OPTIMIZING SERVICE QUALITY MANAGEMENT FOR ENHANCED USER SATISFACTION IN TIN CAN ISLAND PORT, LAGOS

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Abstract
Poor Service quality in Nigerian seaports is worrisome because majority of the cargo that are meant for Nigerian seaports are being diverted to the neighboring seaports leading to loss of revenue to the government. This research aim to optimize service quality management in Tin Can Island Port, Lagos, Nigeria. The objectives of this study were to assess the impact of tangibility and reliability on port user satisfaction. Survey type of descriptive research design was utilized. The population consist of eight hundred and twenty (820) respondents. (269) two hundred and sixty-nine respondents made up the sample surveyed in this study; this was derived with Taro-Yamane (1967) formula. The study used simple random sampling criteria to choose the respondents. Questionnaire was the only instrument adopted to collect data. Simple percentage, frequency and Pearson's correlation were used to analyze data and hypothesis tested with multiple regression analysis. The study findings revealed that tangibility and reliability positively affect port user satisfaction. The research concludes that effective service quality will enhance port users' satisfaction. Hence, the research recommends that government and individuals' terminal operators are encouraged to provide up-to-date facilities and equipment. Secondly, officials at the seaports should always show concern and support port users whenever the need arises.

***Key words:** Enhanced, Optimization, Reliability, Service Quality Management, Tangibility, User satisfaction.*

Introduction

Service quality management is a key area of focus for companies due to its effects on business performance and important component of customer satisfaction. Service quality examines how satisfied a customer is with a firm's product or service when compared with similar offerings from the firm's competitors (Francis & Azeez, 2020). Service quality has become an important strategic factor for distinguishing products and services from that of competitors (Alemneh & Gebremichael, 2018). Several studies have identified importance of quality services to include increase industry's share, customer satisfaction, quick response to customer order, customer retention and

loyalty, increased return on investment and less manufacturing expenses (Alemneh & Gebremichael, 2018). Rising demand for global economic development and international freight have brought competition in the maritime industry. Seaports of the world are in stiff competition to have greater market share in shipping businesses. Sub-sahara Africa and Africa generally have integrated into road transport supply chain than what used to be as part of the transport chain in order to improve customers' satisfaction (Mwendapole & Zhihong, 2021). What is perceived by customers in the interaction process will obviously have critical impact on customers' evaluation of service quality. Due to the peculiar attributes of service, the evaluation of service quality is an important indicator to assess a service provider's performance. Offering high quality services is considered to be a visible way to create customers trust and satisfaction, as well as obtaining competitive advantages and building a long-term relationship with customers (Gronroos, 2019).

Ahmodu and Okeudo (2021) asserted that the seaports serve as mid-value point to the nation's economy as such seaports are special areas at seaside with harbour facilities and equipment where ships can berth and move passengers or freight to land with basic harbour facilities such as port terminals, docking areas and cargo handling equipment such as cranes, tugboats, dredgers; man-made global maritime routes and electronic telecommunications equipment. Nigeria seaports continue to battle with poor service quality occasioned by bureaucracy, costly port levies, dilapidated equipment which results to loss of revenue by government to neighbouring seaports. This view was also supported by (Ahmodu and Okeudo, 202l) who agreed that this had led to increase in loss of revenue generation and cargo throughout. Even though there are similar studies on service quality in Nigeria seaports such as (Onyemechi 2017, Opara, 2023, Owoeye *et al*. 2023, Sakyi, 2018) none of them have actually optimize service quality in Tin Can Port, Lagos. Also, the methodologies adopted by the previous studies were mainly descriptives as such this study uses inferential statistics to treat data collected in this study. Hence, this study optimize service quality management in Tin Can Island Port Lagos, Nigeria.

Statement of the Problem

Tin Can Island Ports Lagos was designed to be the most efficient and well performed ports in West Africa, coupled with policies put in place by Federal Government of Nigeria. However, Omoke *et al.* (2019) was of the opinion that dilapidated seaport facilities, equipment and ineffective logistics are common in Tin can Island port. Port congestions, high container dwell time, high turnaround time of vessels, inadequate ports facilities are the obstacles identified. Maritime operations in Tin can Island port have been facing many challenges that are associated with advancement in the maritime technology operational strategy and the current position of maritime operations in

Nigeria (Edih, Onoriode & Faghawari, 2022).

Certain measures have been put in place to curb the effects of poor service quality and other related challenges confronting Tin can Island port such as port concession, cabotage regime, port security codes, establishment of maritime training institutions etc. despite efforts to structure Tin can Island port towards efficiency, Nigerian have not so far benefited. Even with all the measures put in place poor service quality have become a big threat to Tin can Island port performance as Nigeria loses roughly $300 million every year due to capital flights perpetrated by foreign maritime operators in the Nigerian (Edih, Onoriode & Faghawari, 2022). Most developing nation, particularly in Oceania and Africa, pay an additional 40-70% on average for the transportation of their imported goods compared to their counterparts in highly advanced countries (United Nations Conference on Trade and Development, UNCTAD, 2020). The effects highlighted above might affect Tin Can Island port performance negatively.

Objectives

In finding lasting solution to poor quality service, this research set to optimize service quality management in Tin Can Island Port, Lagos. The specific objectives of the study are:

1. To examine the effect of tangibility on port user satisfaction in Tin Can Island Port, Lagos
2. To assess the effect of reliability on port user satisfaction in Tin Can Island Port, Lagos

Research Questions

Based on the problems identified above, the following research questions are asked:

i. To what extent does tangibility affect port users' satisfaction in Tin Can Island Port, Lagos?
ii. To what extent does reliability affect port users' satisfaction in Tin Can Island Port, Lagos?

Literature Review

Service Quality

Parasuraman, Zeithaml and Berry (1985) described service quality as the users' perception about an organization total success or competitive edge, the scholars explained that service quality indicate serious gaps that exist between users' projection and what they were actually offered. Whatever that's received by users during business dealings will definitely have important effect on users' classification of service quality (Gronroos, 2019). Kumar (2019) was of the details that the received quality in a particular service is the output of an appraisal process as a result of users who will try

to compare what they were promised with what they actually received. As such, it is safe to conclude that service quality is measured on twin factors: anticipated service and felt service. Service actually perceived by a given customer is the output of classification process as users most time compare the services they were expecting with what they actually got. Duc *et al*. (2020) in their studies defined service quality as the service characteristics which brought satisfaction to the users.

The main criterion which customers engaged to classify service quality comprises of tangible, empathy, responsiveness, reliability, assurance these were suggested by Parasuraman, Zeithaml and Berry in their studies when they applied service quality criterion on retail stores in 1985 (Agyapong, 2021). This study is model base on two out of five service quality dimensions as advanced by Parasuraman *et al.* in 1985 which consist of tangibility and reliability

Tangibility

The tangibility criterion of service quality means the physical outlook and environment of machineries, superstructure, facilities, ammenities, equipment, workers and how organization send and receive messages, the tangible factor is concerned with establishing good image and impressions. It is the desire of all firms to provide special, good and lasting first-hand experience to its customers that will make them continue to patronize the firm again and again (Nneoma & Uwabor, 2021).

Reliability

Bello and Idowu (2023) defined reliability as the capability of a firm such as commercial banks, hospitality firm, medical center, schools, governance, consulting etc. to render their service faithfully and constantly. Customers like those at seaport, patient at hospital, wedding celebrants etc. desire quality service which they can rely on from service providers.

Port user satisfaction

In this study, port users are the customers of the port and the terms were used interchangeably throughout this research. Customer satisfaction is a situation that indicates customer needs, desires and ensure that their intentions have been met from a particular service been rendered to them and as such they are willing to continue patronizing the firm's services. The major objectives for while companies do everything to satisfy their customers is to ensure continuous growth and development which when done properly will surely increases profit and sales for such firm. The act of satisfying users has a significant effect on the firm which ultimately influence customers intention to continue to buy the firms services (Aksar, Kayani & Ali, 2020).

Customer satisfaction can be viewed as user's state of mind that indicate happiness due to expected performance or result as it associates with proposed (Sambo, Danladi & Danjuma, 2021).

Customer satisfaction in real sense is a terminology mostly adopted in social and management sciences world which describe evaluation of goods or services rendered by a firm to exceed its users' expectation (Agyapong, 2021). Customer satisfaction can further be described as a worldwide philosophy which cross across every firm, irrespective of its scale of operations, either profit oriented or not-for-profit organizations, home or foreign, small or big. Organizations that meet or exceed her user's expectation tends to benefit from economic of scale (Bolton & Drew, 2021).

Theoretical Framework

SERVQUAL Dimension Theory

This research is based on service quality (SERVQUAL) dimension theory as proposed by Parasuraman, Zeithaml and Berry in their studies about service quality in 1988 where they highlighted five basic factors: tangibility, empathy, responsiveness, reliability, and assurance to measure quality among organizations that render services, these factors were used to make a clear comparison between what customers were expecting and what they actually received. Tangibility, is concerned with physical facilities of the service provider. Security, the absence of doubt, economic risk and physical danger. Access, the ease at which service provider can be reach. Communication, an understandable manner and use of right language by the service providing organizations and being compassionate with customers, strategies put in place by the service provider to know and understand the customer better. Credibility, the capability of the organization to render service as promised without depending on competitors doing so with minimal mistakes. Responsiveness, readiness to assist customers and render quick service. Assurance, knowledge, skills, attitude and courtesy of workers and their interest to instill trust and confidence. Empathy dimension dealt with given personalized attention to customers when issues arise (Parasuraman *et al.,1988).*

Parasuraman *et al.* (1985) when they first conducted the research, they pointed out (97) ninety-seven researchable variables to measure service quality management which was later reduced to (10) variables after they conduct the test in different industries of economy. They defined tangibility criterion as how beautiful or good looking the physical facilities possess by firms are and how well dress their workers are in conjunction with the type of service they render. In their opinion, reliability has to do with the capabilities of such firm to be able to deliver as they agreed with their customers while responsiveness is the willingness of an organization workers to assist customers in a pleasant and efficient manner while replying to customers complains,

issues or problems, questions, and enquires as quickly as possible. Competence, the capability of workers to be able to render the service. The workers skills and education should be in line with their jobs. Courtesy, the respect, thoughtfulness, and politeness exhibited by company towards their customers

Empirical Review

Sakyi, Appiah, Ayesu, Immurana and Baidoo (2020) carried out research with objective to analysis terminal level of service quality among seaports in Nigeria. The study used transparency, and responsiveness to measure service quality. The study adopted gap score methods of SERVQUAL model. The study discovered that in total all the surveyed terminals were of low service quality and transparency was considered to possess highest point for service quality while responsiveness had the worst service quality. It was recommended that more efforts should be directed towards improving responsiveness which can be achieved by quickly responding to customers, assisting customers and informing them when precisely services will be rendered. Even though this study cover Nigeria. It only covers terminals which are not seaports as this study covered Tin Can Island Port, Lagos.

Okeke, Onwumere and Kalu (2019) in the study of Nigerian seaports aimed at determining how the concessions of Nigeria Ports influenced the quality of port service delivery. The research used survey research design. The study reviews existing literature in service quality by using tangibility, reliability, responsiveness, assurance and empathy. The study discovered that port concession policy adopted by Nigeria government has helped in providing new facilities used in seaport operations and the study further discovered that assurance level at the Nigerian seaports has improved. Even though, the study concentrates on Nigeria seaports it only covers Apapa Port Complex leaving Tin Can Island Port, Lagos uncovered.

Olufemi, Nkechi, Ejem and Dike (2021) in their study which aimed at assessing how port infrastructure development affect service quality between the year 2000 to 2019. The research analyzed key relationship between port infrastructure and ship turnaround time and average time spent at berth by ships that call at Nigerian seaports. The Ordinary Least Square (OLS) regression analysis was used to analyze the secondary data obtained on quality of port infrastructure index; ship turnaround time and average time spent at berth gathered from Nigerian Ports Authority and World Economic Forum. Data was made to pass through Augmented Dickey Fuller (ADF) unit root test in order to stabilize the data. The study variables were stationed to foresee spurious regression. The study found that port infrastructure does not significantly correlate with ship turnaround time and average time spent at berth by ships that call at Nigerian seaports. The study does not used primary data via questionnaire or interview to gather

data from the responded rather it uses secondary data.

Bello and Idowu (2023) embarked on a study to determine the impact of service quality on customer satisfaction concentrating on Bida hospitality sector in Niger state, Northern Nigeria. Survey research design was adopted while questionnaire was used to gather data. The result from analysis revealed that customer satisfaction in Bida hospitality sector were mainly driven by empathy, assurance and responsiveness while tngibility and reliability were found not to has significant effect on customer satisfaction. The study recommended that it is crucial for hotels industrialist to manage service quality criterion properly in order to support customer satisfaction. The gap observed in the study was that it only concentrates on hotels in Bida hospitality industry.

Sakyi (2020) in his attempt to compare quality of service offered at the Economic Community of West African States (ECOWAS) seaports with special focus on Ghana, Takoradi, Banjul ports, Tin Can Island and Apapa ports in Nigeria, Port of Abidjan, Port of Cotonou and Port of Lome. The study covered year 2019 and 2020. It was found that service quality is improving among the seaports covered.

Singh, Ahmad, Hamdan Suhaimi, Salman and Oyyappan (2023) studied engaged in a research effort with aim to analyze service quality and perceived service quality in Malaysia shipping industry after COVID-19 pandemic. The study specially aimed at establishing the relationship between service quality offered and the perceived service quality provided in the shipping industry. SERVQUAL Model was employed to analyze the data gathered. The study adopted reliability, assurance, tangibility, empathy, and responsiveness variables. The research found out that service quality and perceive service quality correlate positively. The period cover was between 2019 and 2022. As such the study left 2023 period uncovered. Moreover, the study did not cover any of the Nigerian seaports.

Even though so many authors have written about quality in both services and products in many industries both in Nigeria economy and other nations globally none have actually concentrated on Tin Can Island Port, Lagos the population gap covered in this study. Furthermore, they have failed to use tangibility and responsiveness variables to study quality service in Tin Can Island Port, the literature gaps covered in this study. Also, most of the studies used inefficient methodologies such as Sakyi (2020) who studied ECOWAS seaports and analyzed the data gathered with descriptive statistics like mean, standard deviation and simple percentage but failed to use inferential statistics to treat data collected the methodological gap which this study covered.

Methodology

Survey research design was adopted in this study. The data for the study was obtained with the aid of questionnaire from port users at Tin Can Island Port Lagos, Nigeria. The questionnaires were administered personally to the respondents. The total population used in this study is eight hundred and twenty (820) respondents according to NPA (2023) records which consists of government workers staff (250), NIMASA staff (30), Customs officers (20) Police officers (30) Terminal operators (70) Importers and exporters (50), Agents (80), Truckers (140) shipping lines (50), shipping agents (40) and dockworkers (60). The study used simple random sampling technique to choose port users. The use of the simple random sampling technique ensures that every port users have equal chance of being selected.

A sample size of two hundred and sixty-nine (269) respondents was used for this study with the aid of Yamane, T. (1967) formular

$$n = \frac{N}{1-\mathrm{N}(0.05)2} \ldots\ldots\ldots\ldots\ldots\ldots\text{(i)}$$

$$n = \frac{820}{1 - 820(0.05)2}$$

$$n = \frac{820}{3.05}$$

$$n = 269$$

n= sample size, significance level at 0.05,

This study optimized service quality at Tin Can Island Port, Lagos. Service quality (SQ) is a function of port users' satisfaction (PU). Tangibility (T) and Reliability (R) was used to proxy service quality (SQ). The study used multiple regression analysis

The function is represented as follows:

$PU = f(SQ)$…… (ii)

From equation (ii) above. The model is thus specified as:

$PU = \beta_0 + \beta_1 T + \beta_2 R + \mu t$…… (iii)

$PU = \beta_0 + \beta_1 T + \beta_2 R + \mu t$ …… (iv)

$PU = Port\ users\ satisfaction$, $T = Tangibility$, $R = Reliability$, $\beta_0 = Constant$, $\beta_1 T = Tangibility$, $\beta_2 R = Reliability$, $\beta_0 \ldots \beta_2 = Regression\ coefficients\ of\ the\ model$, $A\ priori\ expectation: \beta_0 > 0\ and\ \beta_2 > 0$

In testing the validity and the reliability of the instrument Cronbach's Alpha method was used to check the internal consistency of the variables. Pearson correlation analysis, simple percentage and frequency was used to analyze the data and multiple regression

analysis was used to test the hypotheses of the study.

Data Analysis

Two hundred and sixty-nine (269) copies of the instrument was administered to respondents, but (250) copies was successfully retrieved. This represent 93% responses which is valid for use in this study. Data analysis and hypotheses testing were therefore, based on the number of returned copies of questionnaire

Table 1: Descriptive Analyses of Respondents' Personal Information (N=250)

Variables	Level	Frequency	Percentage (%)
Sex	Male	148	59.2
	Female	102	40.8
Age Range	21-30 years	80	32
	31-40 years	119	47.6
	41yrs and above	51	20.4
Qualification	FSLC	12	4.8
	WAEC	19	7.6
	ND/NCE	118	47.2
	HND/B.Sc. & Others	101	40.4
Experience	1-5 years	36	14.4
	6-10 years	150	60
	11-15 years	49	19.6
	16 years and above	15	6
Cadre	Government workers	59	23.6
	Dockworkers	50	20.0
	Agents	105	42
	Others	36	14.4

Source: Field Study, 2024

Table 1 analysis above indicate 148 participants (59.2%) was male, and 102 (40.8%) female. This suggests that more male participated in the study when compared with their female counterpart. Also, Table 1 presents analysis for age of study's participants. The findings reveal 32% of them are between 21-30 years old, while 47.6% aged between 31years and 40 years. Lastly, 20.4% aged 41 years and above older. The results of the above analysis indicates that the entire participants were in their working age, which makes it valid for this study. And that they are actively engaged and working within Tin Can Island Port, Lagos.

Table 1 in addition, also presents educational qualifications of the participants. The results showed that 12 respondents (4.8%) had FSLC qualification, 19 respondents (7.6%) had WAEC certificate, 118 respondents (47.2%) had OND/NCE certificates and

101 respondents (40.4%) had HND/B.Sc. or other qualifications. This interpret that the respondents are learned and educated as such they are capable to provide the necessary information needed to guide this study.

Table 1 further indicates the work experience and the results show that 36 respondents (14.4%) had 1 year to 5 years' experience, majority had 150 (60%) had 6-10 years working experience. Additionally, 49 respondents (19.6%) had 11-15years working experience, and 15 respondents (6%) had 16 years and above experience. This indicates workforce primarily composed of individuals with moderate professional experience. The concentration of respondents within this specific range suggests that the data collected may predominantly reflect the views and experiences of those who are relatively seasoned in their careers but not yet in senior or long-term positions.

Lastly, Table 1 broaden insight into nature of business of the people who volunteer to participate in the research. 59 (23.6%) are government workers. Moreover, the majority of respondents, comprising 105 (42.0%), were categorized under agents. Additionally, 36 respondents (14.4%) were identified as others while, 50 respondents (20%) fell into dockworkers category.

Table 2: Pearson Correlation showing the relationship between the variables

	Variables	Mean	SD	1	2	3
1.	PU	3.47	.46	1		
2.	T	3.26	.67	.585**	1	
3.	R	3.16	.73	.592**	.631**	1

Key: **p<0.01; N = 250. SD: Standard Deviation; PU: Port user satisfaction; T: Tangibility; R: Reliability

** Correlation is significant at the 0.01 level (2 railed)

Source: SPSS 23 Output.

Pearson correlation was computed for each of these variables as shown in Table 2 above and the analysis report emphasize that tangibility positively relate with port user satisfaction in Tin Can Island Port (r=.585; p<.01). This means that tangibility criterion cannot be neglected at Tin Can Island Port, Lagos in order to satisfy their customers.
Also, Table 2 assert how reliability influence port users' satisfaction in Tin Can Island Port. Result from Table 2 showed that reliability variable contributes meaningfully to port users' satisfaction in Tin Can Island Port (r =.592; p < .01).

Test of Hypotheses

Hypothesis 1

H_1: Tangibility has significant effect on port user satisfaction in Tin Can Island Port, Lagos

Table 3. Multiple regression showing the impact of Tangibility on port users' satisfaction

Predictor Variable	***B***	**β**	**T**	**R**	**R^2**	**F**	***p***
(Constant)							.00
				.585[a]	.342	180.716	
Tangibility	.401	.585					.00[b]

Source: SPSS version 25 output

Table 3 showed the regression output of the two variables of tangibility and port user satisfaction. Findings from the table showed a regression R = .585. This indicates that tangibility has significant and positive impact on port user satisfaction in Tin Can Island Port. R^2 =.342 emphasize that 34.2% can be explained by tangibility while the remaining 65.8% can be explained by other variables not covered in this research.

Table 3 showed the ANOVA output for the study. Findings from the table showed an F(1); 248 = .180.716; p = .00[b]). This indicates that tangibility and port user satisfaction is a good fit, given that the F- calculated is greater than -1.96 and 1.96. This is also a proof that tangibility was a good predictor of port user satisfaction In addition, Table 3 showed the table of coefficient between the variables under consideration. Findings showed that the individual contribution of tangibility in the study was .401. This implies that tangibility contributed 40.1% of the total variance of the study. This fact also corroborates the fact that tangibility was a good fit and a good predictor of port user satisfaction in Tin Can Island Port, Lagos. As a result, hypothesis one which states that tangibility has significant effect on port user satisfaction in Tin Can Island Port, Lagos is accepted

Hypotheses 2

H_1: Reliability has significant effect on port user satisfaction in Tin Can Island Port, Lagos

Table 4. Simple linear regression showing the impact of Reliability on port users' satisfaction

Predictor Variable	***B***	**β**	**T**	**R**	**R^2**	**F**	***p***
(Constant)							.00
				.592[a]	.242	111.137	
Reliability	.311	.492					.000[b]

Source: SPSS version 25 output

Table 4 showed the regression output of the two variables of reliability and port user satisfaction. Findings from the table showed a regression R=.592, the results emphasize that reliability contribute to port user satisfaction in Tin Can Island Port, Lagos. R^2 = .242 means that 24.2% of variance in port users; satisfaction can be explained by reliability while the remaining 75.8% can be explained by other variables not mentioned in this study. Table 4 showed the ANOVA output for the study. Findings from the table showed an F(1); 248=111.137; p =.000[b]). This supported the hypothesis that reliability can contribute to port user satisfaction and also it is a good fit, given that the F-calculated is greater than -1.96 and 1.96. This is also a proof that reliability was a good predictor of port user satisfaction in Tin Can Island Port, Lagos.

Table 4, also revealed coefficient between the variables under consideration. Findings showed that the individual contribution of reliability in the study was .311. This implies that reliability contributed 3.11% of the total contribution of the study. This fact also corroborates the fact that reliability was a good fit and a good predictor of port user satisfaction. As a result, hypothesis which states that reliability has significant effect on port user satisfaction in Tin Can Island Port, Lagos is accepted

Discussion of findings

Regarding the tangibility dimension Table 3 showed R =.585. The analysis interpret that tangibility contribute immensely to port user satisfaction in Tin Can Island Port, Lagos. This outcome implies that, Tin Can Island Port, Lagos ranks averagely under the tangibility dimension, similar finding was revealed by Sakyi (2020) whose findings reveal an average rank for tangibility in Tin Can Island port in study of ECOWAS seaports with Tin Can Island as one of the ports covered in the study. The findings highlighted that the assumption of port customers concerning the availability of contemporary seaport facilities and machineries, attractive seaport amenities and equipments, how well looking and tidy the Tin Can Island Port Lagos staff are and that

the appearance of port staff and physical facilities are in line with the seaport services offered by Tin Can Island Port, Lagos. All these attributes are found to be far below expectations of the port users. This is due to inadequate finance by Tin Can Island Port authority which make it cumbersome to purchase up-to-date equipments for the port's use. This makes port users discontented with the class of service they receive from Tin Can Island Port, Lagos. As such, seaport managers, terminals operators and government need to put more efforts aimed at realizing these factors since they impact the quality of services they offered.

Secondly, for the reliability criterion Table 4. Findings from the table displayed a regression value (R=.592). This elucidate that reliability impact port user satisfaction positively. Thus, as regards when officials at Tin Can Island Port, Lagos vow to undertake something they keep to their pledge. When issues arise workers at the seaports are bothered and helpful, provides dependent services, quick, effective and maintain a proper book of accounts for record purposes. Their incapability to exceed port user's expectation in reliability criterion was as a result of time wasted by customs officials and other government officials when examining and inspecting cargo containers at the Tin Can Island Ports, this was occasioned by poor documentation, insufficient gangs an, gantry cranes and bad internet connectivity noticed by port users. This is in line with the findings of Sakyi (2020) about Tin Can Island Port, Lagos on the studies of ECOWAS seaports where it was found that Tin Can Island Port ranks the lowest in terms of reliability dimension among other surveyed seaports in West Africa.

Conclusion and Recommendations

This study optimize service quality in Tin Can Island Port, Lagos. The study concluded that tangibility variable is core to port users' satisfaction and that modern port facilities and machineries are the backbone behind a successful ports while maintaining well compensated and dressed workers cannot be ignored. The study, in addition concluded that reliability factor plays key role in keeping port customers satisfied as workers at the seaport need to show concerned and helpful to port users whenever issues arise during port operations.

In line with the two objectives of this study:

i. To examine the effect of tangibility on port user satisfaction in Tin Can Island Port, Lagos, the study proposed that port executives and private terminal operators be obliged to provide up-to-date facilities and equipments at the port.
ii. To assess the effect of reliability on port user satisfaction in Tin Can Island Port, Lagos. Secondly, the study recommends that Tin Can Island Port Lagos officials should always show concern and support port users whenever the need arises. These are necessary because the results of this research revealed that tangibility and reliability criterion at Tin Can Island Port, Lagos were still below the

International Maritime Organization set standards when compared with advanced ports of the world such as port of Singapore, Shangai port in China, Port of Roterdam etc.

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