



The Impact of Serv... (Muhammad, A. Y. & Gwarzo, A A 2024) DOI:<https://10.59479/jiaheri.v1i1.65>

### The Impact of Service Quality on Customer Satisfaction: Evidence from Nigerian Railway Station (Rigasa), Kaduna State

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#### Abstract

Quality of service operation is regarded as one of the most important factor in achieving customer satisfaction in any organization. Transport by Rail is considered one of the cheapest, secured, and safest means of transportation from one place to another. The main objective of the study is to assess the impact Service Quality Dimensions (Tangibles and Assurance) on Railways Passengers satisfaction in Rigasa Train station, Kaduna State. The study employed the use of survey research design was used. In this work, primary and secondary data were employed to acquire information for inference, The sample size was determined using Kregcie and Morgan Sample size table from the total population of (200) respondents, which was identified based on those that uses the Abja-Kaduna Train service.the result revealed that Tangibles measures have a considerable impact on passenger satisfaction, whereas Assurance has a Significant and positive impact on passenger satisfaction, according to the research. This indicates that passengers are content with the rail service. The study recommended that Nigeria Railway Corporation should encourage its marketing and research divisions to do frequent passenger service research from time to time in order to improve service delivery and to resist market dynamics affecting their wants, Provision of a good Modern Rail road network should be available to ensure that passengers arrive their Destination on time.

**Keywords:** Quality, Service, Satisfaction.

#### Introduction

Mobility is one of the most fundamental and important characteristics of economic activity as it satisfies the basic need of going from one location to the other, a need shared by passengers, freight and information(Kumsa, 2020). The land transportation services industry is a very large and growing transportation industry, particularly when other means of transportation are very expensive. This growth was not only caused by the increase in land transportation service users, both for the purpose of traveling people and for transporting goods(Aswanti Setyawati1, 2021). The transport sector is thus becoming important component of the economy impacting on development and the welfare of populations (Hundal, 2015). When transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multipliers effects such as better accessibility to markets, employment and additional investments (Agrawal, 2008). The importance of transportation grows as society and economic systems become more complicated. Furthermore, transportation demand is derived since it is dependent on demand for



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the commodities carried or the benefit of personal travel, and each trip is unique in time and space. To enable economic growth and development, a good transportation system is required. For many years, Nigeria's single-narrow-gauge rail line, built during the colonial period, was the only form of freight transportation between the northern and southern sections of the country. In 1909, the Lagos – Ibadan line was extended to Jebba, and in 1915, it was combined with the Kano – Baro line. In 1916, the Port Harcourt line reached Enugu in Nigeria's east. The railway line served towns and cities like as Jos, Kaduna, Zaria, Namoda, Nigwu, Ifo, Maiduguri, and Gombe between 1916 and 1966. In 1966, the Alesa Eleme oil refinery in Port Harcourt was connected to the Enugu line (Ademiluyi & Dina 2011). According to Odeleye (2000), the Nigerian rail system consists of 3,505 kilometers of narrow gauge (1.067m) single track running parallel through the country from north to south and from south to north. Because there are 1,600 strong curves between 4 and 10 degrees over 1788 kilometers of this line, the maximum permitted speed has been restricted to 65 kilometers per hour. Unfortunately, the government has built no major railway extensions since independence in the last five decades. The present lines are mostly colonial remnants that Nigeria inherited from the colonial administration (Kefele, 2016). Rail transport is essential for economic and industrial development. Rail transport not only conveys passengers but also freight across the country, according to Krishna kumar and Kavitha (2020). Since its inception as a method of public transit, rail transportation has been crucial to the growth of Nigerian transportation.

Rail transport is a crucial element in intermodal transportation of products and services, especially for developing countries like Nigeria, which has the natural advantage of being a bulk carrier, safer, and cheaper. It is also more environmentally friendly, has less traffic, and uses less fuel than other forms of transportation. A poorly utilized rail transportation system has a negative impact on the total national transportation system, resulting in low output and a lower contribution to the country's economy. Passenger rail traffic has increased in several countries, particularly in wealthy countries. However, the situation in Nigeria's North-West area, where train traffic has continued to deteriorate, is the polar opposite. Rail services, according to Mehta (2014), are an important means of transportation that is more convenient because it transports bulk commodities over vast distances, is less expensive, and is very safe and environmentally friendly. The study will make significant contribution to the knowledge of service quality, facilities and passengers' satisfaction. The study will also measure impact of service quality, facilities and passengers' satisfaction. It will also come up with findings, which will help government and private educational providers, to provide a better management for running the train station efficiently and effectively. Finally, the research will serve as an example for future studies among academics. Therefore, it is against this background the present study wishes to do an investigation of the impact of service quality, facilities on the passengers' satisfaction.

Satisfaction is a way of evaluating quality. A very high level of customer satisfaction is believed to be the best indicator of the company's future profits. Satisfaction can be broadly characterized as an evaluation of the quality of a post-purchase product given pre-purchase expectations (Tse et al, 1990). Satisfaction as a customer's attitude towards meeting their needs. Satisfaction can also be defined as the feeling of pleasure or disappointment a person experiences after comparing the perceived performance or results of a product with his expectations (Angelova & Zekiri, 2011). Customer satisfaction is a level where the needs, wants and expectations of customers can be met which will result in repeated purchases or continued loyalty so that customer



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satisfaction or dissatisfaction is an after-purchase assessment where the performance of the product purchased meets customer expectations (Rita et al., 2019). Satisfaction is a feeling of pleasure or disappointment for someone who appears after comparing the performance (result) of the product thought against the expected performance (or outcome). If the performance is below expectations, then the customer is dissatisfied. If the performance meets expectations, the customer is satisfied. If performance exceeds expectations, the customer is very satisfied. Consumer satisfaction is a situation shown by consumers when they realize that their needs and wants are as expected and are met properly (Permana et al., 2021).

Service is a strategy or key in various businesses or activities of a service nature, to achieve market competition, quality improvement and other forms of service is a very urgent matter by utilizing available technology, so that it becomes a continuous and integrated service. When defining the concept of service quality, one should always start with the customer, as quality is the most important factor for customers and also the basis of their opinion, which then results in the fact that service quality, is achieved if customer expectations are met. One service quality approach that is widely used as a reference in research. Research is the SERVQUAL (model Service Quality). According to Parasuraman (2010), SERVQUAL (Service Quality) is based on the theory of disconfirmation of expectations and depends on the gap between customer expectations about services provided and evaluation of perceptions of services. Goetsch and Davis define Service Quality as a dynamic condition related to products, services, people, processes, and the environment that meet or exceed expectations. Service quality has a long-term effect in shaping customer satisfaction and will make customers loyal to the company (Chang & Yeh 2017). Service quality can be measured by dimensions such as tangibility, reliability, responsiveness, assurance and empathy in which the high quality of service in that dimension will increase customer satisfaction. Service quality is the whole process of meeting customer needs so that customers feel valued by service staff, accurate billing, getting customer feedback from experience, and maintaining service speed during busy times. Important factors in service quality such as important environment & facilities, safety & security, mode of transportation and travel information, accessibility & directions, comfort, convenience & environmental quality 'and staff & ticket management, are factors that become benchmarks in improve service quality (Chauhan et al., 2021).

Service quality is a significant factor affecting customer satisfaction (Li et al., 2021). In the concept of customer satisfaction, a good work environment and service-related training can create a positive service climate for employees, which in turn can increase customer satisfaction (Son et al., 2021). The strategy of increasing satisfaction does not depend solely on the criteria with the lowest level of satisfaction and weighted estimates, the nature of each criterion, the nature of customer demand, and the technical margin for customer service improvement. Service excellence is a strategic priority and that service significantly influences superior value creation, customer satisfaction, competitive advantage, growth, and profitability (Eren et al., 2013). The relationship between service personal values (SPV) and emotional satisfaction (E-SAC) is due to the customer service experience (Mustaffa et al., 2016). As consumers become more informed and more demanding about their purchasing services, failure to satisfy all consumers is inevitable. As a result, it is important to reduce consumer dissatisfaction caused by service failure factors (Jung & Seock 2017). Service quality is one of the best measurement models of customer expectations and



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perceptions. Company performance results in customer satisfaction with products or services (Agarwal & Gowda 2020)The determining factor for overall customer satisfaction and encouraging increased collaboration and coordination between various customers is on-demand services (Xu 2021).

The need to increase mobility of passengers in Nigerian road and the emergence of transport sustainability led to the development of a light railway system in the Kaduna to Abuja. It was expected that Nigerian rail system delivers quality service, reduce the transportation problem grounded for long years and the overflow of passengers in the country. It was about improving the communities' life by making Nigeria an even better place to live and work in. It was about encouraging rapid economic development, industrialization and international competitiveness with efficient, high quality and modern transport infrastructure. The government intended with such project to encourage the downtown citizen and creating conducive transport system to the city. Accordingly, Obe *et al.*, (2022) investigate Customer (passenger) satisfaction and analyze the rail service quality dimensions that influence passengers' satisfaction and patronage of the South West Mass Transit Train, Nigeria'. Similarly, improving traffic safety at railroad level crossings "Pedestrian. None of these studies focused on the evaluation of the service quality delivered, facility and customer satisfaction level in Nigeria.

At the present, there is no evidence that shows the current status of the service quality and passengers' satisfaction in Nigeria rail way context particularly Rigasa train station. The situation calls for the need of studies to fill the gap. It is essential for the Railway Corporation in general and Rigasa train station in particular and as well for responsible bodies of government to know about the opinion of the passengers regarding the services offered to them and their satisfaction level in order to make future policies, provisions, standard for quality service and improvement action decision. Hence, a research should be conducted to understand both the expectations and perceptions of customers and also measure them from their perspective in order to identify gaps in delivering service quality to ensure customer satisfaction.

Precisely, this study attempts to contribute on two, main gaps that exist in the literature on predicting passengers' satisfaction, investigation the impacts of service quality on passengers' satisfaction, exploring the impact of facilities on passengers' satisfaction in Rigasa train station. Currently, to the researchers' knowledge no study has been conducted directly on the relationship between service quality and passengers' satisfaction in Rigasa Train Station, previous studies focused on either Hospital or Hotels and Banks. Similarly, little or no study found in the literature regarding Rigasa train station, on the relationship between the service quality and passengers' satisfaction based on the literature available. Consequently, this study aims is to respond to two (2) direct questions. Equally, the study aims at achieving two direct objectives as presented in the following subsections.

### **Objectives of the Study**

The main objective of the study is to evaluate the current status of service quality and facilities on the passengers' satisfaction in Nigerian railway service. The study has the following specific objectives:

1. To determine impact of Tangibility on customers' satisfaction in the Nigerian railway service.
2. To determine impact of Assurance on customers' satisfaction in the Nigerian railway service.

### **Research Questions**





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- 1) What are the impacts of Tangibility on the passengers' satisfaction in the Nigerian railway service?
- 2) What are the impacts of Assurance on the passengers' satisfaction in the Nigerian railway service?

### **Research Hypothesis**

1. Tangibility has positive and significant impact on customers' satisfaction in the Nigerian railway service.
2. Assurance has positive and significant impact of Assurance on the passengers' satisfaction in the Nigerian railway service.



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**Research Methods**

In this study, a survey research design was used. In this work, primary and secondary data were employed to acquire information for inference. The sample was chosen from the population using the purposeful sampling technique. The sample size was determined using Kregcie and Morgan Sample size table from the total population of (200) respondents, which was identified based on those that uses the Abja-Kaduna Train service. To obtain information from the respondents, a structured five point-Likert-scale questionnaire was used. A basic random selection procedure was used to distribute the questionnaires. The validity of the instrument designed for this study was determined using content validity, and the questionnaire's reliability was determined using Cronbach's alpha of 0.86. Pearson coefficient and basic regression analysis were used to evaluate the hypotheses.

**Results and Discussion**

A total of 132 questionnaires were distributed among those people that uses Abuja Kaduna Train even if its once so that they can assess the quality of the services given by the Train. Out of such number, only 95 questionnaires were returned and completed. Therefore the analysis can done using 95 respondents.

**Demographic profile of the respondents**

Majority of the respondents (65%) are between the age of 35 -50, while only 35% are within the age range of 51 years and above.

While on the other hand the occupational distribution of the passengers are as follows: 55% are civil servant, that are residing in Kaduna for easy living and going to Abuja almost on daily basis, 30% are business men intended to travel to Abuja through Train for their daily Business transactions, while the remaining 15% are laborers that engage in personal handwork to survive.

**Regression Analysis**

**Table 4.1:** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523 <sup>a</sup>	.274	.258	1.79328

a. Predictors: (Constant), ASSURANCE, TANGIBILITY

The model summary explains R-square, and the R-square is 27% which explain the influence of Tangibles and Assurance on Train Passengers satisfaction in Rigasa Train station Kaduna State. While 73% will be explain by other variables than Tangibles and Assurance.

**Table 4.2:** Anova

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	111.506	2	55.753	17.337	.000 <sup>b</sup>
Residual	295.860	92	3.216		
Total	407.366	94			



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a. Dependent Variable: CUST Sat.

b. Predictors: (Constant), ASSURANCE, TANGIBILITY

The table Above explain model fitness, based on the sig. value of .000<sup>b</sup> the model is fit to predict the independent variables (ASSURANCE, TANGIBILITY) @ 5% level of significance.

**TABLE 4.3: Regression Result**

Model	Coefficients <sup>a</sup>					Collinearity Statistics
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	7.685	1.592		4.827	.000	
TANGIBILITY	.199	.085	.221	2.342	.021	.885
ASSURANCE	.451	.105	.405	4.289	.000	.885

Source: SPSS 21

Table 4.3 above explain the relationship between variables (IV ‘s and DV), its explain how tangibles and Assurance impacted on Passenger’s Satisfaction in Rigasa Train station, Kaduna State. Based on the results above, the level of significance is 5% mostly used in social science research.

Tangibility shows positive impact on the Passenger’s Satisfaction in Rigasa Train station, Kaduna State. With sig. value of .021 which is less than .005, with t value of 2.342 greater than 1.96. As such null hypothesis should be rejected @ 5% level of significance.

Assurance on the other hand impacted significantly and positively on the passengers satisfaction, with a sig. value of .000, highly significant and t value of 4.289 greater than 1.96. As such null hypothesis should be rejected @ 5% level of significance. The tolerance level is within the range of .010, which is acceptable according to (Hair et al, 2010). Indicating absence of multicollinearity in the data.

**Conclusion/ Recommendations**

Passengers' impressions of service quality on the Inter-City rail system in Northern Nigeria are investigated in this study. The railway transport sector is one of the world's most important service industries, according to literature. It is necessary for economic development. This will only be possible if travelers receive high-quality service that meets their expectations.

Tangibles measures have a considerable impact on passenger satisfaction, whereas Assurance has a Significant and positive impact on passenger satisfaction, according to the research. This indicates that passengers are content with the rail service. According to the study,



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most passengers take more journeys each week and are more likely to rely on trains than other modes of transportation.

The above results coincide with that of Perera and Bandara, 2016, Kumsa, 2020, and Aswanti, 2021.

Conclusively the objective of the study is achieved based on the results of the study. As such Tangibility is a predictor Passengers satisfaction and also Assurance is another predictor of passenger's satisfaction.

### **The study therefore recommended that:**

1. The Nigeria Railway Corporation should encourage its marketing and research divisions to do frequent passenger service research from time to time in order to improve service delivery and to resist market dynamics affecting their wants.
2. Provision of a good Modern Rail road network should be available to ensure that passengers arrive their Destination on time.
3. Equally there is need to improve the quality of rail service while also attracting more passengers,
4. Government must provide security and safety, thus basic criteria and monitoring of passengers' assets must be thoroughly examined to assure the protection of their goods.

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