

# Effect of Corruption on Service Delivery in the Nigerian Ports Authority (NPA) Port Harcourt Complex.

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***Abstract-*** *The study examines the effect of corruption on service delivery in the Nigerian Ports Authority (NPA) Port Harcourt complex. The principal-agent theory was adopted as the theoretical framework for the study. Data were collected through secondary sources such as maritime journals, port authority reports, industry publications, and international shipping documents, with analysis conducted using content analysis of these secondary sources. The study revealed that corruption has a significant impact on the effective provision of port services, including cargo handling, vessel operations, documentation processing, and infrastructure maintenance. The study finds that corruption manifests through three primary dimensions: administrative corruption, operational corruption, and financial corruption, leading to extended vessel turnaround times, increased operational costs, and compromised service quality. The consequences of corruption on port service delivery are measured through five key indicators: operational efficiency, service quality, cost-effectiveness, procedural transparency, and stakeholder satisfaction. The study demonstrates that corruption-related inefficiencies add 30-40% to standard operational costs while extending cargo dwell times to triple the international standards. The study recommends implementing automated systems, strengthening institutional frameworks, enhancing infrastructure maintenance, establishing whistleblower mechanisms, and prioritizing capacity building for port personnel. The findings underscore the urgent need for comprehensive measures to combat corruption and enhance port services to improve maritime trade facilitation and economic development.*

***Indexed Terms-*** *Corruption, Port Service Delivery, Maritime Operations, Port Authority, Infrastructure Efficiency*

## I. INTRODUCTION

The maritime sector is a cornerstone of Nigeria's economic infrastructure, serving as the primary gateway for approximately 90% of the country's international trade activities (Afolabi & Idowu, 2023). The Nigerian Ports Authority (NPA), particularly the Port Harcourt complex, occupies a strategic position in the nation's maritime operations, handling over 40% of non-oil cargo traffic in the eastern region (Mohammed et al., 2023). Established in 1913, this port complex has evolved into a crucial hub for regional and international trade. However, the pervasive challenge of corruption has significantly undermined its operational effectiveness and service delivery capabilities. Recent studies indicate that corruption-related inefficiencies cost the Nigerian maritime sector an estimated \$7 billion annually in lost revenue and operational disruptions (Okonkwo & Nwachukwu, 2023; Peters & Adebayo, 2022).

The impact of corruption on port operations represents a critical concern in developing nations, particularly in West Africa, where institutional frameworks often struggle to maintain transparency and accountability (Johnson & Ibrahim, 2023). Research conducted by the Maritime Anti-Corruption Network (MACN) reveals that Nigerian ports rank among the most challenging in terms of corrupt practices, with Port Harcourt specifically experiencing an average of 7-9 different types of corrupt solicitations per vessel call (Lawrence et al., 2023). These practices manifest through various forms, including bribe solicitation, bureaucratic bottlenecks, unauthorized fees, and deliberate delays in cargo clearance processes. A comprehensive survey by Adeniran and Mohammed

(2023) found that corruption adds approximately 30-40% to standard operational costs for port users, significantly impacting service delivery and operational efficiency.

The Port Harcourt port complex, as a major hub for oil and gas activities in the Niger Delta region, faces unique challenges in combating corruption. Statistical evidence from the Nigerian Bureau of Statistics (2023) indicates that the port handles approximately 65% of oil and gas-related maritime traffic in the eastern region, making it particularly vulnerable to corrupt practices. Despite various reform initiatives, including the implementation of the Port Service Support Portal (PSSP) and the Standard Operating Procedures (SOP), corruption continues to persist. Studies by Okafor and Bassey (2023) reveal that approximately 60% of port users report experiencing some form of corruption-related challenges during their operations, leading to increased operational costs, extended cargo dwell times, and diminished competitive advantage in the regional maritime sector.

This study examines the multifaceted effects of corruption on service delivery within the Port Harcourt port complex through a comprehensive analysis of operational data, stakeholder experiences, and comparative performance metrics. Building on previous research by Hassan and Adekunle (2023), this investigation employs qualitative methodology to analyze how corrupt practices impact operational efficiency, stakeholder satisfaction, and overall port performance. The research specifically focuses on key performance indicators including vessel turnaround time, cargo dwell time, and user satisfaction metrics, while also examining the effectiveness of existing anti-corruption measures (Ukpong et al., 2023; Nnamdi & Thompson, 2023).

The significance of this research extends beyond academic discourse, offering practical implications for port sector reforms in Nigeria and other developing nations. Recent findings by international maritime organizations suggest that improving port efficiency could boost Nigeria's GDP by up to 2.5% annually (World Bank Maritime Report, 2023). This study aims to identify practical solutions for enhancing transparency, accountability, and service delivery in port operations by examining the specific case of Port

Harcourt port. The findings will be valuable for policymakers, port administrators, and stakeholders working towards creating more efficient and corruption-free port systems, particularly in developing economies where similar challenges persist (Lawrence & Adebayo, 2023; Ibrahim & Okonkwo, 2023). Furthermore, this research contributes to the growing body of literature on maritime sector reform and anti-corruption strategies in developing nations, providing empirical evidence and practical recommendations for improving port service delivery systems.

## II. STATEMENT OF THE PROBLEM

The endemic issue of corruption within the Nigerian Ports Authority (NPA) Port Harcourt has severely compromised the efficiency and effectiveness of maritime services, significantly impacting Nigeria's economic development and international trade competitiveness (Adeniran & Mohammed, 2023). This pervasive corruption has created a complex web of challenges that undermine the port's operational capacity and service delivery mechanisms. The failure to provide efficient port services has resulted in increased operational costs, extended cargo dwell times, and diminished stakeholder confidence, indicating an urgent need for systematic reform and intervention (Okonkwo et al., 2023).

As a strategic maritime gateway and critical infrastructure in Nigeria's eastern region, the Port Harcourt port complex should have achieved significantly higher levels of operational efficiency and service delivery standards, given its strategic location and available resources. However, corruption has emerged as a fundamental barrier to achieving these objectives, making the port less competitive compared to other regional ports such as Lome and Cotonou. The port's underperformance is particularly evident in key operational metrics such as vessel turnaround time, cargo handling efficiency, and customer satisfaction indices (Hassan & Ibrahim, 2023).

This research examines corruption through multiple dimensions relevant to its impact on service delivery at the Port Harcourt port complex. These dimensions encompass: administrative corruption, including unauthorized fees, deliberate delays in documentation,

and solicitation of bribes; operational corruption, involving manipulation of cargo handling procedures and equipment allocation; financial corruption, including revenue leakages and misappropriation of port funds; and systemic corruption, manifesting through established networks that perpetuate corrupt practices within the port system (Lawrence & Adebayo, 2023). The persistence of these corrupt practices has created a significant gap between the port's potential and its actual performance.

The study evaluates service delivery through specific measurable indicators within the port context. These include: operational efficiency, measured through vessel turnaround time and cargo dwell time; service quality, assessed through the reliability and consistency of port services; cost effectiveness, examined through analysis of official versus actual operational costs; procedural transparency, evaluated through the clarity and consistency of port processes; and stakeholder satisfaction, measured through user experience and feedback metrics (Ukpong & Bassey, 2023). By examining these dimensions, the study aims to quantify the impact of corruption on port operations and identify specific areas requiring intervention.

The manifestation of corruption in the Port Harcourt port complex has created significant challenges that require immediate attention. Statistical evidence indicates that corruption-related inefficiencies add approximately 30-40% to standard operational costs, while extending cargo dwell times by an average of 12-15 days compared to international standards (Peters et al., 2023). These inefficiencies not only affect direct port users but also have broader implications for Nigeria's economic development and international trade competitiveness. The study therefore seeks to address this critical problem by examining the relationship between corruption and service delivery, with the aim of proposing practical solutions for improving port efficiency and effectiveness.

### III. AIM AND OBJECTIVES OF THE STUDY

This study aims to interrogate the effect of corruption on service delivery in the Nigerian Port Authority Port Harcourt. The specific objectives of this study are to:

1. Interrogate the effect of Corruption on Service delivery at the Port Harcourt port complex.
2. examine the factors that contribute to corruption within NPA Port Harcourt and their impact on operational efficiency.
3. Determine the impact of Corruption on port service delivery performance metrics.

#### Research Questions:

1. What is the extent and nature of corruption at the Port Harcourt port complex?
2. What are the factors that contribute to corruption within the Port Harcourt port complex?
3. How does corruption impact the efficiency and effectiveness of port services in Port Harcourt?

### IV. THEORETICAL FRAMEWORK

#### Principal-Agent Theory:

The theoretical framework for this study draws upon the principal-agent theory, which provides critical insights into the relationship between corruption and service delivery within the Nigerian Ports Authority (NPA) Port Harcourt. Principal-agent theory originated in the field of economics and has since been applied to various disciplines, including maritime administration, port management, and public sector governance. This theoretical approach offers a robust framework for analyzing the complex relationships and incentive structures that influence corruption and service delivery in port operations.

The concept of principal-agent theory can be traced back to the works of economists such as Kenneth Arrow and John Pratt in the 1960s. The theory was further developed by economists Michael Jensen and William H. Meckling in their seminal paper, "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure" in 1976. They examined the inherent conflicts of interest that arise when one party, known as the principal, delegates authority to another party, known as the agent, to act on their behalf. This foundational work has proven particularly relevant to understanding the dynamics of port administration and operational management.

Principal-agent theory is based on the assumption that agents may not always act in the best interests of the principal due to information asymmetry, self-interest, and divergent preferences. In the context of port operations, this manifests when port officials (agents) prioritize personal interests over the objectives of port management or government authorities (principals). The primary goal of the NPA as a principal is to maximize operational efficiency and service delivery, while agents may prioritize opportunities for personal gain through various forms of corrupt practices. This divergence of interests creates significant challenges in maintaining effective port operations and ensuring quality service delivery.

The theory posits that the principal must design mechanisms or incentives to align the interests of the agent with their own objectives. Within the port context, this involves implementing monitoring systems for cargo handling procedures, establishing performance metrics for service delivery, providing incentives for efficient operations, and imposing penalties for corrupt practices. The effectiveness of these principal-agent relationships in port operations depends on the design of these mechanisms and the ability to overcome challenges posed by information asymmetry and agency costs in maritime operations. Recent studies have shown that ports implementing robust monitoring and incentive systems have demonstrated improved operational efficiency and reduced corruption incidents (Adeniran et al., 2023).

The Principal-Agent Theory has faced significant criticisms for its limitations and oversimplifications in the maritime sector context. Critics argue that the theory assumes a simplistic, dichotomous relationship between port authorities and operational staff, neglecting the complexity of port operations and the multiple stakeholders involved, including shipping lines, freight forwarders, and customs officials. It is also criticized for its focus on individual self-interest, overlooking other motivations and factors that influence port officials' behavior, such as institutional culture, organizational norms, and systemic pressures. Additionally, the theory is seen as too narrow, concentrating on control mechanisms rather than addressing the underlying structural issues that contribute to corruption in port operations.

In the specific context of this study, principal-agent theory provides a valuable framework for understanding the relationship between corruption and service delivery in the Port Harcourt port complex. The NPA, as the principal, is entrusted with the responsibility of ensuring efficient port operations and service delivery. However, corruption introduces a significant divergence in interests, with port officials exploiting their positions for personal gain, often at the expense of operational efficiency and service quality. This corruption manifests through various forms of malfeasance, including deliberate delays in cargo clearance to solicit bribes, manipulation of port equipment allocation, falsification of documentation and records, unauthorized fees, and misappropriation of port resources (Ukpong & Mohammed, 2023)

The application of principal-agent theory in this research helps analyze the complex dynamics between port authorities and operational staff, providing insights into how corruption undermines service delivery and operational efficiency. The theory suggests that effective anti-corruption measures must address both the incentive structures and the monitoring mechanisms within port operations. This includes implementing transparent documentation systems, establishing clear performance metrics, creating effective whistleblower protection programs, and developing robust accountability frameworks.

This study utilized principal-agent theory to evaluate the effectiveness of existing anti-corruption measures and policies in the Port Harcourt port complex and to propose recommendations for improving governance mechanisms and accountability structures. By examining the relationships between various stakeholders through this theoretical lens, the research aims to contribute practical solutions that align the interests of port officials with the goals of providing efficient and transparent port services. The findings will help inform the development of more effective interventions to enhance port operations and combat corruption within the maritime sector.

## V. METHODOLOGY

This is a descriptive study, library research utilizing secondary data collected from maritime sources such as academic journals, port authority reports, maritime industry publications, and international shipping

documents to investigate the effect of corruption on service delivery in the Nigerian Ports Authority (NPA) Port Harcourt complex. Library research is undertaken to ascertain and describe the characteristics of variables in their natural setting without manipulation (Ahiazu and Asawo, 2016). A comprehensive literature review was conducted spanning maritime databases, industry publications, and institutional reports to address the research questions and construct a theoretical framework. Content analysis was employed to systematically organize and categorize the data based on key concepts and themes relevant to port operations and service delivery, while thematic analysis helped identify recurring patterns in port service delivery challenges and develop a deeper understanding of corruption's impact on maritime operations. The analysis focused on documentation of corrupt practices, service delivery bottlenecks, operational inefficiencies, infrastructure maintenance issues, and stakeholder complaints and feedback. However, the methodology provided valuable insights into the challenges caused by corruption and its detrimental effects on port service delivery in Port Harcourt, contributing to the existing knowledge in the field of maritime operations and port management through systematic analysis of extensive secondary data.

## VI. CONCEPTUAL CLARIFICATION

### Concept of Corruption

Corruption manifests itself in different forms and environments within port operations, making it impossible to have a universal conception. Mana (2013:3) defines corruption as the abuse or misuse of public office and funds for personal gain, which in the port context involves the exploitation of maritime administrative positions and resources. Vittal (2003) defines corruption as the use of public office for private gains, particularly relevant to port officials who leverage their positions for personal benefit in cargo clearance and documentation processes.

Gboyega (quoted in Olasupo, 2009:188, cited in Adenyi, 2012:184-185) defines corruption as the giving and taking of bribes or the illegal acquisition of wealth using the resources of a public office. Within the Nigerian Ports Authority (NPA) Port Harcourt, this manifests through unauthorized fees, manipulated

documentation, and misappropriated port resources. According to Transparency International (2000), corruption is the abuse of entrusted power for private gain, which in port operations includes the manipulation of cargo handling procedures, customs clearance, and maritime administrative processes.

According to the World Bank (1997): "Corruption is the unauthorized use of public resources or position for personal gain, including bribery, embezzlement, and other forms of corrupt practices." In port operations, this involves port officials leveraging their positions to acquire wealth or personal benefits through various maritime-related activities. This definition encompasses operational, administrative, and financial dimensions within port management. Otite (1986:12) views corruption as the perversion of integrity or the state of affairs through bribery, favoritism, or moral depravity. In port operations, it involves actions that deviate from standard maritime procedures and alter judgments and positions of trust, often involving informal, extra-legal, or illegal acts in cargo handling and customs clearance.

Agboola (2017:105) adds that public servants, including port administrators and maritime bureaucracy, are in a special position to practice corruption due to their control over critical port processes and documentation. The World Bank (2002) describes corruption as the abuse of public office through private agents who offer bribes to circumvent public policies and processes for competitive advantage and profit. In port operations, this manifests through collusion between port officials and private stakeholders to bypass established maritime procedures and regulations.

Corruption is particularly devastating in port operations within developing economies, where institutional frameworks are often weak (BelloImam 2005, cited in Agboola, 2017:105). Nye (1967/1996) defines corruption as behavior deviating from the normal duties of a public role due to private interests, be it pecuniary, status gains, or familial influences. In the Port Harcourt complex, this includes preferential treatment in vessel berthing, cargo handling, and documentation processing based on personal connections or bribes.

Within the context of this study, corruption in the Port Harcourt complex represents a pervasive challenge that significantly impacts maritime service delivery. It hampers the effective and efficient provision of essential port services such as cargo handling, vessel berthing, documentation processing, and customs clearance. Corruption leads to the diversion of port revenues meant for infrastructure improvements, compromising the quality and accessibility of maritime services. It undermines transparency and accountability in port operations, erodes stakeholder trust, and perpetuates a cycle of inefficiency and reduced competitiveness.

The definitions provided by various scholars highlight the corrupt practices conducted by port officials and private agents who offer bribes and engage in illicit activities to gain advantages and circumvent established maritime procedures. Corruption occurs across operational, administrative, and financial spheres, affecting the integrity of port institutions and the fair allocation of maritime resources. It is important to note that corruption in port operations is not confined to a single dimension or sector. It cuts across different aspects of port governance and impacts various areas of maritime service delivery. The understanding of corruption within the context of port operations serves as the basis for exploring its consequences on maritime services and the efficiency of the Port Harcourt complex.

## VII. DIMENSIONS OF CORRUPTION

Akindele (1990) and Babalola (1995) have made efforts to categorize corruption into many dimensions or forms in public institutions. Within the maritime sector and particularly in port operations, corruption manifests through various dimensions that directly impact service delivery and operational efficiency. These include Administrative, Operational, and financial corruption, along with other forms such as regulatory, customs, and maritime security corruption. In this study, focusing on the Nigerian Ports Authority (NPA) Port Harcourt, three primary dimensions of corruption is discussed: Administrative Corruption, Operational Corruption, and Financial Corruption.

### Administrative Corruption

Administrative corruption refers to corrupt practices that occur during port documentation processes, permits issuance, and regulatory compliance procedures. It encompasses actions aimed at manipulating administrative outcomes in favor of certain individuals or groups within the maritime sector. Examples of administrative corruption include falsification of cargo declarations, irregular issuance of permits, manipulation of customs documentation, and deliberate delays in processing paperwork. Administrative corruption undermines the fairness, integrity, and transparency of port processes, eroding stakeholder trust in the system and compromising the legitimacy of port operations. It can have severe consequences for port efficiency and service delivery, as it often results in extended processing times, increased costs, and reduced port competitiveness.

Administrative corruption has been a persistent issue in the Port Harcourt port complex, undermining the integrity of maritime processes and compromising operational efficiency. According to Okonkwo (2023), port documentation procedures were marred by widespread corrupt practices, with the majority of port users reporting experiences of solicitation for unofficial payments. Similarly, Mohammed (2021) noted that administrative processes in the port were characterized by deliberate bureaucratic bottlenecks, resulting in significant delays and additional costs for port users. Hassan (2023) documented the prevalence of administrative corruption, highlighting how documentation procedures are deliberately complicated to create opportunities for bribe solicitation.

The empirical evidence suggests that administrative corruption has become systemic within port operations, with each level of documentation processing presenting new opportunities for corrupt practices. For instance, Adebayo (2023) reported that the introduction of electronic documentation systems was deliberately sabotaged to maintain opportunities for corruption. Lawrence (2022) also noted that administrative staff often create artificial delays to extort payments from port users. The consequences of administrative corruption have been severe, with

stakeholders facing increased operational costs and extended processing times.

#### Operational Corruption

Operational corruption involves the abuse of power by individuals in operational positions for personal gain or to maintain control over port processes. It encompasses various acts such as manipulation of cargo handling procedures, deliberate delays in vessel berthing, unauthorized equipment allocation, and artificial congestion creation. This dimension of corruption can occur at different levels of port operations and significantly impacts efficiency, resource allocation, and overall port performance. Within the Port Harcourt complex, operational corruption manifests through deliberate delays in cargo handling, manipulation of equipment allocation, and creation of artificial operational bottlenecks (Ukpong, 2021).

The port's operational landscape has been particularly affected during peak seasons when opportunities for corruption increase due to higher cargo volumes and time pressures (Bassey, 2021). Studies by Ibrahim (2023) reveal that operational corruption has resulted in vessel waiting times increasing by up to 40% compared to regional standards, while cargo dwell times frequently exceed international benchmarks by several days. These inefficiencies directly translate into higher costs for port users and reduced competitiveness for the port.

#### Financial Corruption

Financial corruption represents the third major dimension, referring to corrupt practices occurring within the port's financial management systems and revenue collection processes. It involves the misuse of financial procedures, regulations, or discretion for personal gain or to obstruct proper revenue collection and management. According to Ibrahim (2023), financial corruption in the Port Harcourt port complex manifests through various schemes including under-declaration of cargo values, revenue leakages, manipulation of port charges, and embezzlement of port funds. Studies indicate that this form of corruption has resulted in significant revenue losses, with estimates suggesting that up to 30% of potential

revenue is lost through various corrupt practices (Adeniran & Mohammed, 2023).

The high level of financial corruption in the port sector is exemplified by numerous cases of revenue leakage and fraudulent billing practices. For instance, Peters (2023) documented systematic under-declaration of cargo values and manipulation of port charges, while Hassan (2022) revealed complex schemes for diverting port revenues. These practices have severely undermined the port's financial integrity and its ability to maintain and improve infrastructure and services. Furthermore, Bassey (2023) notes that financial corruption has created a culture of opacity in revenue management, making it difficult to implement effective financial controls and accountability measures.

The interplay between these three dimensions of corruption creates a complex web of challenges that significantly impacts port efficiency and service delivery. The combined effect undermines the port's competitiveness, reduces government revenue, increases operational costs for users, and compromises the quality of port services. Understanding these dimensions and their interconnections is crucial for developing effective anti-corruption strategies and improving port performance.

#### Service Delivery

According to the International Maritime Organization (IMO, 2023), port service delivery can be viewed as the process of creating an effective maritime administration, which involves improving operational efficiency, reducing vessel and cargo delays, and enhancing overall port performance. However, achieving effective port service delivery remains a significant challenge for maritime sectors in many developing countries (Hassan & Ibrahim, 2023). Common issues hindering effective service delivery in ports include bureaucratic bottlenecks, political interference in operational decision-making, and inadequate administrative approaches. These shortcomings often result in stakeholder dissatisfaction with port services.

The World Maritime Organization (2023) defines port service delivery as the processes and mechanisms through which maritime services are planned,

implemented, and monitored to ensure their effective provision to port users. Within the context of port operations, service delivery refers to any interaction between port administration and users, including shipping lines, freight forwarders, importers, exporters, and other stakeholders, in which they request or receive port services, manage their cargo operations, or fulfill their regulatory obligations.

The delivery of port services should be efficient, consistent, dependable, and user-oriented (International Port Association, 2023). The widespread adoption of port community systems and digital platforms has led to the recognition of electronic service delivery as a cost-effective method for both port users and authorities to save time and improve operational efficiency (Adeniran & Mohammed, 2023). Good port service delivery according to the International Association of Ports and Harbors (IAPH, 2023) requires that:

- Port authorities acknowledge the need for fostering an administration that prioritizes the needs and interests of port users.
- Effective port governance is implemented systematically, using various regulatory and operational methods, to guarantee the provision of high-quality maritime services.
- Port services are guaranteed to be accessible to all legitimate users. The foundation of port service delivery is rooted in the provision of efficient and equitable services within the maritime sector.

Port service delivery refers to the extent to which maritime services meet or exceed the expectations of port users and stakeholders. It entails the provision of essential port services such as vessel berthing, cargo handling, documentation processing, storage facilities, and maritime safety services. Port service delivery is essential for promoting trade facilitation, economic development, and regional integration. It encompasses various dimensions, including operational efficiency, service quality, infrastructure availability, cost-effectiveness, and responsiveness to user needs (World Bank Maritime Division, 2023).

Accessible and quality port services that are delivered efficiently and responsive to stakeholder needs

contribute significantly to maritime trade development and economic growth. According to Peters and Lawrence (2023), effective port service delivery requires robust governance frameworks, adequate infrastructure, capable personnel, and mechanisms for stakeholder engagement and accountability. It relies on collaboration between port authorities, terminal operators, shipping lines, customs agencies, and other maritime stakeholders to ensure the effective delivery of port services (Okonkwo & Bassey, 2023). The quality of port service delivery directly impacts a nation's trade competitiveness and economic development potential.

#### Measures of Service Delivery

In this study, service delivery at the Nigerian Ports Authority (NPA) Port Harcourt will be evaluated through five specific measurable indicators: Operational Efficiency, Service Quality, Cost Effectiveness, Procedural Transparency, and Stakeholder Satisfaction. These indicators collectively provide a comprehensive framework for assessing the effectiveness of port services and their impact on port users, enabling systematic evaluation of service delivery performance.

#### Operational Efficiency

Operational efficiency stands as a fundamental measure of port service delivery, primarily assessed through critical metrics of vessel turnaround time and cargo dwell time. According to Hassan and Ibrahim (2023), the current vessel turnaround time at the Port Harcourt complex averages 7.5 days, significantly exceeding the international standard of 2-3 days, indicating substantial operational inefficiencies in port services. This extended turnaround time directly impacts port productivity and user satisfaction, contributing to increased costs for shipping lines and cargo owners. Similarly, cargo dwell time, which measures the duration cargo remains in port after discharge, averages 21 days compared to the international benchmark of 7 days, reflecting serious challenges in cargo clearance and port logistics operations (Adeniran et al., 2023).

#### Service Quality



The measurement of service quality focuses intensively on the reliability and consistency of port services provided to various stakeholders. Peters and Lawrence (2023) highlight that service quality assessment encompasses multiple parameters including the reliability of scheduled services, consistency of cargo handling operations, accuracy of documentation processing, and responsiveness to user requirements. Current data indicates that service quality standards at the port fall significantly below international benchmarks, with service reliability averaging only 65% compared to the international standard of 85% (Okonkwo, 2023). This gap in service quality has substantial implications for port competitiveness and user satisfaction.

#### Cost Effectiveness

Cost effectiveness measurement involves comprehensive analysis of official versus actual operational costs incurred by port users. Recent studies by Bassey (2023) reveal a concerning trend where actual operational costs at the Port Harcourt complex exceed official tariffs by approximately 30-40% due to various inefficiencies and unofficial charges. This cost disparity significantly impacts port competitiveness and creates additional financial burdens for users. The analysis of cost effectiveness considers multiple factors including standard port tariffs, hidden charges, unofficial payments, and comparative costs with regional ports, providing insights into the port's cost efficiency and value proposition for users.

#### Procedural Transparency

The evaluation of procedural transparency focuses on the clarity and consistency of port processes and operations. According to Ukpong (2023), current assessments indicate that only 45% of port users consider the existing procedures transparent and predictable, highlighting significant challenges in process clarity and consistency. The measurement of procedural transparency encompasses various aspects including the clarity of operational procedures, accessibility of information, consistency in rule application, and transparency in decision-making processes. This low transparency rating significantly impacts stakeholder confidence and operational efficiency.

#### Stakeholder Satisfaction

Stakeholder satisfaction represents a crucial measure of service delivery effectiveness, assessed through comprehensive user experience evaluation and feedback mechanisms. Recent studies by Lawrence (2023) indicate overall stakeholder satisfaction levels at 55%, considerably below the desired benchmark of 80%. This measurement incorporates regular user satisfaction surveys, complaint resolution metrics, feedback response times, and service quality perceptions. The relatively low satisfaction levels reflect broader challenges in service delivery and highlight the need for significant improvements in port operations and user engagement.

The interrelation of these measures provides valuable insights into the overall state of port service delivery at the Port Harcourt complex. Recent port performance data compiled by Hassan et al. (2023) reveals consistent gaps across all measurement dimensions, with operational efficiency showing 40% deviation from international standards, service quality indicators highlighting significant reliability issues, and cost effectiveness analysis indicating substantial price premiums over official tariffs. These measurements serve as critical tools for identifying service delivery gaps, assessing improvement initiatives, benchmarking against international standards, and developing targeted interventions for enhanced port performance.

Understanding and effectively utilizing these measures proves crucial for strategic planning, performance improvement initiatives, resource allocation decisions, and policy formulation. The comprehensive nature of these measurements enables port authorities to develop targeted strategies for service delivery enhancement while providing stakeholders with clear metrics for assessing port performance and efficiency. Regular monitoring and evaluation of these measures facilitate continuous improvement in port services and support the development of more efficient and user-oriented port operations.

#### Relationship Between Corruption and Service Delivery

Corruption and service delivery in port operations have an intrinsic connection, as corruption negatively impacts every dimension of port services and operational efficiency. Firstly, corruption hinders accessibility to port services. When corruption infiltrates resource allocation and decision-making processes within the port complex, it often leads to favoritism, nepotism, and bribery in cargo handling and documentation procedures. This, in turn, restricts equal access to port services, with smaller shipping lines and importers facing significant barriers in obtaining essential services such as berth allocation, cargo handling, and customs clearance. According to Hassan and Ibrahim (2023), small and medium-sized port users often face delays of up to 300% longer than larger operators due to their inability to participate in corrupt practices.

Secondly, corruption significantly compromises the quality of port services. When funds designated for port infrastructure and maintenance are misappropriated or embezzled, it results in a lack of investment in essential facilities, equipment, and skilled personnel. Adeniran et al. (2023) document that approximately 40% of allocated funds for port infrastructure maintenance at Port Harcourt never reach their intended purpose. The consequence is substandard facilities, insufficient handling equipment, and diminished capacity to deliver efficient port services. In cargo operations, for example, corrupt practices have led to a shortage of functional handling equipment, with only 60% of available equipment meeting operational standards, severely impacting service quality.

Thirdly, corruption undermines equity in the distribution of port services. When corrupt practices influence the allocation of port resources and facilities, smaller operators and new entrants often bear the brunt of the consequences. Lawrence and Okonkwo (2023) reveal that established port users with corrupt connections can secure preferential treatment in berth allocation and cargo handling, creating a two-tier service system. The wealthy and influential operators can manipulate port systems to gain privileged access to services, exacerbating existing inequalities and perpetuating unfair practices in maritime operations.

Furthermore, corruption significantly reduces efficiency in port service delivery. Resources are diverted and wasted, leading to inefficiencies in the management and utilization of port infrastructure and equipment. Peters and Bassey (2023) estimate that corruption-related inefficiencies increase cargo dwell times by an average of 60% and vessel waiting times by up to 45%. Bureaucratic processes are often deliberately complicated by corrupt officials, resulting in delays and unnecessary documentation requirements. These inefficiencies impede timely access to port services and contribute to a decline in overall operational performance.

Lastly, corruption weakens transparency and accountability mechanisms that are vital for effective port service delivery. When corruption becomes pervasive, it erodes trust in port authorities and decreases stakeholder confidence. According to Ukpong (2023), only 35% of port users express confidence in the transparency of Port Harcourt's operations. Port institutions that lack transparency and accountability are more likely to tolerate and perpetuate corrupt practices, creating a vicious cycle that hampers service delivery efforts. The Nigerian Maritime Administration's 2023 report indicates that lack of transparency in port operations has led to an estimated annual revenue loss of over \$2 billion across Nigerian ports.

Numerous case studies and empirical evidence highlight the negative impact of corruption on port service delivery outcomes. For instance, in the Port Harcourt complex, corruption has been implicated in the mismanagement of port modernization funds and the diversion of resources meant for service improvement projects. Mohammed and Ibrahim (2023) reveal instances of contract fraud in equipment procurement, embezzlement of maintenance funds, and systematic bribery in operations, which have hampered infrastructure development and compromised the accessibility and quality of port services.

The relationship between corruption and port service delivery is further evidenced through comparative studies of port performance. Research conducted by the World Maritime Organization and other international bodies demonstrates a strong negative

correlation between corruption levels and port service delivery outcomes. Ports with higher levels of corruption consistently exhibit lower indicators of service delivery effectiveness, including extended cargo dwell times, higher operational costs, and deficient infrastructure maintenance. These examples illustrate the detrimental effects of corruption on port service delivery and emphasize the urgent need to combat corruption to improve service access, quality, equity, efficiency, transparency, and accountability in port operations.

#### Corruption and Service Delivery in Port Harcourt Port Complex

Corruption has had a significant impact on service delivery in the Nigerian Ports Authority (NPA) Port Harcourt complex between 2015 and 2024. During this period, the port has faced numerous challenges in effectively providing essential maritime services such as cargo handling, vessel berthing, documentation processing, and port infrastructure maintenance. Corruption has played a major role in undermining port service delivery and exacerbating disparities in accessing quality maritime services. Although oversight mechanisms exist through various maritime regulatory bodies, recent investigations by the Nigerian Maritime Administration and Safety Agency (NIMASA) revealed significant irregularities in port operations and financial management (Hassan & Ibrahim, 2023).

One area greatly affected by corruption is the port's operational sector. Reports have highlighted cases of embezzlement, diversion of funds, and fraudulent activities within the cargo handling and vessel management systems (Adeniran et al., 2023). According to Mohammed (2023), these corrupt practices have led to the misallocation of resources meant for increasing operational efficiency, upgrading port equipment, and providing quality maritime services. As a result, port users have faced significant challenges in accessing efficient and cost-effective port services, leading to extended cargo dwell times and increased operational costs. Studies indicate that corruption-related inefficiencies add approximately 40% to standard handling costs and extend vessel turnaround times by up to 300% compared to regional benchmarks.

The port's infrastructure development has also been severely impacted by corruption. Irregularities in procurement processes, embezzlement of maintenance funds, and widespread bribery have compromised the quality of port infrastructure (Lawrence & Peters, 2023). Lack of adequate maintenance, deteriorating handling equipment, and insufficient storage facilities have further hindered the delivery of quality port services. Okonkwo (2023) documents that only 60% of allocated infrastructure maintenance funds reach their intended purpose, with the remainder lost to various corrupt practices. This corruption in infrastructure management has perpetuated operational inefficiencies and limited the port's capacity to handle increasing cargo volumes effectively.

Corruption in project implementation has hampered the development and maintenance of critical port facilities. Bassey and Ukpong (2023) report numerous instances of inflated project costs, kickbacks, and substandard construction materials in port development projects. Consequently, infrastructure improvements such as berth rehabilitation, yard expansion, and equipment modernization have either remained incomplete or failed to meet required standards, leading to inadequate service capacity and compromising operational efficiency. Recent assessments indicate that approximately 45% of port development projects initiated between 2015 and 2024 have faced significant delays or quality issues due to corruption-related factors.

The consequences of corruption on port service delivery have been severe. According to Ibrahim (2023), corruption has hindered the availability, accessibility, and quality of port services, leading to a lack of trust in port authorities and diminishing user satisfaction. Smaller shipping lines and importers have been disproportionately affected, experiencing limited access to essential services and facing greater difficulties in conducting their operations. Studies show that small and medium-sized port users face average delays 200% longer than larger operators due to their inability to participate in corrupt practices.

Efforts to address corruption and improve service delivery have been made at the Port Harcourt complex. Maritime regulatory agencies have implemented

various oversight measures, and policies have been introduced to enhance transparency and accountability in port operations (Adebayo & Hassan, 2023). However, the persistence of corruption and the challenges it poses to service delivery require sustained efforts in strengthening governance mechanisms, promoting stakeholder engagement, and ensuring effective resource allocation. Recent initiatives include the implementation of automated systems for documentation processing, enhanced monitoring of cargo handling operations, and improved transparency in tariff application, though their effectiveness remains limited by systemic corruption.

#### Challenges of Service Delivery in Port Harcourt Port Complex

Across Nigeria's maritime sector, service delivery faces significant challenges in achieving operational efficiency, maintaining service quality, ensuring cost effectiveness, establishing procedural transparency, and meeting stakeholder satisfaction standards. The Port Harcourt port complex, in particular, experiences substantial difficulties in these five crucial measures of service delivery. The Maritime Authority of Nigeria (2022) documents how these challenges have persistently undermined the port's ability to meet international standards and user expectations, significantly impacting its competitiveness in the regional maritime sector.

The challenge of operational efficiency manifests primarily through extended vessel turnaround times and prolonged cargo dwell times. The African Port Development Journal (2021) reveals that vessel turnaround time at Port Harcourt averages 7-10 days, far exceeding the international benchmark of 2-3 days, while cargo dwell times extend to 21-25 days compared to the international standard of 7 days. Thompson (2023) attributes these inefficiencies to various factors including inadequate cargo handling equipment, poor berth management, and inefficient yard operations. These operational challenges significantly impact port productivity and increase costs for port users, creating a ripple effect throughout the maritime supply chain.

Service quality challenges persist through inconsistent cargo handling operations and unreliable

documentation processing, severely impacting user experience and operational reliability. According to Davidson (2022), the port's service reliability index stands at 65%, substantially below the international benchmark of 85%. The West African Maritime Review (2023) highlights how inadequate maintenance practices and poor facility management contribute to frequent service disruptions, with only 60% of handling equipment meeting operational standards. This inconsistency in service quality creates uncertainty for port users and undermines the port's reputation in the maritime community.

The challenge of cost effectiveness is particularly evident in the significant disparity between official tariffs and actual operational costs incurred by port users. Rahman (2021) reveals that users typically face 30-40% additional costs above official tariffs due to various inefficiencies and unofficial charges. The Maritime Trade Analysis (2023) demonstrates how these extra costs disproportionately affect smaller operators and reduce the port's regional competitiveness. This cost inefficiency creates barriers to entry for new users and limits the port's potential for growth and development.

Procedural transparency remains a persistent challenge within the port's operations, significantly impacting user confidence and operational predictability. The Port Users Association (2021) reports that only 45% of port users consider current procedures clear and predictable, while Williams (2022) identifies how complex documentation requirements and inconsistent regulation application create confusion and opportunities for manipulation. Nwafor (2023) documents the challenges users face in accessing accurate information about port processes and decision-making procedures, contributing to operational uncertainties and reduced stakeholder trust.

Stakeholder satisfaction faces significant hurdles, as evidenced by consistently low user satisfaction ratings and frequent complaints about service quality. The Maritime Services Quality Report (2023) indicates overall satisfaction levels at 55%, well below the target of 80%. Olayinka (2022) attributes this low satisfaction to multiple factors including extended processing times, inconsistent service delivery,

unpredictable costs, poor communication, and limited grievance resolution mechanisms. These satisfaction challenges reflect broader systemic issues in the port's service delivery framework and highlight the need for comprehensive reforms.

The International Port Management Institute (2022) emphasizes that these challenges are interconnected, with improvements in one area often requiring concurrent advances in others. For instance, enhanced operational efficiency typically leads to improved service quality and stakeholder satisfaction, while better procedural transparency often results in improved cost effectiveness. The Maritime Anti-Corruption Network (2023) notes that addressing these service delivery challenges requires a holistic approach that considers both technical and institutional factors, including infrastructure development, technological adoption, and staff capacity building.

Recent initiatives focusing on automation, process standardization, and performance monitoring show promise in addressing these service delivery challenges. However, Johnson (2023) argues that sustained improvement requires continued commitment to reform, substantial resource investment, and effective stakeholder engagement. The success of these initiatives will ultimately depend on the port's ability to implement comprehensive solutions that address all five measures of service delivery simultaneously while maintaining focus on long-term sustainability and user satisfaction.

### VIII. EMPIRICAL REVIEW

A significant study was conducted by Thompson et al. (2022) on the effects of corruption on service delivery in Nigerian ports. The study aimed at evaluating port authorities' capacity to provide fundamental services in areas of cargo handling, documentation processing, infrastructure maintenance, and other essential maritime operations. The research relied primarily on quantitative data obtained from port performance metrics and stakeholder surveys. Using institutional theory as a theoretical framework and employing content analysis, the study revealed that corruption significantly impedes port efficiency and maritime trade development. The finding of the study was that corruption directly affects the efficient provision of

services by port authorities, with documented increases in cargo dwell times of up to 40% and additional costs of 30-35% for port users. It recommends increased investment in port automation and staff training to reduce corruption opportunities. This study, however, cannot be applied outside Nigeria due to its situating root causes in specific Nigerian port contexts. It lacks adequacy in present context and approach to attract broader scholarly attention.

In another study, Rahman and Davidson (2023) examined bureaucratic corruption and service delivery in West African ports, focusing on the operational challenges of port administration in the 21st century. The study aims at assessing port performance in providing satisfactory services that build stakeholder trust and confidence. The Port Performance Tracking Survey (PPTS) and the Quantitative Service Delivery Assessments (QSDA) have established the role of institutional weaknesses in facilitating corruption within port operations. The paper uses a mixed-method analysis, including documentary review and stakeholder interviews. Based on the method adopted, it concludes that escalating levels of port sector corruption have severely compromised service delivery. This has resulted in widespread trust deficits and operational inefficiencies across maritime services. The study recommends comprehensive internal control mechanisms to combat corruption and accelerate effective service delivery. The study is however short of rigorous statistical analysis, somewhat limiting its academic applicability.

The Maritime Economics Group led by Williams et al. (2023) conducted a study on the impact of corruption on port service delivery in major African ports. The study examined the phenomenon of corruption on maritime service delivery using mixed methods to generate data for analysis. The study, which was anchored on collective action theory, revealed that corruption has affected port service delivery systems, leading to extended vessel turnaround times, increased operational costs, deteriorating infrastructure, and eroded stakeholder trust. It was also revealed that corruption has brought about decrepit port facilities, lack of maintenance, and other operational deficiencies that have affected socio-economic development. The consequences are seen in the

degradation of infrastructure and the erosion of public trust in maritime services. The study therefore recommended among other things that an effective anti-corruption strategy must produce effective punishments as well as greater operational openness and accountability to guarantee that port resources are utilized efficiently. To bring about long-term reform in service delivery, stakeholders should be active in the monitoring and assessment of port development programs and projects. The study methodology, while comprehensive, faced challenges in quantifying certain corruption impacts, potentially affecting the reliability of some findings.

#### IX. FINDINGS AND DISCUSSION

The study examines the effect of corruption on service delivery in the Nigerian Ports Authority (NPA) Port Harcourt complex. It recognizes that corruption has a significant impact on the effective provision of maritime services in the port. Corruption occurs when port officials abuse their positions for personal gain, leading to a divergence of interests between the principal (port authority) and the agent (port officials). The findings of the paper highlight the detrimental impact of corruption on service delivery in the Port Harcourt complex through various dimensions that fundamentally undermine port operations and efficiency.

The study explored three primary dimensions of corruption affecting port operations: administrative corruption, operational corruption, and financial corruption. These forms of corruption have been pervasive in the port complex, leading to mismanagement of resources, favoritism in service provision, embezzlement of port funds, and systematic bribery throughout port operations. Administrative corruption manifests through documentation manipulation and deliberate delays, operational corruption appears in cargo handling inefficiencies and equipment allocation manipulation, while financial corruption emerges through revenue leakages and fraudulent billing practices.

The consequences of corruption on port service delivery are evident across multiple performance indicators, particularly affecting operational efficiency and service quality. In operational efficiency, the study reveals that vessel turnaround

time at Port Harcourt averages 7.5 days, significantly exceeding the international standard of 2-3 days, while cargo dwell times extend to 21 days compared to the benchmark of 7 days. Service quality measurements indicate that only 60% of port equipment meets operational standards, with service reliability averaging 65% against the international benchmark of 85%. These inefficiencies directly translate into increased costs and reduced port competitiveness.

Cost-effectiveness analysis reveals that port users typically face 30-40% additional costs above official tariffs due to various corruption-related inefficiencies and unofficial charges. The study documents widespread cases of under-declaration of cargo values, manipulation of port charges, and complex schemes for diverting port revenues. This financial impact particularly affects smaller operators and new entrants to the port, creating significant barriers to fair competition and market access. The impact of corruption on port service delivery is profound. It perpetuates operational inefficiencies, exacerbates inequalities among port users, and hinders trade facilitation efforts. Corruption hampers access to port services, compromises service quality, undermines operational equity, reduces efficiency, and weakens transparency and accountability in port operations. The study demonstrates that small and medium-sized port users face average delays 200% longer than larger operators due to their inability to participate in corrupt practices.

The challenges of service delivery in the Port Harcourt complex are attributed to systemic corruption, limited resource utilization, political interference in port operations, inadequate infrastructure maintenance, and weak governance mechanisms. These challenges hinder the effective provision of port services and contribute to the overall underperformance of the port in the regional maritime sector. Procedural transparency remains particularly problematic, with only 45% of port users considering existing procedures clear and predictable. The study emphasizes the urgent need for comprehensive anti-corruption measures and improved governance mechanisms to enhance port service delivery. Key recommendations include the implementation of automated systems for documentation processing, enhanced monitoring of cargo handling operations,

improved transparency in tariff application, and strengthened accountability frameworks. The research suggests that effective reform requires simultaneous attention to both technical improvements and institutional strengthening.

Overall, the findings highlight the detrimental effects of corruption on port service delivery and emphasize the urgent need for comprehensive measures to combat corruption and enhance service provision. The study provides valuable insights into the dimensions of corruption and the challenges of service delivery in the port sector, contributing to the understanding of the complex relationship between corruption and maritime service delivery outcomes. The research concludes that addressing these challenges requires a holistic approach incorporating technological solutions, institutional reforms, and human capital development to achieve sustainable improvements in port efficiency and effectiveness.

#### CONCLUSION/RECOMMENDATIONS

The findings of this paper illustrated the detrimental impact of corruption on service delivery in the Nigerian Ports Authority (NPA) Port Harcourt complex. Corruption in various forms, including administrative corruption, operational corruption, and financial corruption, has compromised operational efficiency, service quality, cost-effectiveness, procedural transparency, and stakeholder satisfaction in port operations. The consequences of corruption on port service delivery have perpetuated operational inefficiencies, exacerbated inequalities among port users, and hindered maritime trade facilitation. Based on these findings, it is crucial to prioritize anti-corruption initiatives and implement measures to enhance service delivery in the Port Harcourt complex. The following recommendations are proposed:

1. The port authority should institute measures to enhance transparency and accountability in maritime service delivery. This can be achieved through implementation of automated documentation systems, digital tracking of cargo handling operations, real-time monitoring of port charges and fees, regular publication of performance metrics, establishment of anonymous reporting mechanisms for corrupt

practices, and integration of blockchain technology for transaction transparency.

2. Efforts should be made to strengthen the institutional frameworks involved in port operations. This includes restructuring port governance systems, streamlining operational procedures, enhancing professional standards for port officials, implementing merit-based recruitment systems, developing comprehensive staff training programs, establishing clear performance evaluation metrics, and creating effective oversight mechanisms.

3. The port authority should allocate resources in a manner that prioritizes service delivery and operational efficiency. This includes adequate funding for infrastructure maintenance, investment in modern cargo handling equipment, development of port management systems, enhancement of storage facilities, upgrade of port access infrastructure, implementation of efficient yard management solutions, and establishment of regular facility maintenance programs.

4. Whistleblowing mechanisms should be established to encourage reporting of corruption. This requires creation of secure reporting channels, development of protection programs for whistleblowers, implementation of reward systems for valid corruption reports, establishment of investigation protocols, collaboration with anti-corruption agencies, regular follow-up on reported cases, and public disclosure of investigation outcomes.

5. There should be a strong emphasis on capacity building and operational excellence. This involves comprehensive technical training for port personnel, adoption of modern port management practices, implementation of customer service enhancement programs, technology adoption and utilization, application of international best practices, regular performance assessments, and development of continuous improvement initiatives.

6. Stakeholder engagement processes should be strengthened through establishment of regular consultation forums, implementation of feedback mechanisms, conduct of user satisfaction surveys, development of clear communication channels, adoption of collaborative problem-solving

approaches, organization of performance review meetings, and implementation of service improvement initiatives.

7. Infrastructure and technology enhancement should focus on comprehensive port facility modernization, implementation of digital documentation systems, development of automated cargo tracking, integration of port management solutions, adoption of smart port technologies, modernization of equipment, and implementation of environmental sustainability measures.

8. Cost-effectiveness measures should include the development of standardized tariff structures, elimination of unofficial charges, implementation of transparent billing systems, adoption of competitive pricing strategies, the introduction of value-added service options, the establishment of cost monitoring mechanisms, and implementation of regular tariff reviews.

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