ASSESSMENT OF NIGERIAN SEAPORT SERVICE DELIVERY AND CUSTOMERS' SATISFACTION

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Abstract— **The study assesses the Nigerian Seaport Service Delivery and customers' Satisfaction with view to identify and assess the most impacting and least impacting port services as well as the overall level of satisfaction with port services in Apapa Port Complex. The study employed primary data involving administration of structured questionnaire. It adopted ROPMIS model and Weighted Mean Rank, Gap Model and spearman rank correlation to assess the customers' satisfaction and port services quality. The result showed a significant relationship between customers' satisfaction and port services quality. The study recommends that government should prioritize the construction of access roads in and out of the port and port management should focus on the most and least impacting port services to improve on service delivery quality to ensure increased customers' satisfaction.**

Keywords: *Seaport, Service, Delivery, Quality.*

I. INTRODUCTION

Port has always played a pivotal role in facilitating world trade with its ability to facilitate interchange and consolidation for transporting large volumes of cargoes at low costs. It connects major continents and as well links the manufacturers to their customers and suppliers. Until the 1980's, the port industry was characterized as heavily unionized, fragmented and inefficient. The privatization of ports and/or the associated operations, or the transfer of responsibility to self-governing bodies managed by local authorities, has been a recent trend and has increased both the efficiency of operations and the level of competition [1] As a result, the quantity of supplied services has increased, modernized and improved, and new aspects of service quality have emerged. The globalization of transport, development of logistics and specialization in production, are further indications of an already intense competition.

A seaport is as an entry point for goods coming into a country from other countries just as it is an exit point for goods leaving the country for other countries [2]. According to Godfrey and Obed, there is a positive relationship between a ship and a port [3]. This relationship was described as a servant/master relationship. In other words, the main function of a port is to provide all necessary facilities to accumulate calling ships as well as enable the ships load and off load cargoes [4].

Nigeria's seaports play a significant role in international trade in the sub-region; over 90% of traded goods are carried by sea. The Nigeria economy accounts for over 70% of seaborne trade in the West and Central African sub-region due to its vast population [5]. It is prudent to understand the dynamics of how quality service is closely linked to seaport business performance and with the focus that Apapa Ports Complex, Lagos, Nigeria. The port has been one of the main drivers of the economic boost of Nigeria during the past ninety-seven (97) years. An insight into its level of quality of service will not only assess how far it is meeting with the expectations of its customer but also to the extent it can poise itself to become one of the leading ports of the region.

Nigeria is a member of ECOWAS and with the introduction of a single passport and a single market, subsequently other barriers that limited the flow of goods, services and capital flow between Nigeria and her neighbours, have disappeared. The removal of these barriers, made it impossible for ports in other West African countries previously to load/unload. Nigeria cargo by sea ushered in competition among the ports in the sub-region. This meant the decision and choice variables to use any of these ports Apapa port in Lagos, Cotonou Port in Benin, Lome Port in Togo or Tema Port in Ghana is total cost, speed and reliability of transport. Consequently, Nigerian ports began to lose cargo, because many shippers responded to these scenarios by diverting their containers to other countries for transshipment to Nigeria in smaller vessels. Nigeria 's loss has become her more competitive neighbouring ports' gain [6].

Hitherto, most of the studies that have benchmarked and examined the port services are from the shippers' or shipping lines' perspective. Few studies focused on port choice made by freight forwarders and mostly carried out outside Nigeria. This study systematically analyzed and presented the most important factors in port choice from the perspective of all port users including the freight forwarders in Nigerian port. By doing so, it attempts to assess these factors in terms of

port competitiveness in attracting its users and port performance.

Consequently, a port is described as an enterprise that must provide quality service to her customers to survive economically [7]. This is because port customers such as shippers, ship owners, Godfrey and Obed and others demand efficient services from port operators for continuous patronage [4]. Ugboma perceives a port as a service facility that needs to be equipped properly to service her master efficiently if its usefulness and performance level is to be recognized [8]. He further stated that the shipping industry's usefulness, efficiency and overall performance is evaluated in the light of services rendered to the ships, so also the usefulness of the seaports relate to the entire economy.

This study is aimed at assessing Nigerian seaport quality service delivery on customer satisfaction in Apapa Port Complex, Lagos, Nigeria. The objectives are to identify and assess the most impacting and least impacting port services as well as the overall level of satisfaction with port services in Apapa Port Complex. The relationship between port customers' satisfaction and port service quality was also measured in the study.

II. LITERATURE

Lopez and Poole specify three dimensions which contribute to the quality of port services as; efficiency, timeliness and security. Ha devised a group of port service quality factors including ready information availability of port-related activities, port location, port turnaround time, facilities available, port management, port costs and customer convenience [9]. On another hand, Cho, Kim and Hyun developed a separate measurement tool for port service quality which comprises of endogenous, exogenous and relational quality [10]

These studies however neglect a critical dimension, *social responsibility,* which can enhance or damage the image or reputation of organization and hence the perceived quality of their services. This is particularly important in the context that many ports around the world are now trying to implement their green port initiatives.

A study by Thai explored the concept of service quality in maritime transport and developed and validated a measurement model (ROPMIS) which consists of six dimensions: *resources*, *outcomes*, *processes*, *management*, *image* and *social responsibility* [11]. This model was initiated based on a comprehensive review of various service quality dimensions and factors in the previous studies and also incorporated newly developed elements such as management-, image- and social responsibility related quality dimensions. In comparison with the SERVQUAL model, the ROPMIS model is more suitable to the maritime industry as it incorporates the image and social responsibility aspects which are critically important in this industry. Although the model was supposed to be generically

applicable for maritime transport services, the author argued that its factors can be readily revised for specific sub-sectors in the maritime industry such as ports.

III. METHODOLOGY

The study made use of primary data. The method of data collection includes questionnaire administration, empirical survey (Observation) and interview of respondents-Apapa Port users. The port users comprise the passengers, freight forwarders or logistics service providing companies, truckers, shippers and shipping companies and others. Purposive sampling technique was adopted in choosing members of population to participate in the study. However, the sampling is a non-probability sampling method and proved to be effective when only limited numbers of people can serve as primary data sources due to the nature of the research design and aims and objectives.

To determine the appropriate sample size for uncertain number of populations, a judgment about the confidence level and the maximum error allowance was made, also the equation below was applied which was in tandem with [12]. This was adopted for determining sample size for this study:

$$n = \frac{Z^2}{4E^2} \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots .1$$

where; n = Sample size; Z = Z score for the 95 percent level of confidence is 1.96; E = Maximum acceptable error = 0.05; 95 percent Confidence level at 0.05 maximum error was chosen because of the time consciousness of port customers. When inserting the values into the sample size equation, it resulted in a sample size of 384. The sample size determined was 384, as shown below:

$$n = \frac{1.96^2}{4(0.05)^2} \; ; \qquad n = \frac{3.84}{0.01} \; ; \quad n = 384$$

The questionnaire employed both fixed-alternative and opened-ended response questions. It consisted of three sections in which respondents were asked to indicate demographic characteristics including the years of patronage of the Lagos Port Complex and the other two sections took care of expectations of customers towards the port services, and the perception of services after the services have been offered. Respondents' opinions were measured using a four-point Likert scale. Analyses of means, variances, and standard deviations, factor analysis, and spearman correlation test were performed to identify relations between and among the ROPMIS model statements.

3.1   *Model Specification and Reliability Test*

Given that this research has to do with perceptions and as such information gathered has to do with attitudes, emotions, opinions, personalities, and description of people's environment; so, the research adopted the use of Likert-type

scales. As individuals attempt to quantify constructs which are not directly measurable, they oftentimes use multiple-item scales and summated ratings to quantify the construct(s) of interest. The Likert scale's invention is attributed to Rensis Likert, who described this technique for the assessment of attitudes. McIver and Carmines described the Likert scale as follows: A set of items, composed of approximately an equal number of favorable and unfavorable statements concerning the attitude object, is given to a group of subjects [13].

They are asked to respond to each statement in terms of their own degree of agreement or disagreement. Typically, they are instructed to select one of five responses: strongly agree, agreed, undecided, disagree, or strongly disagree.

In order to examine the degree of accuracy and reliability, Cronbach's Alpha was used to validate Likert scales that was to examine the reliability of questionnaire instrument. Pallant suggested Crombach Alpha value of 0.70 was taken acceptable for reliability measure [14].

In order to analyze this study, Crombach Alpha values of Expected Service (ES) was compared with the Crombach Alpha values of Perceived Service PS. Hence, Gap analysis was conducted based on the Crombach Alpha values.

IV. RESULTS AND DISCUSSION

The study gathered information from Apapa port customers. a total of three hundred and eighty-four (384) questionnaires were distributed to customers in Apapa port, and 225 questionnaires were collected after completion. This translated to a response rate of 58.6 percent. According to Mugenda and Mugenda [15]; a response rate of 50 percent is adequate for data analysis and reporting; a rate of 60 percent is good and a response rate of 70 percent and over is excellent, this signifies that 58.6 percent response rate is very good for data analysis and reporting [16].

4.1 Customers Perception about the Port Service Quality:

The heterogeneity and homogeneity of passengers' perception towards port service quality was determined from the interpretation of standard deviation. In the view of [16] and [17], if standard deviation is more than the interval, the perception of all respondents towards a particular service is dissimilar or heterogeneous, if standard deviation is less than the interval the perception of all respondents towards a particular service is similar or homogenous. Port customers felt dissimilar (heterogeneous) with 57.14% of port service quality, while they felt similar (homogenous) with 42.86% of port service quality. These perceptions of passengers towards the port service quality were analyzed and depicted in Table I, and they were used for further explanation and to established facts in the study.

Table I: Perception of Port Users on the Port Service Quality

Port Service Quality	Standard Deviation	Perception based on 0.75
Ease of access into the port	.929	Dissimilar
Internet facilities and Wi-Fi availability	.497	Similar
Business centre facility	.749	Similar
Bureau de change facility	.994	Dissimilar
ATM facilities	1.092	Dissimilar
Courtesy and attitude of security staff	.485	Similar
Standards of physically impaired facilities	.901	Dissimilar
Prevent lost good services	.698	Similar
Priority goods delivery efficiency	.929	Dissimilar
Custom NAFDAC, SON staff attitude for processing goods	.749	Similar
Waiting time for goods at security screening	.868	Dissimilar
Language skills for port staff	.782	Dissimilar
Choice of shopping tax free and other outlets	.709	Similar
Prices charged in port	1.056	Dissimilar
Level of ICT applications in port operations and management	.782	Dissimilar
Competency of port management regarding incident-handling capability	.829	Dissimilar
Feed-back service mechanism	.749	Similar
Customer retention strategy	.706	Similar
Demonstration of good records of operations	.560	Similar
Fulfillment of social responsibility	.968	Dissimilar
Inclusiveness environmental management system	.994	Dissimilar

Source: Author's Computation, 2021

4.2 Impacting Port Services Based on Satisfaction Level of Port Customers and Port Service Quality:

Most impacting and least impacting port services based on port service quality and customers' satisfaction were analyzed with simple descriptive statistics and factor analysis. This approach gives basis for comparing results and establishing facts.

4.3 Impacting Port Services Based on Satisfaction Level of Port Customers:

This part includes the results of the port customers' satisfaction level towards Apapa port's services. The satisfaction level is based on twenty-one port services and set as benchmark for this study. Likert Scale was selected as a measurement tool to allow the respondents rate how they were satisfied or dissatisfied with the port services along a four-point scale ranging from 1, strongly dissatisfied, to 4, strongly satisfied, for all positive questions. Based on the Likert range, weighted mean ranks were carried out to identify the most and least impacting port services regarding port customers' satisfaction. The result is shown in Table 1. Considering the overall service regarding port customers' satisfaction, the most impacting port services were Competency of Port Management Regarding Incident-Handling Capability with rank 1, Language Skills for Port Staff with rank 2, Demonstration of Good Records of Operations with rank 3, Priority Goods Delivery Efficiency with rank 4, and Prices Charged in Port with rank 5. Also, the least impacting port services were Ease of Access into the Port with rank 21, Bureau De Change Facility with rank 20, Business Centre Facility with rank 19, Choice of Shopping

Tax Free and Other Outlets with rank 18, and Standards of Facilities for Physically Impaired with rank 17.

Regarding the ROPMIS attributes, the most impacting service on Resource related were the Courtesy and Attitude of Security Staff. The most impacting service in Outcome related was the Priority Goods Delivery Efficiency while the most impacting service in Process related was the Language Skills for Port Staff. Meanwhile, the most impacting service in Management related was the Competency of Port Management Regarding Incident-Handling Capability. Whereas the most impacting service in Image and Social Responsibility related was the Demonstration of Good Records of Operations. This is shown in Table II.

In addition, the least impacting service on Resource related is the Ease of Access into the Port, the least impacting service in Outcome related is the Prevent Lost Good Services, the least impacting service in Process related is the Choice of Shopping Tax Free and Other Outlets, the least impacting service in Management related is the Level of ICT Applications in Port Operations and Management, and the least impacting service in Image and Social Responsibility related is the Inclusiveness Environmental Management System. This is shown in Table II. The most impacting ROPMIS attributes of port customers' satisfaction were Management related and Outcome related.

Table II: Satisfaction Level of Port Customers

Statements of Port Services for Customers' Satisfaction	Mean	Ranks
R Resource related		
Ease of Access into the Port	1.63	21
Internet Facilities and Wi-Fi Availability	2.06	16
Business Centre Facility	1.88	19
Bureau De Change Facility	1.81	20
ATM Facilities	2.44	10
Courtesy and Attitude of Security Staff	2.63	6
Standards of Physically Impaired Facilities	2.04	17
Overall Mean	**2.07**	
O Outcome related		
Prevent Lost Good Services	2.38	12
Priority Goods Delivery Efficiency	2.69	4
Overall Mean	**2.54**	
P Process related		
Custom NAFDAC, Son staff Attitude for Processing Goods	2.25	14
Waiting Time for Goods at Security Screening	2.56	7
Language Skills for Port Staff	2.79	2
Choice of Shopping Tax Free and Other Outlets	2.00	18
Overall Mean	**2.40**	
M Management related		
Prices Charged in Port	2.68	5
Level of ICT Applications in Port Operations and Management	2.45	9
Competency of Port Management Regarding Incident-Handling Capability	2.81	1
Feed-Back Service Mechanism	2.49	8
Overall Mean	**2.61**	
IS Image and Social Responsibility-related		
Customer Retention Strategy	2.41	11
Demonstration of Good Records of Operations	2.75	3
Fulfillment of Social Responsibility	2.31	13
Inclusiveness Environmental Management System	2.13	15
Overall Mean	**2.40**	

Source: Authors' Computation, 2021

Based on factor analysis structured after Varimax rotation, twenty-one port service attributes were blended into ROPMIS model to examine the most impacting and least impacting port services of customers' satisfaction. The result revealed that out of twenty-one port services the following four port services (Feed-back service mechanism; Fulfillment of social responsibility; Prevent lost good services; and Demonstration of good records of operations) were the most impacting port services based on customers' satisfaction with highest extraction values respectively. Also, the following five port services (Priority goods delivery efficiency; Ease of access into the port; Choice of shopping tax free and other outlets; Level of ICT applications in port operations and management; and Customer retention strategy) were the least impacting port services based on customers' satisfaction with lowest extraction values respectively.

The result of the principal component analysis conducted revealed that the following four port services (Feed-back service mechanism; Fulfillment of social responsibility; Prevent lost good services; and Demonstration of good records of operations) which were the most impacting port services based on customers' satisfaction has the explanation of 89.933% variance with their Eigenvalues greater than 1. (See Appendix)

4.4 Comparison of Results Obtained by Weighted Rank and Rank of Factor Extraction for Impacting Port Services Based on Customers' Satisfaction:

In order to establish the most impacting and least impacting port services based on customers' satisfaction, descriptive statistics was used to generate weighted rank, and factor extractions was also used to generate rank. The two ranks were compared. The result of comparison showed that: Courtesy and attitude of security staff; Demonstration of good records of operations; Feed-back service mechanism and Competency of port management regarding incident-handling capability were the most impacting port services based on customers' satisfaction. More so, ease of access into the port; Business centre facility; Choice of shopping tax free and other outlets; and Inclusiveness environmental management system were the least impacting port services based on customers' satisfaction.

Table III: Comparison of Weighted Rank and Rank of Factor Extraction for Impacting Port Services Based on Customers' Satisfaction

Variables	Rank from Weighted Mean	Rank from Factor Extractions
Ease of access into the port	**21**	**18**
Internet facilities and WiFi availability	16	9
Business centre facility	**19**	**15**
Bureau de change facility	20	7
ATM facilities	10	6
Courtesy and attitude of security staff	**6**	**7**
Standards of physically impaired facilities	17	10
Prevent lost good services	12	3
Priority goods delivery efficiency	4	19
Custom NAFDAC, SON staff attitude for processing goods	14	5
Waiting time for goods at security screening	7	13
Language skills for port staff	2	12
Choice of shopping tax free and other outlets	**18**	**17**
Prices charged in port	5	11
Level of ICT applications in port operations and management	9	16
Competency of port management regarding incident-handling capability	**1**	**8**
Feed-back service mechanism	**8**	**1**
Customer retention strategy	11	16
Demonstration of good records of operations	**3**	**4**
Fulfillment of social responsibility	13	2
Inclusiveness environmental management system	**15**	**14**

Source: Authors' Computation, 2021

4.5 Impacting Port Services Based on Port Service Quality:

This part includes the results of the port service quality level towards Apapa port's services. The service quality level was based on twenty-one port services and set as benchmark for this study. Hence, these port services are categorized into six arms named ROPMIS Likert Scale was selected as a measurement tool to allow the respondents rate how they were satisfied or dissatisfied with the port services along a four-point scale ranging from 1, very low, to 4, very high, for all positive questions. Based on the Likert range, weighted mean ranks were carried out to identify the most and least impacting port services regarding port service quality. The result is as shown in Table III.

Considering the overall service regarding port service quality; the most impacting port services were Prices Charged in Port with rank 1, Language Skills for Port Staff with rank 2, Language Skills for Port Staff with rank 3, Customer Retention Strategy with rank 4, and Demonstration of Good Records of Operations with rank 5. Also, the least impacting port services were Ease of Access into the Port with rank 21, Internet Facilities and Wi-Fi Availability with rank 20, Choice of Shopping Tax Free and Other Outlets with rank 19, Prevent Lost Good Services with rank 18, and Bureau De Change Facility with rank 17.

Regarding the ROPMIS attributes, the most impacting service on Resource related was the ATM Facilities; the most impacting service in Outcome related was the Priority Goods Delivery Efficiency; the most impacting service in Process related was the Language Skills for Port Staff; the most impacting service in Management related was the Prices Charged in Port; and the most impacting service in Image and Social Responsibility related was the Customer Retention Strategy. This is shown in Table IV. The least impacting service on Resource related was the Ease of Access into the Port; the least impacting service in Outcome related is the Prevent Lost Good Services, the least impacting service in Process related was the Choice of Shopping Tax Free and Other Outlets; the least impacting service in Management related was the Level of ICT Applications in Port Operations and Management; and the least impacting service in Image and Social Responsibility related was the Inclusiveness Environmental Management System. This is as shown in Table III. The most impacting ROPMIS attributes of port service quality was Management related, and Image and Social Responsibility related.

Table IV: Port Service Quality

Statements of Port Services for Service Quality	Mean	Rank
R Resource related		
Ease of Access into the Port	1.42	21
Internet Facilities and Wi-Fi Availability	1.44	20
Business Centre Facility	2.06	10
Bureau De Change Facility	1.86	17
ATM Facilities	2.75	2
Courtesy and Attitude of Security Staff	2.17	6
Standards of Physically Impaired Facilities	1.98	12
Overall Mean	**1.95**	
O Outcome related		
Prevent Lost Good Services	1.63	18
Priority Goods Delivery Efficiency	2.13	8
Overall Mean	**1.88**	
P Process related		
Custom NAFDAC, Son staff Attitude for Processing Goods	2.16	7
Waiting Time for Goods at Security Screening	2.00	11
Language Skills for Port Staff	2.63	3
Choice of Shopping Tax Free and Other Outlets	1.50	19
Overall Mean	**2.07**	
M Management related		
Prices Charged in Port	2.88	1
Level of ICT Applications in Port Operations and Management	1.88	16
Competency of Port Management Regarding Incident-Handling Capability	1.94	13
Feed-Back Service Mechanism	2.11	9
Overall Mean	**2.20**	
IS Image and Social Responsibility-related		
Customer Retention Strategy	2.44	4
Demonstration of Good Records of Operations	2.25	5
Fulfillment of Social Responsibility	1.92	14
Inclusiveness Environmental Management System	1.90	15
Overall Mean	**2.13**	

Source: Authors' Computation, 2021

Consequent upon factor analysis structured after Varimax rotation, twenty-one port service attributes were blended into ROPMIS model to examine the most impacting and least impacting services of port service quality. The result indicated that: out of twenty-one port services the following five port services (Level of ICT applications in port operations and management; Feed-back service mechanism; Fulfillment of social responsibility; Inclusiveness

environmental management system; and Priority goods delivery efficiency) were the most impacting port services based on port service quality with highest extraction values respectively. Also, the following five port services (Prices charged in port; Internet facilities and WiFi availability; Prevent lost good services; Language skills for port staff; and Ease of access into the port) were the least impacting port services based on port service quality with lowest extraction values respectively. The result of the principal component analysis conducted revealed that the following five port services (Level of ICT applications in port operations and management; Feed-back service mechanism; Fulfillment of social responsibility; Inclusiveness environmental management system; and Priority goods delivery efficiency) which were the most impacting port services based on port service quality have the explanation of 86.843% variance with their Eigenvalues greater than 1. (See appendix)

4.6 Comparison of Result Obtained by Weighted Rank and Rank of Factor Extraction for Impacting Port Services Based on Port Service Quality:

The two ranks were compared and the result revealed that; ATM facilities; Courtesy and attitude of security staff; Custom, NAFDAC, SON staff attitude for processing goods were the most impacting port services based on port service quality. Also, Ease of access into the port, Internet facilities and WiFi availability and prevent lost good services were the least impacting port services based on port service quality.

Table V: Comparison of Weighted Rank and Rank of Factor on Impacting Port Services Based on Port Service Quality

Variables	Rank from Weighted Mean	Rank from Factor Extractions
Ease of access into the port	21	16
Internet facilities and WiFi availability	20	19
Business centre facility	10	13
Bureau de change facility	17	11
ATM facilities	2	6
Courtesy and attitude of security staff	6	8
Standards of physically impaired facilities	12	9
Prevent lost good services	18	18
Priority goods delivery efficiency	8	5
Custom NAFDAC, SON staff attitude for processing goods	7	7
Waiting time for goods at security screening	11	15
Language skills for port staff	3	17
Choice of shopping tax free and other outlets	19	14
Prices charged in port	1	20
Level of ICT applications in port operations and management	16	1
Competency of port management regarding incident-handling capability	13	12
Feed-back service mechanism	9	2
Customer retention strategy	4	10
Demonstration of good records of operations	5	7
Fulfillment of social responsibility	14	3
Inclusiveness environmental management system	15	4

Source: Author's compilation, 2021

In order to make concrete affirmation about the most impacting and least impacting services from the comparison of ranks obtained by descriptive statistics and ranks obtained by factor extractions, Courtesy and attitude of security staff; Demonstration of good records of operations; Feed-back service mechanism; and Competency of port management regarding incident-handling capability were the most impacting port services based on customers' satisfaction. Also, Ease of access into the port, Business centre facility, Choice of shopping tax free and other outlets, and Inclusiveness environmental management system were the least impacting port services based on customers' satisfaction.

In addition, the comparison of ranks obtained by descriptive statistics and ranks obtained by factor extractions, ATM facilities; Courtesy and attitude of security staff; Custom, NAFDAC, SON staff attitude for processing goods were the most impacting port services based on port service quality. Also, Ease of access into the port; Internet facilities and WiFi availability; and prevent lost good services were the least impacting port services based on port service quality. Furthermore, when comparing the most impacting services and least impacting services based on customers' satisfaction and service quality analyzed with the rank of weighted mean and rank of factor extractions, Courtesy and attitude of security staff was the most impacting port services; while Ease of access into the port was the least impacting port services.

4.7 Relationship between Port Customers' Satisfaction and Port Service Quality:
Statement of assumption H_0: There is no significant relationship between port customers' satisfaction and port service quality. Port customers' satisfaction is the dependent variable while the port service quality is the independent variable. The chosen significance level is 0.05 whereas the confidence level is 0.95. The computed test statistics was done using nonparametric test (Charles Spearman's rank correlation). For aggregated variables, the significance level (p.value) of 0.002 is less than 0.05. Also, the correlation coefficient of 0.625 signifies a positive and strong correlation. This is strong numerical evidence to reject the Null Hypothesis and affirm the Alternate Hypothesis. It can be concluded therefore that the assumption which states that there is no significant relationship between port customers' satisfaction and port service quality is rejected and that there is significant relationship between port customers' satisfaction and port service quality.

The outcome of this relationship is in tandem with the outcome of [18]. Therefore, the affirmation of the theory that quality service leads to passengers' satisfaction is further confirmed. The result of the analysis shows that Pearson's R is 0.63 and the Spearman Correlation is equally 0.63 which implies that all variables of port service quality are significantly correlated with Customer Satisfaction.

V. CONCLUSION

This study has provided information on germane factors contributing to quality service delivery in Apapa Port Complex Lagos, Nigeria, such as accessibility, port tariffs, turnaround time along with their modes of enhancement and sustainability. For the most and least impacting services based on port service quality considering the overall service regarding port customers' satisfaction, the most impacting port services were Competency of Port Management Regarding Incident-Handling Capability with highest rank, followed by Language Skills for Port Staff, Demonstration of Good Records of Operations, Priority Goods Delivery Efficiency, and Prices Charged in Port. Also, the least impacting port services were Ease of Access into the Port, Bureau De Change Facility, Business Centre Facility, Choice of Shopping Tax Free and Other Outlets, and Standards of Facilities for Physically Impaired. This study reveals that management related and outcome related were most impacting port service quality attributes. It is also expected that image and social responsibility related should be most impacting.

IV. RECOMMENDATIONS

The port management should focus on the port services embedded into ROPMIS attributes, the least impacting port services of customer satisfaction were Ease of Access into the Port, Bureau De Change Facility, Business Centre Facility, Choice of Shopping Tax Free and Other Outlets, and Standards of Facilities for Physically Impaired. Also, the port management should improve on the least impacting port services of port service quality which were Ease of Access into the Port, Internet Facilities and Wi-Fi Availability, Choice of Shopping Tax Free and Other Outlets, Prevent Lost Good Services, and Bureau De Change Facility.

For the overall level of port customers' satisfaction achieved by gap analysis, port customers were not satisfied with the following services; Internet Facilities and Wi-Fi Availability, Prevent Lost Good Services, Priority Goods Delivery Efficiency, Waiting Time for Goods at Security Screening, Language Skills for Port Staff, Choice of Shopping Tax Free and Other Outlets, Level of ICT Applications in Port Operations and Management, Competency of Port Management Regarding Incident-Handling Capability, Feed-Back Service Mechanism, Demonstration of Good Records of Operations, and Fulfillment of Social Responsibility. It is expected that the Port management should look into the least impacting services of customers' satisfaction, least services of port service quality, and the dissatisfied services revealed by gap analysis.

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