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Analyzing the Human Resource's Role and Effective Management of Ports for Optimal Transport Logistics Performance of Maritime Transport Firms in Nigeria

Edih, University O. 1,*, Imide, O. Israel², Igemohia, Fidelia³, Faghawari, Nyanayon D. 1

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ABSTRACT

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effective management, human resource, maritime companies, Nigeria, ports, transport logistics performance. Port as a socio-technical system (Interreg, 2018; Marios, 1998) needs the ingenuity and core competencies of the human capital to attain optimal performance. The study examined the human resource's role and effective management of ports for optimal transport logistics performance of maritime transport firms in Nigeria. It has two main objectives; to determine the critical role of employers and employees in growing the maritime industry, and to ascertain the impact of effective management of ports on transport logistics performance. The theoretical framework for the study is the human resource based theory. The study employed multiple regressions statistical tools to analyze the primary data generated through questionnaires distributed to 20 registered private maritime companies. Findings revealed that ports accommodate a web of operations that are carried out by personnel of the various maritime organizations. These companies are manned by the employers and employees who in turn utilize machinery to facilitate the volume of work done on a daily basis. Therefore, there can be no meaningful accomplishment by these entities without the collective will and utilization of the expertise and ingenuity of the human resource. Hence, it is recommended that maritime organizations should place its human resource as top most priority in the productive and profitable scale of preference. Management or managers should develop policies or programmes that will empower and motivate the human asset for effective and efficient, and sustained transport logistics performance.

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1. Introduction.

Contextually, both the employers and employees sum up the concept of "human resource" in every organization contrary to popular assertion. The age-long notion that employees (and not the employers) are the backbone of a profitable organization is not a fallacy but partially correct. It is better to state that the success or otherwise of a business or non-profit entity rests on aggregation of skills, ideas, trainings, motivation and experience(i.e., core competencies) of both the employers

and employees. We dare argue that it is the synergized ingenuities, training and experiences of both that culminate into effective organization or management. In that case the human resource can be described as the engine room and grease that enhances organizational performance (Nwiyi, n.d; Omisore and Okofu, 2014), as well as an indispensable asset in the management of institutions (Edih, 2021; Ejo-Orusa and Okwakpam, 2018; Marios, 1998). To that extent, the human resource entails "the employers and the employees" in an organization in contradistinction to the common interpretation in literature (Nwiyi, n.d). In many incorporated firms, employers and employees form the management team. The board of trustees and directors are drafted from among the shareholders and the various levels of management (top, middle and lower levels) are made up of competent employees.

The organizational structure or organogram determines the

¹Nigeria Maritime University, Okerenkoko, Delta State.

²Department of Economics, University of Delta, Agbor.

³Delta State University, Abraka.

^{*}Corresponding author: Edih, University O. E-mail Address: oweilade123uni@gmail.com.

levels or composition of the management team. Is it not out of place to think that the proprietors of a business enterprise or shareholders of a company will form it , recruit workers and abandon it to employees to plan and take every decision towards its progress without any measure of checks and control? Charlotte and Jan (1999) identified three major objectives of the employer as business continuity, securing a good working environment and keeping total control of the business. The foregoing argument is a ground to create a new horizon and paradigm shift in conceptualization or rather, defining concepts.

It has to be reiterated that organizational productivity and profitability are largely dependent on effective management of available resources (human, financial, technology and sociocultural resources). Management involves the development of a plan and the execution of it to achieve set objectives, while effective management is the appropriate utilization of resources in such a judicious manner to attain target results and avoid unnecessary wastage. Effective management is driven by the vision and mission, purpose and objectives as well as the composition of the management team. It is a pointer to effective leadership and the leadership styles, namely; democratic, autocratic or the laissez-faire. What makes up effective leadership depends on the situational or environmental factors which are necessarily outside the purview of this study. However, the majority of scholars tend to support the democratic leadership structure that avails collective inputs and shared ideas from both the management and employees.

A lot of theories in management and political sciences lay credence to the significance of human resource and its essential role in managing other critical resources in every organization or a state. The human resource based theory is very prominent in driving the import of the human asset (the employers and employees) towards achieving the vision and mission, goals of an organization or entity. Also, the matching model and Vroom's expectancy theory buttress the usefulness of personnel and the necessary or complementary factors that will affect overall organizational performance (Edih, 2021; Obi, 2015).

According to Umur et al., (2022), personnel is crucial to port management hence the recruitment process should encompass the needs/or priorities of all departments in an organization. Port operations are part and parcel of organizational management. They are conceived, built and developed by men (i.e the human element and are controlled by men). This drives the notion of port management towards rendering effective and efficient services to its customers. It is crystal clear that the human resource is at the epicenter of every economic unit in the society. The importance of port operations (inclusive of development and management) to the global economy cannot be overemphasized as a web of complex and connected operations are performed in the ports. Ports serve as a link between the hinterland and the waterways. It is also the gateway to international trade and global integration. Based on the increase in shipping operations and the effect of globalization, the demand for the use of ports in countries engaged in maritime trade and transportation has increased. This has resulted in the clamour for reforms on trade liberalization and openness to accommodate more private hands (Edih et al., 2022. Imide et al., 2022; Omoke et al., 2019; Osadume and University, 2020; Peretomode, 2014). In that respect and with regards to Nigeria, many private maritime companies were registered by the Corporate Affairs Commission, CAC, the agency legally empowered to recognise business enterprises and companies with the license to operate in such capacity. However, the problem of port congestion leading to high demurrage is aching. This may be attributed to the biased attention given to the clusters of ports in Lagos to the abandonment of other major ports in Nigeria.

Transport logistics is an embodiment of services rendered to facilitate shipping operations or rather maritime business. Transport logistics include, freight forwarding services, ship brokerage services, legal services and others. It is difficult to state a clear distinction between port operations, shipping operations and transport logistics services due to their relatedness if not one and the same service. Therefore, ensuring transport logistics performance is invariably thriving for optimal port operations or shipping operations performance.

A lot of literature have addressed the issue of human resource with focus on diverse areas; as a subprocess in an entity, in developing the transport sector, qualifications required, human resource in road transport, problems of human resource in maritime transport (Vassiliev, 2008; Tzvetkova, 2016; Paulica & Mednikarov, 2013; Tichon, 2005 all cited in Koralova, 2016). However, none considered the double aspects of the human resource (employers and employees), and effective management of ports as major determinants that may lead to high transport logistics performance in the maritime industry. More so, many maritime firms embarked on worker retrenchment during emergencies (e.g, the Covid-19 pandemic) arising from the concept of downsizing to reduce costs and save some money. This is the paradox of the human resource being the victim of circumstances meaning its importance has considerably been deemphasized by both the public and private sectors. Therefore, it is necessary to examine the effect of human resource and effective management on transport logistics performance in the maritime industry.

Based on the foregoing, two hypotheses are formulated for the study;

- There is no positive and significant relationship between the roles of employers and employees (implementation of management decisions, tasks, etc) and transport logistics performance.
- 2. There is no positive and significant relationship between effective management of ports (team spirit, sound policies and strategies, training, etc) and transport logistics performance.

2. Review of related literature.

2.1. The human resource

2.1.1. Human resource management and performance.

The most significant, progressive and innovative asset in any "socio-techno", "socioeconomic", "socio-cultural" and "sociopolitical" entity is the human resource (Obi, 2015). On the

contrary, the employees are the most retrenched or terminated during emergencies and Obi calls such a scenario as "the paradox of the human resource". Workers are the driving force or propeller that sustain the wheels of progress of corporate organizations. The human resource gives life and dynamism to other resources such as money, materials and technologies. The art of making policies, and practices to ensure full utilization of the human expertise towards achieving set goals is termed human resource management (Obi, 2015). It should be recalled that every organization or its activities are influenced by both the internal and external environments being factors that cause business dynamism and intense competition in a particular industry. The environment, especially the external environment as an uncontrollable complex structure induces creativity, innovations, and competition among firms. To enhance business sustenance and viability, managers are continuously evolving measures such as regular training for staff, other empowerment and effective management strategies to enrich the capabilities of their workforce(Cole, 2002; Obi, 2015).

In Inegbenebor and Agbadudu (1995 as cited in Obi, 2015), human resource management fixates on the philosophies, policies and procedures that guide and motivate workers in discharging their duties in the organization. There may be a special department designated as the "human resource management department", but it does not exclude managers heading other administrative units from managing and directing staff under their immediate span of control. Obi (2015) opines that all managers either directly or indirectly manage the human resource in their organizations. According to Goldthrope (1968 as cited by Obi, 2015), training workers on new ideas and services will lead to maximum productive use of their potential. The human resource manager is responsible for designing and implementing the manpower plan(i.e. recruitment and selection, training, compensation system, etc) in an organization (Martand, 2007). Drucker (1954) argued that among the productive resources available to an institution, the human capital is seen to have operated at a low efficiency. This assertion corroborates the need for worker's training and development on regular intervals. It is also an argument in support of the postulations of Theory X & Y with respect to worker's motivation and development of the active and promising, while sanctioning and supervising the indolent in an organization.

According to the classical free market economy theory propounded by Adam Smith in his book "the Wealth of Nations" (1776) 2.1.2. Management and/or Effective management of port operasserts that human beings are the central force that brings success in commerce and industry (Obi, 2015). Obi reviewed five theories that lay credence to the importance of employees to any organization. The Human capital theory sees people as valuable assets, the Agency theory cements the symbiotic relationship between the employers and employees, and the General systems theory emphasizes the networking of every section, department for organizational progress. Others are, the Competitive advantage theory which capitalizes on organizational advantage- skills, and core competencies, while the Organizational learning leans on the plank that as the labour force acquires new skills by learning or practice and develop the right attitude towards work improve organizational success. The study

of Mwaniki and Gathenya (2015), utilized the Matching model (MM) and Vroom's expectancy theory of the human resource management (HRM) to buttress the significance or the role of human capital in Kenya Power Authority (KPA). The MM advocates that the human resource system, organizational structure and strategy should be positively harnessed and congruent with their expectations. It is contended that an employee's performance may be affected by his personality, skills and knowledge, experience and entire ability. The valence in this context, is the emotional orientations exhibited by employees towards certain rewards or outcomes- training, supervision, commission, promotion, etc.

Organizations, (either profit or non-profit,) achieve growth and success through people and the effective management of human resources produces higher performance (Mwaniki and Gathenya, 2015). However, the Kenya Power Authority, KPA showed that increase in the number of employees does not necessarily translate to improved human resource performance in an organization. It presupposes that employee's or organizational performance can be adduced to complementary factors such as expertise, motivation, knowledge in ICTs, etc. The main function of the HR management is to help the organization attain its set objectives. This is done by initiating and providing guidance to employees and suggesting ideas that foster the development of policies and programmes (Armstrong, 2007). In Mitchell, et al (2013), the backbone of a business enterprise ought to be appropriately guided in line with standard and vision of the organization. The act of guiding and supervising workers connotes human resource management or the strategically integrated and coherent approach for employing and developing persons in pursuing organizational targets is called human resource management (Armstrong, 2009). Organizational management can be described to mean the journey towards realizing the set objectives and enhance overall performance. Performance in this context represents what has been done and how it has been done or expected/future performance. It is argued that organizational or effective worker's performance rests on the role of human resource management (Mitchell, 2013). Therefore, it is crystal clear that the essence of effective management of all resources which is the focus of the resource-based theory (RBT) is to boost the performance of the organization.

ations.

Ports are maritime structures which facilitate maritime business across the globe. They are likened to bridges that connect the waterways to the hinterlands and are strategically built to carry out certain crucial maritime functions. Ports are divided and subdivided into units called terminals to ease daily operations. Every terminal is specifically designed to execute a singular function. They enhance the loading and unloading of cargoes with the aid of machinery, cranes and others, and serve as warehouses for cargoes. Ships are positioned to dock at the ports and there are different kinds of ports, namely; sea ports and dry ports. The Nigerian government plans to build six dry ports to complement the eight sea-ports and terminals that are performing at low ebb (apart from the Lagos cluster of ports). Hence, the need to institutionalize effective management culture in the ports.

The term "management" may look simple because every human being is doing one thing or the other to sustain its existence without knowing that he is a manager. However, management in this study is larger than the above definition. It involves the process of bringing together or assembling selected people from diverse backgrounds with the requisite credentials and matching them to the organizational vision and mission to achieve a set of objectives. It is the planned process of getting the right people and getting the people right (Marios, 1998). That is to say, management has two broad categorizations, namely; formal and informal management. The formal management is a complex task which requires some level of expertise and knowledge and experience. In other words, formal management is the art and science of planning and organizing, staffing and directing, placing and training of employees to attain certain predetermined objectives of an organization. This is usually done by a group of knowledgeable people regarded as the management team or board of directors. Every company or enterprise has its preferred appellation given to the management team and such is never an issue in the contemporary business world.

On the other hand, effective management is the act of ensuring that available resources are used to achieve required results. Management is seen to be effective based on the execution of plans, projects and programmes according to specifications and timing. Also, effective management connotes the judicious usage of resources to meet targets. It entails getting the right persons and assigning the same to the right jobs. Therefore, effective management can lead to efficient utilization of resources. Efficiency in the use of resources is achieving optimal performance with no or minimum wastage. In doing so or attaining such feat, the management team must have designed a clear cut vision and purpose for the company, recruit, train and motivate workers equipped with current technologies.

Effectiveness and efficiency in resource use are precursors to productivity and sustainability of an organization (Heinz et al., 2011). Effective management guarantees high performance and profitability and the various components of effective management include worker's motivation, competitive remuneration, training and development (Obi, 2015). Other ingredients or pillars of effective management are job design, and job analysis, recruitment and selection, staffing requirements, worker's placement, and job orientation, staff training and development as well as performance appraisal. The importance of effective human resource planning can not be over emphasized because it produces the following advantages;

- It guarantees stability and healthy growth of the organization.
- Manpower planning provides an adequate replacement model in time of retirement or retrenchment.
- 3. It provides an alternative for downsizing policy based on its negative impact on worker's morale.

- 4. A flexible human resource plan gives room for adjustments during business expansion/ growth.
- 5. It minimizes total personnel costs by preventing unnecessary surpluses or shortages in the number of employees.

Heinz et al., (2011) define productivity to mean effectiveness and efficiency in individual and organizational performance. Accordingly, effectiveness is the achievement of objectives while efficiency implies achieving an end with the least amount of resources. Effectiveness of staff depends on line-staff relationship or understanding authority relationship, education of line to listen to staff, informed staff, employee completing its assigned task, and staff taking work as a way of organizational life. It is good to note that there is no one best way or strategy to ensure effective performance. It requires a network of concerted efforts and integrated decisions and communication strategies. Also, it involves understanding the organizational structure and the basic principles of effective management. In Jaja and Arugu (2015), the human resource culture is the foundation for adding value to the organization in terms of processing ideas, collective participation of employers and employees, structure and channel of communication, etc.

2.1.3. Transport Logistics and Port management in the maritime industry.

Port management is responsible for the performance and conduct of its employees. To facilitate efficient organization and a healthy working environment management creates time for evaluating employee's performance, grievance and complaint procedure and other related policies. One of the complex problems of ports is about human resource management and development (HRM/D). Human resource handles the equipment used in the ports and plays other productive roles (Buchari and Basri, 2015). Organization and/or management of human resources are integral to the maritime transportation process because manpower is required to carry out the main and secondary services in the ports. Personnel engage in transshipment activities(Koralova, 2016). The study of Bulgarian sea ports revealed that human resource management led to optimisation of financial results and contributed to safe and secure navigation and increased productiveness of ports (Koralova, 2016).

The focus on the use of technology in port operations has increased in recent years. However, it has reduced concern on human efforts, knowledge and skills (Interreg, 2018). Ports are demonstrating the characteristics associated with a "sociotechnical system" which demands the co-existence between human efforts and the application of technology in carrying out the numerous operations carried on the maritime industry. This "socio-techno" relationship can only be consolidated by training maritime workers. Human resource development stimulates capacity building resulting in getting the right people to work in the ports (Interreg, 2018). The Danube Transnational Programmes gave an overview on the current examples of best practices on initial and continuing education of workers in the ports. The report covers nations such as Austria, Hungary, Romania, Bulgaria, and Croatia (the Danube riparian countries). Accordingly, "the Dustburg is the largest inland port in the world and the leading logistics hub in Central Europe (Duisport).... More than 20,000 ships and 25,000 trains are handled each year. In total, around 1150 people are employed at the Duisport and generate a turnover of around 230 Mio Euro. Training of workers entails understanding the use of digital media and tools (e.g., Doodle, E-learning, Air Cargo, Security training via E-learning), promoting young talents, job and competence matching, use of new HR software to get personal data of employees, etc" amongst others (Interreg, 2018). Also, Marios (1998) has described port as a socio-technical system which demands partnership between human beings and technologies. However, Marios posits that no singular resource (human, technology or management skills) is superior but a rational balance is the recipe.

2.2. Empirical studies.

Umur et al., (2022) concluded that the quality of personnel is vital to promote the value chain in port operations. Based on the global pressures and the need for dynamic capabilities, selection of qualified personnel is very critical for improved port's performance. The study's model reflects port manager's priorities and port customer's evaluation. Thus, the integration of the various departments in the recruitment process was stressed. Kronom et al., (2022) examined the effect of manpower forecasting and employee's audit on managerial competence and found that there is a positive relationship existing between manpower forecasting and employee's audit with the attainment of organizational objectives. The study concludes that qualified and motivated staff do the right thing at the right time which in turn improves organizational effectiveness. It is suggested that there is a need to conduct manpower audit and planning at specified/or regular intervals. Nwachukwu et al.,(2021) discovered that human resource performance influences organizational performance. Also, findings reveal that effective HR planning such as anticipating manpower factors of job satisfaction, understanding people's needs, utilization, motivation, compensation and training and development can boost worker's creative minds, innovation, and overall organizational perfor-

Isokariari and Tamunomiebi (2021) found a positive relationship between human resource information systems and employee's commitment to work. Optimal use of employee's competencies will lead to the attainment of peak performance by an organization (John and Elyse, 2010), and application of information technology has revolutionized the modern work environment in areas employee's effectiveness and efficiency (Mujtaba et al., 2011). Human resources planning affects organizational performance in oil and gas firms in Port Harcourt (Anya et al., 2017) and however, the lack of institutionalization of human resource management practices have been identified as the root cause of employee turnover (Omoankhanlen and Ikeoba, 2017).

Yi-Chih (n.d) defines port as the strategic point where goods are transferred from one mode of transport to another (i.e, seaborne to land transport, vice-versa). Ports are facing several challenges in the era of economic globalization due to unpredictable environmental changes and trends in the shipping, ports, and

logistics industries. Among the many port's functions are; as landlord to private entities, as regulator of economic activities and operations, plans for capital investments and operations, as operator of nautical services and facilities, markets and promotes port services and fosters economic development, handles cargoes and storage, and provides ancillary activities. The author identified conditions for a successful hub port such as; location and proximity to major world routes, quick turnaround time, quality services, reasonable costs, accommodate super and larger ships (deep water, and advanced equipment), intermodal infrastructures (access to rail, air, and road distribution networks), and local market providing freight volume.

In Lucasz (2018), it is emphasized that HRM (human resource management) adds value to public employment services (PES) stakeholders (i.e, customers, social partners, employees, etc.). This value chain can be achieved by improving staff competencies, motivating employee's morale, and engagement, restructuring organizational culture and ensuring effective leadership (which implies effective management). Human resource functions are diverse ranging from strategic business partner functions to operational supportive roles. Also, human resource management policies (HRMP) range from reactive to current challenges. However, HRM is facing challenges such as change management, leadership development, digitalisation, salary and workplace benefits programmes, recruitment and retention methods, and work-life balance. Therefore, public employment services have to develop necessary HRM strategies, practices and tools that can help to attract, retain and develop talents, and provide quality services. Ejo-Orusa and Okwakpam (2018) emphasized the need for management practitioners to apply proactive analytics in order to improve the human resource practice outcomes. The study revealed a positive and significant relationship between predictive analytics and human resource practices of recruitment and selection, performance management, and succession planning. Predictive HR analytics arises from the use and ability of data to predict what will happen in the future. It is a managerial tool for understanding the future based on the results emanating from rigorous analysis of data. Predictive analytics go beyond descriptive HR analytics by choosing proactive strategic measures or data driven insights to foster the decision making process in an organization (Ejo-Orusa and Okwakpam, 2018; Mishra et al., 2016).

Somuyiwa and Ogundele (2015) examined the correlate of port productivity components and found that, the components of port's productivity were few in pre-reforms era due to unserviceable and obsolete equipments, inadequate storage capacity and the inability of Tin Can Island Port to absorb the volume of cargo. However, during the post reforms period, improved service delivery was observed because of the procurement of new cargo handling equipment, and expanded storage capacity. It was suggested that the government and stakeholders should procure modern cargo handling facilities to improve the port's operational performance. In Somuyiwa and Ogundele (2015), productivity (or performance) is defined as the quantitative relationship between output and input. It is the measure of output to some index of input. Hence, the output of a port (essentially as a service facility) is measured in terms of throughput,

meaning the amount of traffic that passes through the port in a given time. Productivity is determined by factors of production; land, labour (human resource), and capital (technologies and money). In such a context, port operational performance or productivity is dependent on production labour, infrastructures and cargo handling equipment, etc. The analysis of port productivity or port performance is part of measures for effective port management.

According to Port Corpus Christi (n.d), the HR manager has the following functions in his schedule; designing and modifying and executing human resource initiatives, collect and analyze HR data, oversees human resource payroll and talent management system, directs recruitment and hiring functions, adheres to port policy, supervises staff, and ensures job description, among others. UN ESCAP (2020) canvasses that, sustainable port development is an important issue to port management agencies, port authorities and terminal operators. Ports play key roles in international and domestic freight transport and national economic and social development. It is significant to harmonize the roles and functions of ports with the Sustainable Development Goals (SDGs). However, the shortage of port capacity and its hindrance to international trade is pushing the government to seek ways to unlock the capacity constraint inhibiting maritime activities. Also, the private sector is investing in the development of ports as demonstrated by trans-shipment ports around the world.

UNCTAD (2020) posits that more than 80% of world merchandise is seaborne and sea transport carries large volumes of goods and raw materials between countries. Maritime transport requires an efficient port system to handle the inflow of goods (imports) and outflows of raw materials (exports) with respect to developing economies. As advocated in Thi et al., (2019), the Prime Minister of Vietnam directed a reduction in logistics costs and a connection of transportation infrastructure in the ports. The human management planned and implemented solutions to the directive by developing inland ports, restructured the transport market share modes and facilitated the distribution of cargo. Cimen and Cerit (2014) assert that changes in port management of human resources training and development are akin to the usage of new equipment and technologies. And implementation of news and techniques are carried out by qualified and trained employees. The study utilized 13 variables to measure port effectiveness (performance), such as productivity, efficiency, service quality, profitability, growth and adaptability. Others are, information and communication management, innovation, organization's worth, employee's satisfaction and customer's satisfaction as well as acquisition and integration.

According to Brick Stone Africa Research (2019 as cited in Ikenna and Paul, 2021), maritime industry is described to include the following activities "all enterprises engaged in the business of designing, constructing, manufacturing, acquiring, operating, supplying, repairing, and/or maintaining vessels, or component parts thereof: of managing and/or operating shipping lines, stevedoring and customs brokerage services, shipyards, drydock, Marine repairs shops, shipping and freight forwarding services and similar enterprises". It stands that all activities carried on and connected to the maritime environment

are referred to as components of the maritime sector. These include off-shore economic activities such as fishing salvage, towage, underwater resources and on-shore economic activities such as ship construction, repairs and maintenance activities (Ikenna and Paul, 2021).

Nwiyi (n.d) revealed the connection between human resource (HR) and human resource management (HRM) as combined measures for growing and developing an organization. Accordingly, human resources are the most essential resources in an organization and more important than all other resources put together. Peretomode and Peretomode (2007) described human resources management (HRM) as a field of study and practice, which involves the process of making plans and funding them. HRM includes building, coordinating, utilization of the workers and organizing the formal system to achieve set objectives. Human resource management is critical to the success of supply chain management (SCM) (Gowen III and Tallon as cited in Jabbour and Jabbour, 2015), and the concepts and practices in HRM are supporting pillars to the supply chain practices (Ellinger and Ellinger, 2014).

In AFFA Bangkok (2014), the Council of Logistics Management produce a comprehensive definition of logistics to mean " the integrated planning, control, realization, and monitoring of all internal and network-wide material, part, and product flow, including the necessary information flow, industrial and trading companies along the complete value added chain (and product life cycle) for the purpose of conforming to customers requirements". Simply put, logistics entails the network of processes of planning, implementing, and controlling the effective and efficient flow of goods and services from the point of origin to the point of consumption. There are two major types of logistics, namely, inbound and outbound logistics. The management of materials, parts, and finished inventory from suppliers to manufacturing or assembling plants, warehouses, or retail stores is known as inbound logistics, while the process of storage and movement of final products from the end of production line to the end users is called outbound logistics

The study of Young-Sik and Garry (2008) observed that Korea has transformed from being a material-capital-reliance economy to a human-capital reliance economy because knowledge and information technology are strong components for national and regional development. The ports and logistics industry is the most competitive and value added industry in recent years due to innovations in knowledge and ICTs. This has caused the industry to experience fierce competition and to adapt to the wind of change(i.e, managing the change and overcoming the challenges associated with it), organizations are focusing on improving the core competencies of their workforce.

2.3. Human resource based theory.

The striking emphasis of the human resource based theory (HRBT) is to promote, improve and sustain the invaluable importance of the human capital (the people's element) in actualizing both the long-run and short-run goals of the organization, whether business entities or non-business entities. The theory highlights the complementary roles of motivation, organizational policies and culture in fulfilling the dreams of the

employees and realizing the set objectives of the organization. The notion is that humans (i.e, personnel) are resources of the firm and components of the production factors used to achieve results. However, Marios (1998) contends that the human resource or personnel should not be considered as a mere factor of production but given its relevance. The human resource is utilized by firms to create a competitive advantage as an edge over competitors in the industry(Fossas, 1999). The effective management of the human resource in the use and/ or application of other resources (technologies, materials, capital, etc.) determine the level of organizational performance.

The HRBT is seen as an off-shoot of the Resource Based Theory (RBT) which blends concepts and principles from organizational economics and strategic management. RBT focuses on the management of internal resources as a measure of creating competitive advantage. Every organization is a collection of productive resources - physical, social, technological, etc) and the human resource is considered as the most valuable resource. To achieve high performance and sustained competitiveness in the volatile business environment, the need to prioritize these resources is postulated by the human resource based theory and complemented by theories on worker's motivation, etc.

3. Methods and materials.

The study generated primary data by distributing a set of questionnaires to the 20 selected maritime companies in Nigeria. A total number of 400 respondents represented the sample for study based on convenience sampling technique. The questionnaires were distributed in equal proportion to the 20 companies and 345 staff responded to them. The retrieved primary data were subjected to correlations and multiple regressions analyses at five percent level of significance.

3.1. Model specification.

In line with the general formula of multiple regressions analyses(Vincent et al., 2010), we deduced a functional equation to state the relationship between the dependent and independent variables for the study.

$$TLP = f(HRRs, EMPs)$$
 (1)

By introducing proxies, equation 1 is transformed into equation 2

where;

HRRs is human resource roles proxy by (imd),

EMP is effective management of ports proxy by (ts) and (sps),

$$TLP = f(imd, ts, sps)$$
 (2)

By the process of econometric linearization, equation 2 is converted to equation 3

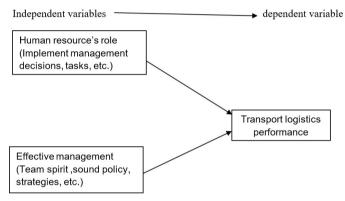
$$TLP_t = a_{0t} + b_1(imd)_t + b_2(ts)_t + b_3(sps)_t + e_t$$
 (3)

where:

TLP is transport logistics performance imd is implement management daily decisions ts is team spirit of management and employees sps is sound policies and strategies e_t is the error term in model formulation t is trend within the period a0 is a constant b_1 - b_3 are the coefficients a_0 , b_1 , b_2 , $b_3 > 0$, as a priori expectation

3.2. Theoretical framework.

Figure 1: Theoretical framework.



Source: Authors.

4. Results and Discussion.

The results from the analysis of field work or the primary data are shown using two tables as follows;

Table 1: Correlation analysis of variables.

VARIABLES	IMD	TS	SPS	TLP
Imd	1.000			
Ts	0.512	1.000		
Sps	0.525	0.588	1.000	
Tlp	0.469	0.504	0.440	1.000

Source: SPSS computation by Authors.

Table 1 above demonstrates the positive and significant correlation between the four variables used in the study.

Table 2: Multiple Regression Analysis.

Source	SS	df	Ms		No of obs	345
Model 1	106.734	3	35.707		F(3,341	=108.83
Residual	80.421	341	.3269		Prob > f	=0.000
	187.156	344	.7516		r. squared	=0.570
Total					Adj R-squared =0.565	
					Root NSE	=0.571
TLP	Coef	Std Err	T	P>It	95% Conf.	interval
IMD	0.2841	0.0480	5.92	0.000	.1895	.3787
TS	0.2638	0.0464	5.69	0.000	.1724	.3552
SPS	0.3080	0.0504	6.11	0.000	.2087	.4074
CONST.	0.8106	0.1883	4.30	0.000	.4395	1.1863

Source: SPSS computation by Authors, maximize into 4 d.p.

4.1. Discussion and Findings.

The study tested the two null hypotheses using the multiple regressions statistical analysis at 0.05 level of significance and the following were the findings;

- 1. Table 2 represents the contributions and/or effect of the human resource's role and effective management of port's on transport logistics performance. The variables were tested at 5% significance level.
- 2. The variables tested are; implementation of management decisions by the human capital (i.e, imd); team spirit of both the employers, and employees(ts), and sound policies and strategies formulated by the Management team (sps) and transport logistics performance (TLP).
- 3. Statistically, findings revealed that there is a positive and significant relationship between implementation of management decisions by the employer and employees and transport logistics performance of maritime firms in the industry since (Coef = 0.284, prob. = 0.000<0.05). The following literature support the above findings (Edih, 2021; Ejo-Orusa and Okwakpam, 2018; Marios, 1998; Nwiyi, n.d; Nwaniki and Gathenya, 2015; Obi, 2015; Umur et al., 2022). In that case the number one null hypothesis is rejected.
- 4. The second variable of team spirit (ts) between employers and employees showed a positive and significant effect on transport logistics performance in the maritime industry. The corroborating statistical figures are (Coef =0.263, prob =0.000 < 0.05). That means the number two null hypothesis is rejected. This finding is substantiated by the following studies, Armstrong, (2009); Buchari and Basri, (2015); Interreg, (2018); Jaja and Arugu, (2015); and Nwaniki and Gathenya, (2015).
- 5. Also, sound policies and strategies have a positive and significant effect on transport logistics performance because the statistical analysis showed that (Coef = 0.308, prob =0.000 < 0.05). The number two null hypothesis is rejected. The finding is corroborated by the studies of Anya et al., (2017); Armstrong (2007); Lucasz (2017); Mitchell et al., (2013); Mishra, (2016); Somuyiwa and Ogundele, (2015), and Thi et al., (2019).
- 6. Based on the analysis, the p-values are less than 0.05 at the 5% level of significance for testing transport logistics performance. This means that the two null hypotheses have been rejected and the two affirmative hypotheses are accepted.
- 7. Furthermore, the adjusted R square of the models is 0.565, meaning that a 56.5% change or increase in transport logistics performance is due to the human resource's role and effective management of the ports.

Conclusions and Recommendations.

The study affirms that port is a "socio-techno" entity (Marios, 1998; Obi, 2015) which demonstrates the combination of human interaction with technology to achieve target objectives

or optimal performance. As a social entity, port operations cannot be carried out without the human resource, however complemented by modern technology. Findings suggest the need for training of maritime workers for improved service delivery at regular intervals, and that effective management is a prerequisite for improved port management, and efficient logistics performance. Effective and efficient management of all resources (i.e, human resource and technological and materials, etc) will lead to high transport logistics performance in the maritime industry.

Similarly, ineffective management of ports is a harbinger of poor transport logistics performance in the industry. It has to be reiterated that there is no one best way of describing the ingredients for effective management of an organization, however, effective management commences from the framing of the vision and mission by the employers or owners of the business, the organizational structure, the management team, recruitment and selection formula and matching of employees with tasks. Also, it involves worker's motivation processes coming from their remuneration, incentives, training and participation in decision making. Since the role of the human resource in formal management is indispensable and invaluable to business growth, development and performance, it behooves the management team to develop sound policies, and strategies, procedures, and practices to improve employee's performance in the maritime industry.

On that note the following recommendations are put forward:

- I. Management/managers of organizations should give top most priority to the human resource by formulating policies and programmes that picture their needs. Worker's oriented policies and strategies are geared towards arousing their morale and solidifying commitment to work.
- II. The human capital should be systematically and regularly trained in the use of new ideas and techniques to enhance its performance. Training programmes would avail the human resource an up-to-date knowledge, skills and experience in the use of evolving technologies.
- III. Management/Managers should seek and incorporate the ideas or suggestions of the employees in making decisions. This will boost their morale, participation and effectiveness. It is a strategy for entrenching participatory leadership, effective management and ensuring a sense of belonging.

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