to assess the effects of service quality attributes on customers' satisfaction towards service quality provided by inter-district public bus companies in the Central Region of Sarawak. A total of 400 respondents were obtained among inter-district public bus users through a convenient sampling method. The mean score for customers' satisfaction was 2.24, which means the level of customer satisfaction towards the service quality of inter-district buses in the Central Region was low. Meanwhile, the result from the multiple regression analysis showed that service quality dimensions of empathy, assurance, and responsibility had significant effects on customers' satisfaction. The inter-district public bus companies in the Central Region of Sarawak should improve their service quality by building and obtaining customer trust to keep existing customers and at the same time to attract potential customers. Good customers' experience towards service and the power of word mouth are marketing tools to enhance business reputation relative to other competitors.

2.9 Sobanah Dhevi Tharmalingam, Sai Mei Ling , Vikniswari Vija-Kumaran, Kalai Vani Kalimuthu, Suresh Nodson (2022): This paper reports the customers' satisfaction about public transportation service in Penang, Malaysia. In this respect, some of the factors namely reliability, accessibility, safety and security are used to measure the customers' satisfaction on bus service Rapid Penang, Malaysia. A survey was conducted where questionnaires were distributed to 500 bus passengers. The results of the study indicates that reliability, accessibility, safety and security of bus service are positively significant to customer satisfaction. The contribution of the study creates better understanding of the service provider the factors that able increase customers' satisfaction and base on the knowledge they able to improve their services and gain the customers' trust.

2.10 Lu Gao ,Yao Yu, Wuling Liang (2016): Public Transit Customer Satisfaction Dimensions Discovery from Online Reviews. Online user-generated content provides a valuable source for identifying dimensions of services. This study proposes a framework for extracting the dimensions of consumer satisfaction of public transportation services using unsupervised latent Dirichlet allocation model. A pilot study was performed on 17,747 online user reviews collected from 1452 public transportation agencies in the United States over 8 years. The proposed approach is able to identify a few dimensions that were not discussed in the previous literature. This research also provides an alternative method to collectively gather users' feedback and efficiently preprocess textual data related to transit customer satisfaction

2.11 Luong My Linh , Nguyen Quoc Nghi , Dinh Hoang Anh Tuan (2021): Factors Affecting Customer Satisfaction with the Bus Service Quality of Phan Thiet Automobile Transport Cooperative This study aims to determine the factors influencing customer satisfaction with the bus service quality of Phan Thiet Automobile Transport Cooperative. Research data are collected from 290 customers who regularly use bus services of Phan Thiet Automobile Transport Cooperative. Applying the exploratory factor analysis and multivariate linear regression, the research results indicate factors positively affecting customer satisfaction with bus service quality are trust, assurance, empathy, traffic culture, perceived value, quality of the station, and tangible facilities. In which, the perceived value puts the most impact on customer satisfaction with the bus service quality of Phan Thiet Automobile Transport Cooperative.

2.12 Seyed Mohammad Mahmoudi, Fereyduun Verdinejad, Gholamreza Jandaghi and Ali Mokhtari Mughari (2020): Analysis and establishment of bus rapid transit (BRT) on customer satisfaction in Tehran. This research aims at exploring and analyzing the Bus Rapid Transit (BRT) in passengers' satisfaction in Tehran City, which has been the huge event in public transportation. In doing this research, after exploration of models and approaches in service quality, Vahed Company, as public services organization, serves passengers and uses quality models that emphasize customer satisfaction. However, the conceptual model based on primary and sub hypothesis was designed. For gathering data, two questionnaires were used for BRT passengers and customers satisfaction. The research hypotheses were tested by a correlation test and all the hypotheses were verified. The sequences of priorities in passenger's satisfaction were driver's behavior, ergonomics, and bus velocity and

service item. There was a significant relationship between passengers satisfaction and BRT quality. Also, it was concluded that drivers behavior item with mean of 1.99, bus velocity with mean of 2.04, ergonomics item with mean of 2.87 and service quality of BRT with mean of 3.10 were from first to fourth of the passengers' satisfaction priority, respectively.

2.13 M L Hamzah, A A Purwati, A Jamal , Sutoyo , M Rizki (2020) : An Analysis of Customer Satisfaction and Loyalty of Online Transportation System in Pekanbaru, Indonesia This study aims to determine the mediating role of customer satisfaction in the relationship between customer trust and customer experience on customer loyalty in Grab transportation in Pekanbaru. The variables of this study include customer trust, customer experience, customer satisfaction, and customer loyalty. This research was conducted in Pekanbaru City. Data were collected through a questionnaire method which was filled independently of 400 respondents using the census / questionnaire method then analyzed by Structural Equation Modeling (SEM) with the help of SPSS 26.0 and Smart PLS 3.2.9. The results of the analysis prove Customer Trust has a positive and significant effect on Customer Satisfaction.

III. CONCLUSION

It was observed that the customer satisfaction is very important role in Public transportation system. It was found that in the presence of all the dependent variables, the factors like empathy, reliability, Assurance, Customer comfort, accessibility, safety and security are used to measure the customers' satisfaction on bus service. The results of the analysis prove Customer Trust has a positive and significant effect on Customer Satisfaction. Customer feedback and efficiently preprocess textual data related to transit customer satisfaction was main purpose of the service.

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