

## **ROAD TRANSPORT MANAGEMENT AND CUSTOMER SATISFACTION IN NIGERIA: A STUDY OF IMO STATE TRANSPORT COMPANY, NIGERIA**

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**ABSTRACT:** *Road transportation is one of the engine of an economy as it links both the producers and consumers. But ineffective and inefficient management of road transportation system have crippled development of the Nigerian economy and social activities which have resulted in dissatisfaction among the customers in the industry. To this end, the study examined road transport management and customers' satisfaction in Nigeria using SERVQUAL Model with focus on Imo Transport Company, Nigeria. The study used primary data collected through questionnaire as survey instrument to elicit the service quality perceptions of road passengers. The results of the study indicated that the six SERVQUAL dimension showed that there is a strong relationship between customers' satisfaction and public transport service in Nigeria. Thus, from perspectives of the passengers, road transportation and customer's satisfaction is very essential for the movement of goods and people. Based on the finding, the study recommended regular maintenance of vehicles and roads and provision of quality customer services that will satisfy the commuters who constantly use the roads must be put in place in order to achieve customers' satisfaction and thus improve economic activities.*

**KEY WORDS:** commuter, customers', management, road transport, satisfaction

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## **INTRODUCTION**

Transportation is one of the drivers of the economy. Transportation helps to bridge the gap between producers, suppliers and industrial users as well as individual commuters. This means that without transportation management system, the entire economy will suffer stagnation (Adeniran, 2018). By means of definition, transportation is the process of making goods and services available to a named destination through air, pipeline, water and land. Similarly, Nwachukwu (2014) defined transportation "as the movement of people and goods from one location to another.

Meanwhile, the commonest means of transport, is the land transport which entails transportation with the use of road and rail to convey goods and people from one place to another. But of great importance in this study is road transportation. Road transport entails the use of vehicle, motor cycle and bicycle to move goods and passenger from place to place. Road transportation is a necessary end right from early history. The mobility of

people and materials especially in the present days become one of the greatest needs that have to be adequately satisfied in our society and economy at large (Okakunori, 2006). Research has shown that road transportation alone account for about 46% of the total physical distribution costs for manufacturing companies and 28 % for reseller companies (Taylor, Miller & Fink, 2008; Anderson, Baggett & Widener, 2007). It is important to note that not much success can be accomplish in manufacturing, distribution of goods and services including the movement of people without transportation.

It is as a result of the great importance of road transportation that man has over the ages developed various transportation modes in other to facilitate the movement of people and materials. The mode of transportation selected will greatly depend on price, time, delivery, condition and destination, customer's patronage, and past purchase satisfaction. But poor transportation management in term of road and vehicle maintenance as well as customer's satisfaction can therefore jeopardize the source of procurement of materials; goods and services, movement or people and even course increase in prices and loss of lives (Wojuade & Adewumi, 2017; Krizek & El-Geneidy, 2007). Advances in business over the years have been considerably driven development in business philosophies such as marketing, transportation and distribution, and customer demands and satisfaction for survival in an increasing competitive business world. Level of customer expectation has engendered an industry wide search for quality high level of customer service and greater cost effectiveness (Parasuraman, Valarie, Zeithmal & Berry, 1988).

Meanwhile, according to Achaka (2014), poor road transportation management is one major problem that is affecting the growth of the Nigerian economy. Poor road transportation management has manifested in the form of bad road network, poor technological development and construction of sub-standard roads which led to the ineffectiveness and collapse of the Nigerian road system that supposed to carry bulky goods from one city to another and has increases the prices of goods and services. This in turn has bounced as the road transportation system characterized by heavy-duty Lorries overworking the road system and the resultant effect is damages of roads causing accidents and loss of lives and property. Similarly, poor management of Imo Transport Company (ITC) transportation system has caused breakdown of vehicles that has resulted in goods and movement of people not being able to reach their destination on time. This poor management of road transportation systems has cost the nation a damaged image, loss of huge amount of money, loss of lives and properties and most customers are greatly dissatisfied with condition of road transportation in Nigeria. Also, lack of poor technological development to regulate the speed of vehicles, high overloading of men and goods are great problems to road transportation. In lieu of the scenario above, the paper examined road transport management and customer satisfaction in Imo state transport company, Nigeria.

## LITERATURE REVIEW

Transportation is the movement of people and goods from place to place. It is a means by which people, goods and raw materials are able to get to where they are needed for commercial or non-commercial purposes at the preferred time (Adeniji, 2000). Thus, mobility of people and materials is one of the greatest needs that have to be adequately satisfied in both the developed and developing nations if any meaningful level of social interaction, co-operation, production activities, economic and other types of development, and human welfare is to be achieved. It is as a result this, road transport which is the commonest means of transport, is often referred to as the engine and wheel of the society (Okakunori, 2006).

Road transportation for any nation is an essential aspect of the social and economic life as it enhances trade in which the industrial and tourist sectors as well as distribution needs are served. Thus, a responsive and effective transport system will enhance economic development in Nigeria and strategic roles in the global economy. Meanwhile, the road transport sector in Nigeria constitutes one of the greatest employers of labour in the economy. The impact of road transporters can be felt in every aspect of the Nigerian society. This is because road is the major mode of transportation in Nigeria. Other means of intra urban and inter urban transport system are the use of inland waterways and rail transport which are of course limited to a very few urban centers with peculiar terrain (water) in Nigeria (Oyeobu, Oyebisi, Olateju & Sesede, 2014). Studies in the area of urban transportation confirmed that more than 75% of population in cities depended on public transport while 25% depended on private transportation (Ogunbodede, 2008). Although, the first roads in Nigeria were built in the first decade of the 20th century, road transportation did not become generalized until the 1920s. The first road transportation services were by the colonial government and a few private individuals.

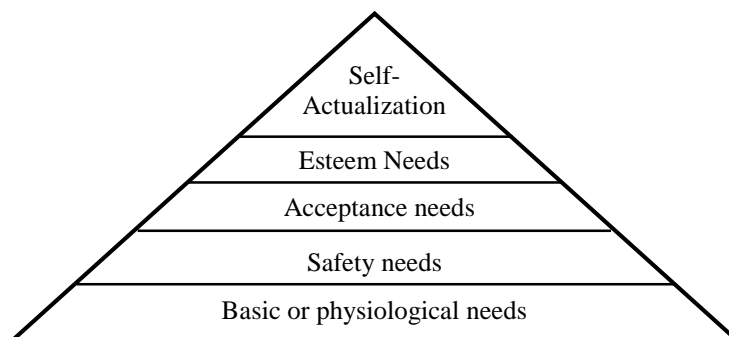
Private sector participation has been very significant in the road transport industry in Nigeria. Today the vast majority of road transport operations belong to the private sector. It accounts for more than 90% of urban and non-urban transport services. The Igbo were believed to be the pioneers of modern transportation business in Nigeria. Luxury bus transport business commenced in the early 1970 after the Nigerian civil war. In Onitsha, luxury bus transportation service was pioneered by P.N. Emerah Motors Transport Services and Late Chief Augustine Ilodibe, the owner of Ekene Dili Chukwu Transport Company. They represent the first generation of transporters of luxury bus transport service. This was followed by the second generation of luxury bus transport service such as Emenike Motors, Micmerah International Agency, G.U.O Okeke Transport Service, F.G Onyenwe, Dan Dollars, The Young Shall Grow Motors, and ITC Transport Services among others. Luxury buses ply the major urban areas in Nigeria such as Owerri, Lagos, Ibadan, Onitsha, Aba, Port-Harcourt, Enugu, Jos, Kaduna, Zaria, Kano, amongst others. Though there are many

transport companies presently operating in Nigeria but Imo Transport Company (ITC) Plc was chosen because it is well organized. Also, because of the location of study (Federal University of Technology Owerri), it is belief that conducting the study with ITC will be more convenient and we will have access to relevant primary data.

### **Theoretical Framework**

This study was anchored on Maslow theory of satisfaction. The hypothesis states that needs that are satisfied do not motivate but unsatisfied needs motivate. Thus, satisfaction occurs when the performance exceed desired expectation (Maslow, 1943). Maslow's theory advanced human are wanting beings: They always ask for more. As soon as one need is, another appears. In this place, this process is unending. It continues from birth to death. Therefore, although a particular need becomes satisfied, needs in general cannot be satisfied. A satisfied need cannot give room for improvement, only unsatisfied need will give way for improvement.

Thus, Maslow hierarchy of need consist of five levels which are physiological needs, satisfy (security) needs, social needs, esteem need and self-actualization needs.



**Source:** Extracted from Maslow, 1943 (Maslow's Hierarchy of Needs)

Normally, people wants to have an opportunity for growth. Only few people will be fully dedicated to their work, if the feelings that they can grow in the job is not given, satisfaction come from process of achieving growth as much as from the accomplishment itself. However, individual varies gratify in the kind of satisfaction to which they aspire.

### **METHODOLOGY**

Imo Transport Company (ITC) started since the administration of Sam Mbakwe. It commence business as a transport company. ITC which has now transformed to be one of Nigerian leading mini bus Service Company which moves about 30,000 passengers daily. The company uses mini buses, luxurious buses and small buses for its operations. Presently, the company has more than 4000 vehicles for their operations. The operational headquarter is located at MCC road Owerri which is under the supervision of Imo State Government. At present, ITC has deports in almost all the states of the federation.

Meanwhile, Imo Transport Company (ITC) was established with two striking objectives; which are profit making and rendering quality service to customers. Amongst the service qualities parameters are enumerated;

**Comfort and Convenience:** Comfort and convenience is an important quality constituent and is expected by any kind of commuter to a reasonable level. In order to ensure better quality, the service providers have to pay attention to various attributes of comfort and convenience. The scores on various individual attributes of the quality dimension of comfort and convenience have been presented in the figure above.

**Safety:** Safety, being equally important for all kinds of commuters, it is one of the most significant dimension of the quality of transport service. The commuters would, therefore obviously demand and expect a high level of safety. As a matter of fact the overloaded vehicles are generally exposed to greater incidents; the commuters generally prefer to travel in less overloaded vehicles notwithstanding the fact that the time bound commuters many a times, compromise with the situation. Safety, among other things, is subservient to the approach of driving and maintenance of the vehicles.

**Reliability:** Signifying dependability and accuracy in terms of timely departure, smooth speed and timely arrival is however, effectuated by other intervening factors such as the kind of the roads, breakdowns, traffic jams, enroute accidents etc. time bound commuters such as students; offices goers etc. are obviously interested in greater degree of reliability and generally opt for such transport service that is most reliable and at times compromise with other aspects of the quality. The commuters generally expect maintenance of a reasonably good speed with in time departure so that the arrival at destination is in time. The population of the study is the number of passengers that patronize ITC Plc. which is estimated to be about 2,000 per day as well as the number of ITC staff which is estimated at 4200. But a 10% random sampling technique was used to select 200 passengers and 42 workers of ITC. These were passengers and staff at the operational headquarter of the company located at MCC road Owerri. The instruments used were questionnaires and personal interviews. The questionnaires were developed by generating some items after a thorough understanding of conceptualization and operationalization of customer's satisfaction. Also, the questionnaire was pre-tested to check that it would collect relevant information and that the wording was clear. The responses from this pilot study were analyzed and the feedback used to improve the wording of the final research questionnaire. The questionnaires were administered for a week through face to face interviews to respondents. All the close ended question were designed to generate responses on SERVQUAL model to measure expectation and perception of customer's quality service. The principal component analysis (PCA) was used to analyze the data and provide answers to the research questions. The SERVQUAL is an 18-item questionnaire covering the six key dimensions of service quality modeling. The first section of the questionnaire has items elicits responses on the socioeconomic characteristics of the respondents. The second

section consists of attributes of the Service Quality (SERVQUAL) dimensions with respect to service quality in ITC.

### **Explanation of six SERVQUAL Dimensions**

According to Parasuraman, Zeithaml and Berry (1988), service quality is the simple or weighted average of the gap between the expectations of customers and customers' perceived performance along the six dimensions. The six dimensions were the foundation for the SERVQUAL, widely used instruments for measuring service quality. These dimension are shown in Table1.

**Table 1: Six Broad Dimensions of Service Quality**

Dimension	Description
Tangibles (TGB)	Appearance of physical facilities, equipment, personnel, and written materials
Reliability (REL)	Ability to perform the promised service dependably and accurately
Responsiveness (REP)	Willingness to help customers and provide prompt service.
Assurance (ASR)	Employees' knowledge and courtesy and their ability to inspire trust and confidence
Empathy (EPT)	Caring, good communication and customer understanding
Affordability (AFT)	Easy access and competitiveness

**Source:** Zeithamal, Berry and Parasuraman (2006).

## **RESULTS AND DISCUSSION**

Out of the 200 questionnaires administered to the users, a total of 188 were successfully completed and retrieved, and out of the 42 questionnaires administered to the operators, all were totally retrieved. That made up a total of 230 questionnaires that were successfully retrieved out of the 242 issued questionnaires representing 95% response rate. This was made possible due to close monitoring of the respondents which includes both commuters of I.T.C Owerri mass transit and the operators of the bus.

### **Socioeconomic Characteristics of Respondents**

The summary of the spread, showing the frequency and percentages of the gender, age, marital status, educational qualification and occupation of respondents based on the range was presented and analyzed in Table 2.

**Table 2: Socioeconomic Characteristics of Respondents**

Characteristics		Frequency	Percentage
Gender	Male	140	61
	Female	90	39
Age (yrs)	Less than 18	65	28
	18 -45	104	45
	46 and above	61	27
Marital status	Single	142	62
	Married	66	29
	Divorced/separated	14	6
	Widow/Widower	8	3
Educational qualification	FSLC	18	8
	SSCE	35	15
	Undergraduate	64	28
	Graduate	73	32
	Post Graduate	35	15
	Others	5	2
Occupation	Civil Servant	33	14
	ITC workers	42	18
	Students	68	30
	Business Men/women	87	38
Years of Patronizing/Working with ITC	0-4 years	90	39
	5-10 years	110	48
	11 years and above	30	13

**Source:** *Authors' Field Work 2019*

Based on gender, the distribution in Table 2 showed that one hundred and forty (140) respondents representing 61% are male. While ninety (90) respondents representing 39% are female. Thus, men have a considerable dominance than female. This is understandable as men tend to travel more than women especially in Imo state where commerce is very high. Table 2 also showed that one-hundred and four (104) respondents representing 45% are of the age group 18-45 years, sixty-five (65) respondents representing 28% are of the age group less than 18years; and sixty-one (61) respondents representing 27% are of the age group above 45years. Thus, majority of the respondents are of the age group 18-45 years. On marital status, Table 1 showed that one hundred and forty-two (142) respondents representing 62% are singles, sixty-six (66) respondents representing 29% are married, fourteen (14) respondents representing 6% are Divorced/Separated while eight (8) respondents representing 3% of the respondents are Widow/Widower. Thus, majority of the respondents are singles. Table 2 showed that seventy-three (73) respondents representing 32% are graduates; sixty-four (64) respondents representing 28% are undergraduate; thirty-five respondents representing 15% are postgraduate as well as SSCE holders; eighteen (18) respondent representing 8% are holders of first school leaving certificate, while, five (5) respondents representing 2% are holders of others certificates which amongst others could be trade test. Thus, majority of the respondents are graduates.

Based on occupation, Table 2 showed that eighty-seven (87) respondents representing 38% of the sample size are business men/women, sixty-eight (68) representing 30% are students; forty-two (42) representing 18% are workers in ITC which could be drivers/ ticket attendants; and thirty-three (33) representing 14% are civil servant. Thus, majority of the respondents are business men/women. Based on the years of patronizing/working with ITC, Table 2 showed that one hundred and ten (110) respondents representing 48% have between 5 and 10 years' experience with ITC; ninety (90), representing 39% had 0-4 years' experience with ITC; while thirty (30) representing 13% had over 11 years experience with ITC.

### **Relationship between Customers' Satisfaction and Public Transport Service**

The summary of the spread, showing the relationship between customers' satisfaction and public transport service with regards to ITC was analyzed with SERVQUAL dimension of customer satisfaction as presented in the table 3.

### **Descriptive Statistic**

The descriptive statistics measures the characteristics of each of the variable under consideration by determining their mean, median standard deviation, and skewness.

**Table 3 Descriptive Statistic of SERVQUAL Dimensions**

<b>Dimension</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Std. Error</b>
Tangibles (TA)	230	3.4748	0.840584	0.038034
Reliability (REA)	230	3.3386	0.868682	0.039638
Responsiveness (RPA)	230	3.3368	0.764374	0.033378
Assurance(AA)	230	4.23933	0.543844	0.026092
Empathy(EA)	230	3.4018	0.828692	0.039476
Affordability( AFA)	230	3.3382	0.773864	0.03505

**Source:** Extraction Method: Principal Component Analysis.

Table 3 presents the descriptive statistics for each of the six SERVQUAL dimensions. Assurance recorded the highest average score and at the same time the lowest variability as measured by the standard deviation. Similarly, responsiveness reported the lowest mean score but a relatively higher variability. Also, reliability reported the highest variability. Despite the above, on the scale of 1 to 5, all the variable recoded higher scores. Also, based on the average score, assurance dimension has the highest score of approximately 4.239 and closely followed by Tangible 3.47 and then Empathy 3.40. Reliability, Affordability and Responsiveness has an average scores of 3.3386, 3.3382 and 3.3368 respectively. This result is in contrast with the finding of Ramseook-Munhurrun, Naidoo and Lukea-Bhiwajee (2010) who suggested that organization should be particular about overall customer satisfaction in term of tangibility and responsiveness in that order.



Subsequently, the 6 items of the five point Likert Scale were subjected to principal components analysis (PCA) using SPSS Version 21. Principal components analysis revealed the presence of six component with eigenvalues exceeding 1, explaining 92.923%.

### Result of the Principal Component Correlation Matrix

The correlation matrix measures the relationship between two variables or how variables are related. Thus, if one variable increase, the other will also increase, or if one variable decrease, the other will equally decrease. Meaning that the relationship could be positive or negative. A positive and strong relationship shows that the underlying variables influences an outcome directly. While the reverse is the case for negative and weak correlation. The empirical result is presented in Table 4.

**Table 4: Correlation Matrix Result**

Dimension	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Affordability
Tangibles	1.0000	0.589	0.629	0.674	0.677	0.681
Reliability	0.589	1.0000	0.589	0.838	0.707	0.618
Responsiveness	0.629	0.589	1.0000	0.636	0.616	0.594
Assurance	0.674	0.838	0.636	1.0000	0.680	0.782
Empathy	0.677	0.707	0.616	0.680	1.0000	0.715
Affordability	0.681	0.618	0.594	0.782	0.715	1.0000

**Source:** Extraction Method: Principal Component Analysis.

Table 4 presents bivariate correlation matrix among the six customer expectation dimensions. Generally, there were strong positive correlations among the pairs of the 6-SERVQUAL dimension variables; meaning that the customer expect that all six dimension should be well articulated to achieve service quality and hence customer satisfaction. Meanwhile, a cursory look at the analysis showed that the strongest correlation exists between Reliability and Assurance (83.8%). This means that consumer (ITC users) expect that the Imo Transport Company to deliver the promised service dependably and accurately in order to shape service delivery to the needs of individual consumers (users). Closely follow the correlation between Reliability and Assurance is the relationship between Reliability and Affordability (78.2%). This indicated that it is expected that ITC should deliver dependable and accurate services to the customers. The finding is in line with the view of (Ramseook-Munhurrun, Naidoo and Lukea-Bhiwajee (2010), who averred that consumers concerned about overall service satisfaction in term of assurance and affordability.

### Test of Hypothesis

**Ho:** SERVQUAL dimensions do not explain **customer satisfaction** and road transport management in Nigeria.

**Table 5: KMO and Bartlett's Test of Hypothesis**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.684
Approx. Chi-Square	649.495
Bartlett's Test of Sphericity Df	10
Sig	0.0000

**Source:** Extraction Method: Principal Component Analysis

The result of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy test presented in Table 5 indicated that the partial correlation among variables is high, specifically 0.684. Thus, the study concludes that, the five SERVQUAL dimension are significant in predicting ITC users' satisfaction in the Nigerian transport management. Similarly, the Bartlett's test of sphericity showed that the alternative hypothesis which state that correlation matrix is an identity matrix was accepted. To be more precise, Bartlett's sphericity test indicated that Chi-square is 649.495 with a significance of 0.000, this indicated that the SERVQUAL dimension is useful for the factor analysis. Thus, the study concludes that the six SERVQUAL dimension (Tangibles, Reliability, responsiveness, Assurance, Empathy and Affordability) are good measure of customer satisfaction in the Nigerian transport service.

## CONCLUSION

Public transport is the movement of people and goods from one place to another in exchange for an amount of money. The I.T.C public transport is a form of public transport introduced by government of Imo State, to reduce the cost of movement of the people of Imo state, and to make their movement easier. Based on the background above, the study examined road transport management and customer satisfaction in Nigeria with focus on Imo State Transport Company (I.T.C). The objective of the study is to examine the relationship between customers satisfaction and transportation management in Nigeria as regard to ITC. To achieve the objective, the study utilized data from primary source. Primary source include the use of questionnaire and oral interview. A total of two hundred and thirty (230) copies representing (90%) of the questionnaires was used for the analysis. The responses were structured with the use of Likert's 5-scale model. The collected data were analyzed using mean, simple percentage as well as principal component analysis methods. Based on the empirical results, it was found that the six SERVQUAL dimension showed that there is a strong relationship between customers' satisfaction and public transport service in Nigeria. Based on the findings, the study suggested that on the basis of the evidence that to understand customer satisfaction better, the company must survey customers about both perceived service quality and the perception about satisfaction. Also, the I.T.C public transport should have designated bus stops for loading and discharging passengers in order to avoid delay and generate more revenue. Also, there should be improved staff welfare of the public transport service such as better wages and salaries in order to boost the morale of the operators to work, and it will increase their cordial

relationship with customers/users. Good services rendered to customers' causes satisfaction. Also, regular maintenance of vehicles and provision of quality customer services that will satisfy the commuters who constantly use the transport company must be put in place to boost economic activities.

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