



Received: 02-03-2023  
Accepted: 11-04-2023

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Road Mass Transit Management and Customer's Satisfaction: A Study on Peace Mass Transit (PMT) Port Harcourt

<sup>1</sup> Ibiama Kenneth Adonye, <sup>2</sup> Nwankwoala Smart Chimaeze, <sup>3</sup> Ibiama Victoria Adonye, <sup>4</sup> Pepple Margaret Sotonye

<sup>1,2</sup> Department of Transport and Logistics, Federal Polytechnic of Oil and Gas, Bonny, Nigeria

<sup>3</sup> Department of Logistics, Gold Stable Limited, Bonny Island, Nigeria

<sup>4</sup> Department of Registry, Federal Polytechnic of Oil and Gas, Bonny, Nigeria

Corresponding Author: **Ibiama Kenneth Adonye**

#### Abstract

Mass traffic on roads was viewed by researchers as essential to a developed economy or to a developing economy. Road Mass transit is considered the engine of the economy. Although directly or indirectly linking producers, suppliers, consumers and commuters, a poor, ineffective and efficient mass road transport system undermines the development and collapse of many economic and social activities. This is characterized by poor management that has resulted in loss of life and property, including financially unquantifiable damage. The researchers used primary and secondary data sources in this study, used questionnaires as data collection tools, presented data in tables, and used simple percentages to analyse the data obtained. Research has shown that,

among other things, mass traffic on roads is very important for the movement of goods and people. Inefficient roads across the country make commuting unpleasant. Lack of maintenance culture by car owners invariably leads to vehicle breakdowns and poor performance, leading to customer dissatisfaction. Researchers have found that commuters who constantly use roads and vehicles for economic activity, satisfying drivers who use vehicles, building good roads to cope with conditions, regular maintenance of vehicles, and improving quality. It is recommended that the provision of high after-sales service is necessary. Roads can be improved by: Regular workshops on road use.

**Keywords:** Road Mass Transit, Commuters, Satisfaction, Management

#### 1. Introduction

Transportation is an ancient necessity. The movement of people and goods has become one of the greatest needs that must be adequately met in any society or economy, especially in today's world.

Transport is often called the engine of the economy (Olakunori, 2006). This means that without a transport management system, the entire economy would stagnate. It has helped bridge the gap between producers, suppliers, industrial users and individual commuters. Delaney (1986)<sup>[6]</sup> estimates that transportation alone accounts for approximately 46% of total logistics costs for manufacturers and 28% for resellers. It is important to note that not much success can be achieved in moving people without manufacturing, distribution, services, or transportation. Transportation is so important that humans have developed various means of transportation over the years to facilitate the movement of people and goods. The mode of transport chosen is highly dependent on price, time, delivery, condition, destination, customer loyalty and prior purchase satisfaction. Therefore, poor transport management based on the above can jeopardize the source of material procurement. It can lead to increased prices for goods and services, movement, people, and even death.

Poor road transport management is one of the main problems affecting economic growth. Poor road transport management has led to the inefficiency and collapse of Nigeria's road system, which transports people from one point to another. The result of bad management resulting in money loss and customer dissatisfaction.

Lack of technological development to monitor or adjust vehicle speed, payload, and driver attitude remain some prominent problems.

A poorly maintained fleet system has caused some vehicles to break down, preventing commuters from reaching their destinations on time.

In light of all these problems listed above, the purpose of the study is to investigate the road mass transit and how it has impacted on customer's satisfaction with a case study of peace mass transit in Port Harcourt, in order to achieve the purpose, the following objectives were formulated:

- To investigate the impact of booking clerk and drivers' attitude on satisfaction of customers.
- To determine the relationship between the pricing system and customer's satisfaction.
- To investigate the extend of accidents on over speeding and loading of passenger vehicles.
- To assess the maintenance routine on vehicles and infrastructures in relations to customers satisfaction.

Road transport provides an essential activity of time and place. Spending time means having it available when you need it. One industry where the use of time is very important is that of daily newspapers. The industry relies heavily on road transport to ensure that it reaches customers early in the morning when the news brought by vendors and newspapers is still considered fresh. As the days go by, news becomes stale and loses value and price. Road transport helps get goods to consumers by ensuring that they get where they need to be. Most goods are of no use to consumers if they are not available where they are needed for sale, purchase and/or consumption.

Therefore, the need for producers, marketers, or entrepreneurs to build effective and efficient transportation systems for the timely delivery of goods and services to the full satisfaction of society should never be stressed is a

necessary evil that can never be overemphasized.

### Transport Desire and Satisfaction

In Ijeware (2000)<sup>[15]</sup>, researchers rely on Maslow's theory of motivation, also known as satisfaction theory. His explanation clearly states that fulfilled needs do not motivate, but unfulfilled needs do. Satisfaction occurs when performance exceeds desired expectations, and dissatisfaction occurs when performance falls short of desired expectations (Ijeware, 2000:18)<sup>[15]</sup>. This theory further explains gratification as a movement pattern based on human behavior. People always want and need more. As soon as one desire is satisfied, another arises. At this place, the process is endless and continues from birth to death. So, it will satisfy your specific needs, but not your general needs. Needs met cannot leave room for improvement. Only unmet needs leave room for improvement. Human needs are organized into a series of important levels or hierarchies. When lower-level needs are satisfied, higher level needs emerge and likewise seek gratification. Maslow held the view that there are several different levels of individual needs and that these needs are interrelated in the form of a hierarchy. It consists of five levels: needs, social needs, esteem needs, and self-actualization needs.



Source: Ijeware, 2000; 21

Fig 1: Maslow's hierarchy of Needs

## 2. Materials and Methods

This study is based on a descriptive study of road mass transit management and customer satisfaction surveys at Peace Mass Transit Nig. A research study was conducted. The purpose of research is to infer population characteristics from sample results. Data are collected from subjects by means of questionnaires.

For the purposes of this public transit study, 100 customers were selected with a loyalty period ranging from 1 month to 15 years. Selected populations obtain reasonably different views on customer satisfaction. A simple sampling technique was used to give everyone in the population

multiple equal selection opportunities. A sample of 55 respondents was selected and used in the study for statistical ease, usefulness, and rational analysis. Inclusion Criteria; The study population is focused on Peace Mass Transit, Port Harcourt passengers and managers performing services including logistical operations at the Peace Mass Transit Station.

The study excludes all passengers and employees of non-peaceful local transport within the study area from the target group. This method of inclusion and exclusion has been used in several studies such as Munir (2017)<sup>[20]</sup>.

The method used for collecting relevant data for this study is questionnaire. The questionnaire is a structured and fixed type of questionnaire and was administered from (7am to 2pm) for seven days at the Port Harcourt peace mass transit headquarters.

The use of tables and simple percentage methods was used to represent demographic data and hypotheses was tested using chi-square.

Formula for chi-square  $\chi^2$  test:

$$\chi^2 = \frac{fo - fe}{Fe}$$

Where,

- $\chi^2$  = Chi-Square
- Fo = Frequency Observed
- Fe = Frequency Expected
- H<sub>1</sub> = Null Hypothesis
- H<sub>0</sub> = Alternative Hypothesis

### 3. Result and Discussions

Table representing various questions on the questionnaire was presented with tables and analyses with simple percentage. Often there is always a change in the number of customers patronizing respectively in particular period. 55 questionnaires were given and 43 were returned completed.

**Table 1:** Shows various questions and responses from respondents indicates the extent to which they strongly agree (SA), Agreed (A), Disagreed (D), or Strongly Disagreed (SD) with the statement

Part A: Impact of booking clerk and drivers' attitude on satisfaction of customers						
S. No	Statement	SA	A	D	SD	Total
1	Driver's Customer relationship does it affect customer's satisfaction?	23	17	3	0	43
2	Driver's recklessness while driving, does it affect customer's satisfaction?	21	15	4	3	43
3	Does attitude of booking clerk change the perception towards customer's satisfaction?	30	13	0	0	43
Part B: Determine the relationship between the pricing system and customer's satisfaction						
4	Pricing strategy of peace mass transit (PMT), does it affect customer's satisfaction?	13	21	6	3	43
5	Does low pricing attract more customers to PMT?	20	16	7	0	43
6	Does price of fare per trip correlate with the comfortability?	12	10	8	13	43
Part C: Investigate the extend accidents on over speeding and loading of passenger vehicles						
7	Does PMT have well trained and efficient staff?	7	13	15	8	43
8	Does the rate of accident at PMT annually affect customer's turnover?	22	19	2	0	43
9	Does driving at high-speed result in higher accident rate?	12	10	8	13	43
Part D: Assess the maintenance routine on vehicles and infrastructure in relations to customer's satisfaction						
10	Does PMT have infrastructure facilities which stimulate customer's satisfaction?	7	25	11	0	43
11	Are PMT vehicles are sound in terms of navigation and comfortability?	0	0	24	19	43
12	Does PMT maintain their vehicles?	8	10	13	12	43

Source: Researcher's field work 2022

Test of Hypotheses 1

Formula for chi-square ( $\chi^2$ ) test:

$$\chi^2 = \frac{fo - fe}{Fe}$$

Where,

- $\chi^2$  = Chi-Square
- Fo = Frequency Observed
- Fe = Frequency Expected
- H<sub>1</sub> = Null Hypothesis
- H<sub>0</sub> = Alternative Hypothesis

$$\text{Expected} = \frac{\text{Total no. of responses}}{N} = \frac{23+17+3+0}{4} = 10.77 = 10.8$$

Degree of Freedom DF = n-1, N = 4; DF = 4-1 = 3

**H<sub>0</sub>:** Booking clerk and drivers' attitude does significantly affect the satisfaction of Customers?

**H<sub>1</sub>:** Booking clerk and drivers' attitude does not significantly affect the satisfaction of Customers?

Responses	FO	FE	FO - FE	(FO - FE) <sup>2</sup>	(FO - FE) <sup>2</sup> /FE
Strongly Agreed	23	10.8	12.2	148.8	13.78
Agreed	17	10.8	6.2	38.44	3.56
Disagreed	3	10.8	-7.8	-60.84	-5.63
Strongly Disagreed	0	10.8	-10.8	-116.64	-10.8
$\chi^2$ Value					0.91

Source: Researcher's field work 2022

Test of Hypotheses 1

**H<sub>0</sub>:** There is significant relationship between the pricing system and customer's Satisfaction?

**H<sub>1</sub>:** There is no significant relationship between the pricing system and customer's Satisfaction?

Responses	FO	FE	FO - FE	(FO - FE) <sup>2</sup>	(FO - FE) <sup>2</sup> /FE
Strongly Agreed	13	10.8	2.2	4.84	0.45
Agreed	21	10.8	10.8	116.64	10.8
Disagreed	6	10.8	-4.8	-23.04	-2.13
Strongly Disagreed	3	10.8	-7.8	-60.84	-5.63
$\chi^2$ Value					3.49

Source: Researcher's field work 2022

Test of Hypotheses 3

**H<sub>0</sub>:** The extend accidents on over speeding and loading significantly affect passenger vehicles?

**H<sub>1</sub>:** The extend accidents on over speeding and loading does not significantly affect passenger vehicles?

Responses	FO	FE	FO - FE	(FO - FE) <sup>2</sup>	(FO - FE) <sup>2</sup> /FE
Strongly Agreed	7	10.8	-3.8	10.24	0.95
Agreed	13	10.8	2.2	4.84	0.45
Disagreed	15	10.8	4.2	17.64	1.65
Strongly Disagreed	8	10.8	-2.8	-7.84	-0.73
$\chi^2$ Value					2.3

Source: Researcher's field work 2022

### 4. Discussion

#### Decision Rule for hypothesis 1

The book value at 0.05 level of significance and at Df of 3 = 7.82, and since the calculated value is less than the table value, the researchers therefore accept the null hypothesis

which state that booking clerks and drivers' attitude does significantly affect the satisfaction of customers and reject the alternative hypothesis which state that booking clerk and drivers' attitude does not significantly affect the satisfaction of customers.

### Decision Rule for hypothesis 2

The book value at 0.05 level of significance and at Df of 3 = 7.82, and since the calculated value  $X^2$  is 3.49 which is less than the table value or book value, the researchers therefore accept the null hypothesis which state that There is significant relationship between the pricing system and customer's satisfaction and reject the alternative hypothesis which state that There is no significant relationship between the pricing system and customer's satisfaction.

### Decision Rule for hypothesis 3

The book value at 0.05 level of significance and at Df of 3 = 7.82, and since the calculated value  $X^2$  is 2.3 which is less than the table value or book value, the researchers therefore accept the null hypothesis which state that the extend accidents on over speeding and loading significantly affect passenger vehicles and reject the alternative hypothesis which state that the extend accidents on over speeding and loading does not significantly affect passenger vehicles.

### 5. Conclusion

Researchers came to the following conclusions: First, urban road traffic management plays an important role in passenger transportation. Recognizing this, managers should consider the attitudes of booking agents and drivers employed by PMTs. This means that people's mobility is one of today's greatest needs and must be well met in society and the economy. Second, commuters repeatedly express dissatisfaction when serious vehicle breakdowns occur. Most commuters become very frustrated or discouraged when they can't reach their destination as they hoped. This may be due to missed business or related deadlines. Third, if not strategically aligned, PMT's pricing system strives for customer satisfaction. Fourth, commuters always feel uncomfortable when drivers drive too fast. It is one of the leading causes of fatalities on highways. After all, most local shipping companies do not have modern infrastructure. B. Regulation of speed and traffic signs, and facilities such as control computers and air conditioning in the organization to take care of customers. Knowing that road mass transit is referred to as the engine of the economy, the road mass transit management should get in more modern facilities for easy road transportation services and also maintain the equipment available to them.

### 6. Recommendations

Transportation company managers should ensure that transportation vehicles receive regular maintenance to reduce the failure rate of transportation vehicles on highways.

Second, the company's management has also computerized to monitor speed limits for drivers. This will reduce traffic accidents and bring goodwill to the company. Managers also need to provide modern infrastructure and facilities to adequately serve commuters. Finally, the PMT must ensure that training and development sections are conducted for drivers and other company employees in order to ensure efficient service.

### 7. References

1. Akpala A. Principles of Management (Unpublished), 1984.
2. Akpala A. Management: An Introduction to Management and Nigeria Perspective. Enugu: Sunshine Lithographic Press, 1990.
3. Bennette C. Orientation to Work and Organization Analysis. Journal of Management Studies. 1978; 15(2).
4. Bryman Alan, Bell Emma. Business Research Methods, Second Edition. Oxford University Press, 2003.
5. Chrismall PM. Marketing Research, Analysis and Management. USA: Grans Wield Publishing, 1981.
6. Delaney RV. Managerial and financial challenges facing transport leaders, Transportation Quarterly. 1986; 40(1):35.
7. Donnel C. Management Decision. New York: McGraw Hill Inc, 1981.
8. Ejiofor P. Management in Nigeria: Theories and Issues. Ibadan: African Education Publishers, 1981.
9. Ejiofor P. Foundation of Business Administration. Onitsha: African Publishers, 1990.
10. Ejiofor P. Managing Government Owned Companies. Onitsha: Fourth Dimension Publishers, 1990.
11. Ejiofor P. Identifying Sources of Management Motivators in Nigeria: Managing the Nigerian Workers. Ikeja: Longman Nig. Ltd, 1984.
12. Ghauri P, Grønhaug K. Research Methods in Business Studies: A practical guide, third edition, Prentice Hall, Harlow, UK, 2005.
13. Gloss B. Introduction to Business. Benin: Harper and Row Publishers Inc, 1970.
14. Howard A. *et al.* Motivation and Values among Japanese and American Managers Personnel Psychology. New York: Longman Publication, 1983.
15. Ijewere A. Transportation Management. Enugu: Giovanni Publishers, 2000.
16. Ineigbenebor AU. Introduction to Business. Benin City: Uri Publishing Ltd, 2005.
17. Koontz H. Motivation to Work. New York: John willy and Sons Publisher, 1959.
18. Koontz H. Donnel C. A system and Contingency Analysis of Management Functions. Kogatosha: McGraw Hill Book Co. Inc. 6<sup>th</sup> Ed, 1976.
19. Mugenda OM, Mugenda AG. Research Methods: Quantitative and Quantitative Approaches. Nairobi: Acts Press, 1999.
20. Munir AM. Response in Mass Casualty Incidents: Survival of Selected Tertiary Level Hospital in Bangladesh. A Published Dissertation for the Degree of Masters in Disaster Management, 2017.
21. Olakunori, K. Business and Government Policy. New York: Mc-Graw Hill Book Company, 2006.
22. Olakunori K. Transportation Management. Enugu: Grovani Publishers, 2006.
23. Vewere T. Business Management. Benin City: Flovent System Publishers, 2000.