



**EFFECT OF STRATEGIC MANAGEMENT DRIVERS ON OPERATIONAL PERFORMANCE OF CONTAINER
TERMINAL: A CASE STUDY OF KENYA PORTS AUTHORITY**

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ABSTRACT

The purpose of the study was to evaluate the effects of strategic management drivers on the operational performance of container terminal at Kenya Ports Authority. The research identified the role of container terminal from a strategic management perspective and drivers of container terminal operational performance in relation to efficient and effective strategic management. The researcher used descriptive research design on a target population of 195 employees and a sample size of 129 members of staff from KPA Container terminal. Stratified sampling technique was used to select the respondents. The researcher used questionnaires which were distributed to employees to collect primary data. Secondary data was also used by the researcher from website, internet and the company's records. Collected data was analyzed through descriptive statistics. The results revealed that collaborative competition and strategic leadership had significant and positive effect on operational performance while strategic ICT and strategic leadership had insignificant effect on operational performance of container terminal of Kenya Ports Authority. Babu (2012) said that corporate governance is the set of practices that best provides for the effective, open, and visible management of an organization. The study recommended that: the existing strategic ICT and strategic training should be modified so as to improve operational performance of container terminal of Kenya Ports Authority; managers of container terminal should focus more on collaborative competition and strategic leadership so as to improve operational performance; and in modifying strategic training, education programs on training for employees and managers should be given key priority in container terminal.

Key terms: Information Communication Technology (ICT), Twenty-foot Equivalent Unit (TEU), Collaborative Competition, Strategic Training, Strategic Leadership

INTRODUCTION

Often Port, Seaport, and Terminal are terms used interchangeably. A Sea Port is an interface between a sea and land where goods are loaded onto a ship or from where goods are offloaded from a ship. A Terminal is a specialized part of the Sea-Port that increased globalization and technological improvements have tremendously given rise to in handling a particular commodity movement. Container Terminals are the physical connection between the ocean and the several modes of land transportation specialized in handling container cargo. They are the biggest component in the containerization systems as logistics network.

A Container Terminal is therefore a zone of the Port where vessels dock on a berth and containers are loaded, unloaded and stored in a buffer area called yard. In import-export Terminals the flow of containers continues inland and containers are picked-up and delivered in and out by trucks through an area called gate, whereas in Transshipment Terminals, containers are exchanged between ships commonly referred to as mother vessels and feeders, according to a hub-and spoke system.

The economic growth has resulted in the growing demand of container cargo which is a standardized package for faster handling of cargo and reduces risk of damage to the subject cargo. However, the growth of containerization has created many challenges like higher requirements on Terminals, Cities and Communities. Solutions to increase capacity either through physical expansion or better utilization of resources are often employed to alleviate congestion and bottleneck problems that constrain the Terminal's performance. But many Seaports do not have more land for expansion to employ this strategy. This call for other options in addressing the problems that affects Container Terminal efficiency to enhance capacity in Container Terminals (Frankel, 1987).

A strategic management is the system of organizations, people, activities, information, and resources involved in moving products or services from supplier to customer. So strategic management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities (Christopher, 1998). Using implicit and explicit definitions from a set of scholars, Nag et al. (2007) identify seven components of strategic management: performance, firms, strategic initiatives, environment, internal organization, manager/owners and resources. The same components feature among the more relevant items underlying the concept of strategy in the research by Ronda-Pupo and Guerras-Martin (2012).

As trade grows into a global business, ocean transport has grown in importance. Container shipping has become an important factor in trade expansion and also in supply chain (Moccia, 2004). Ocean carriers have been moving actively in many lanes, especially the major ones. Ships have begun to get bigger to meet business growth. Container ships have been developed from early container ships of 1,000 containers or so in size. These container ships are now called trumps and used as feeders because they are currently considered small.

Starting with Hapag-Lloyd's "Frankfurt Express" vessel of 3,000 containers, ships have grown dramatically, as measured in twenty foot equivalents (TEUs). New (Mega-ships) vessels now coming in are 18,000 (TEUs) containers large such as Emma Maersk (American Shipper Daily Newsletter, 2010). The largest ships are generally targeted for use in the Asia-Europe trade. Maritime container shifts and growth are driven by business changes, primarily with manufacturers and retailers. There are some export of containerized sale of components, and sub-assemblies primarily between Europe and the United States and other continents of the world.

Information and Communication Technologies (ICT) play a key role in this process, assuring the linkages between chain participants as well as a more effective control of time, cost, and quality of the service rendered (Sheffi, 2001). Nevertheless, introduction of ICT is not equally distributed in the industry. In the case of maritime transport, shipping lines and terminals seem to be comparatively slow in implementing ICT in comparison with parcel delivery companies or large freight forwarders (Chen, 2003). The container terminals have to be capable of attaining objectives of the maritime supply chain in addition to the objectives of traditional efficiency and this would be critical to competitiveness of container terminals in supply chain world (Roe & Dinwoodie, 2008).

Ports have been essential structures for nations since ancient times. The fact that 80% of the world trade and approximately 90% of the import and export are being transported by sea reveals the importance of ports from an economic aspect as cited by (Turkish chamber of shipping, 2013 and Kucukosmanoglu et.al, 2013).

Kenya is well positioned as a gateway of international trade to the East African region. The port of Mombasa is important to the efficiency of logistics operations of its hinterland. The Kenya Ports Authority (KPA) also known as Mombasa Port is a state corporation established by an act of parliament (Cap. 391) of the laws of Kenya on 20th January, 1978 with responsibility to “maintain, operate, improve and regulate all scheduled seaports” on the Indian ocean coastline of Kenya, including principally Kilindini Harbour at Mombasa, Lamu, Malindi, Kilifi, Kiunga, Shimoni, Funzi, and Vanga.

The Port of Mombasa established a Container Terminal to cope with changing demands of container ships which became operational in 1979. This purpose-built facility has five specialized container ship berths and twelve 40-

ton gantry cranes. In 2005, the Port of Mombasa handled a throughput of 436,000 TEUs which has increased to 1,091,371 TEUs at the end of 2016. (Kenya Ports Authority Annual Review and Bulletin of Statistics, 2017).

The KPA is making improvements designed to reduce container dwell time through improved performance and increased terminal capacity. One such improvement is the installation of new Information Communication Technology (ICT) system for documentation aimed at shortening turn-around times for ships, trucks, and trains. A new facility in the terminal has an office that accommodates staff from container operations, customs, Kenya Bureau of standards, and KPA security. The Port of Mombasa has the busiest container terminal in East Africa with a total throughput of over one million TEUs annually for the last three years.

Objectives of the study

- To find out the effect of collaborative competition on operational performance of container terminal at Kenya Ports Authority.
- To establish the effect of strategic Information Communication Technology (ICT) on operational performance of container terminal at Kenya Ports Authority
- To determine the effect of strategic training on operational performance of container terminal at Kenya Ports Authority.
- To evaluate the effect of strategic leadership on operational performance of container terminal at Kenya Ports Authority.

LITERATURE REVIEW

Theoretical Framework

Stakeholder Theory

This study was guided by “The Stakeholder theory:” as initially put across by Freeman, and later expounded on by Friedman and Miles, (2002) from normative, descriptive, and instrumental perspectives (Donaldson and Preston, 1995). The Stakeholders are further

defined as any group within or outside an organization that has a stake in the organization, its performance (Daft et al., 2007) or its effects on strategic decision making within an organization (Boselie, 2010). According to Freeman et al., (2010) stakeholder theory was designed to solve three problems which had arisen throughout the last decades, and aims at improving our understanding of value creation and how it is traded, connecting ethics and capitalism, and help managers deal with these matters (Freeman et al., 1997, Parmaret al., 2010). Further, the theory is bound to a state where all stakeholders are treated equally (Parmaret al., 2010).

Stakeholder theory begins with the assumption that values are necessarily and explicitly a part of doing business. It asks managers to articulate the shared sense of the value created, and what brings its core stakeholders together. It also pushes managers to be clear about how to deliver on their purpose. This study offers a response to Sundaram and Inkpen's. The firm and stakeholders (customers, suppliers, employees, and shareholders) are named as units in stakeholder theory. Stakeholder theory proposes bilateral relationships between the firm and its stakeholders, based on interdependent exchange of inputs from stakeholders, such as their interests, expectations/obligations, financial aid, labor, etc., and outputs of the firm, such as profits, products, social engagement, and more benefits (Donaldson and Preston, 1995). This theory has been applicable in the firms with interdependent relationship between stakeholders of maritime supply chain of container ships because the efficiency of other stakeholders such as Container terminals, customs, shipping agents, clearing and forwarding agents and employees of these firms determine the performance, thus necessitating them to work in collaboration to maintain competitiveness in performance through information visibility throughout the chain. The

diverse interests of stakeholders; quasi government, the customer, courts 'voice, consumer advocates force management to continually be responsive to changing market place needs.

Resource Dependence Theory

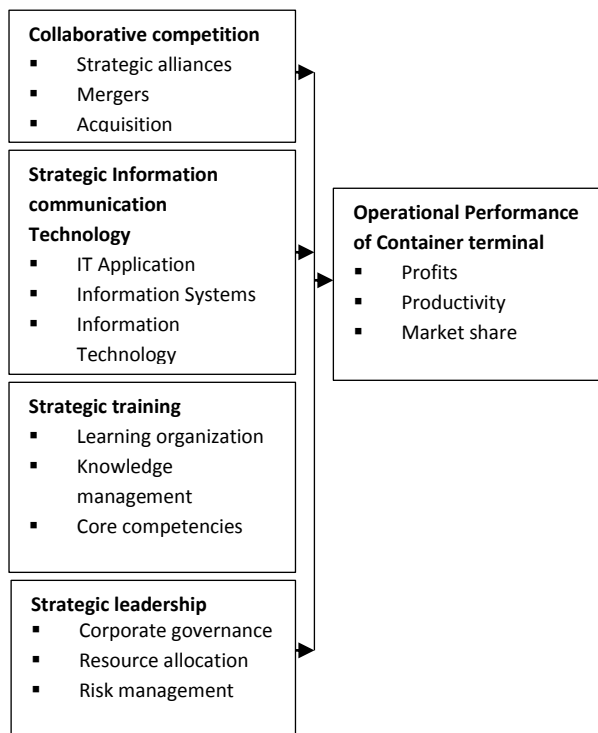
Resource dependence theory has effectively been used in the strategic operations literature to describe relationships between buyers and suppliers. According to Barney (2002) the resource based view examines the link between a firm's internal characteristics and performance.

Resource dependency theory further examines the relationship between organizations and resources they need to operate. Resources can take many dimensions. This includes raw materials, workers, and even funding. If one side maintains the majority of a resource, then another company will become dependent on them in order to operate. Too much dependency creates uncertainty, which leaves organizations subject to risk of external control. External control may be imposed by government or other organizations, and can have a significant effect on operations, such as funding or personnel policies.

The importance of this theory was documented during the 1970s, when authors Jeffrey Pfeffer and Gerald Salancik published the external control of organizations: A Resource Dependency Perspective. Their study discussed where power and dependence originate, and how organizations may use their power and manage those that are dependent upon them. Managers are constantly seeking advantage to improve partnerships with organizations in order to strengthen their own and strategize business plans in order to lower this risk through cooperation, acquisition and mergers across the industries. Mahoney and Pandian, (1992) claim that a firm does not have a good performance because of better resources, but rather due to the firm's competence to make

better use of them, which represents a deeper focus on the basics of the resource based view as proposed in (Penrose ,1990). To put it in another way, a firm that knows how best to make use of its resources will utilize them in a way to maximize productivity. This argumentation is supported by Peteraf, (1993) who states that as resources can be an important ground of a competitive advantage, they should be leveraged further between the resource based view and supply management as argued by (Barney,2012). Consequently, these perspectives have provided only a partial account of firm performance in view of the accumulated evidence of the proliferation and significance of inter-firm alliances in recent years.

Conceptual framework



Independent variables Dependent variable

Figure 1: Conceptual Framework

Collaborative Competition and Operational Performance

A port logistics chain embraces all the global logistics chains that operate through a seaport, including different stakeholders involved in the international trade processes, such importers and exporters, Port Authority, terminal operators, customs, customs agents, transport companies, freight forwarders, and empty container depots among others. The Port logistics requires a platform for the analysis and continuous improvement of the inter-enterprise processes through a structure that considers infrastructure, logistics and port-city relationship and environmental issues as strategic pillars.

This framework is also to be grounded on a paradigm of strategic management theory that emphasizes the development of collaborative advantage (Dyer, 2000), as opposed to competitive advantage (Porter, 1985). Within the collaborative paradigm, the business world is composed of a network of interdependent relationships developed and fostered through strategic collaboration with the goal of deriving mutual benefits.

Simatupang and Sridharan (2002) defines supply chain collaboration as being “two or more chain members working together to create a competitive advantage through sharing information, making joint decisions, and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone.” According to the maritime supply chain of container terminals, ports have been considered as part of the chains of companies involved, through upstream and downstream linkages, in the processes and activities that create value to the maritime business of container terminal operational performance.

Long term relationships work out to be a win-win situation for both Container terminals and shipping lines; container terminal get more business, shipping lines get more discounts and priority berthing, storage and delivery rights. The K.P.A Container terminal can improve

container distribution by better coordination like streamlining container flow and reducing empty hauls which can be achieved by communicating more often and sharing integrated information systems with shipping lines, clients and employees. It is without a doubt that the successful improvement of container terminal's performance has to focus on the clients' needs and wants (Chandra and Kumar, 2000).

Collaborative relationships require trust and commitment for long-term cooperation along with a willingness to share risks (Sahay & Maini, 2002). Morgan and Hunt, (1994) called trust a major determinant of collaborative commitment. K.P.A container terminal should be able to forecast equipment, infrastructure and capacity requirement to load/unload containers and control operation process to make sure that the planned activities are efficiently and effectively done on schedule as this will improve the operational performance of a container terminal. The Port Authority has a strategic role, interacting with the stakeholders involved in international trade logistics, such as exporters, importers, logistics operators, customs, agents, inland carrier and shipping lines in order to identify the main factors that impact the logistics performance of the port system and Container terminals.

Order management system aims to organize and coordinate the execution and control of physical and information flows at the port system and constitutes a tool that manages the exchange of information among stakeholders so as to enable anticipated requests or procedures to expedite the physical flow of cargo at the port. This facilitates the monitoring of activities of the diverse firms at the pre-terminal and terminals; I propose the implementation of a single and standard document referred to as the Single Electronic Coordination Document (SECD), that includes customs and port information that is needed for the free flow of the truck and cargo once it arrives to the port. It

facilitates integration of data among the various stakeholders and seeks to minimize the use of paper documents and double typing of data. It also allows visualizing the physical and documentation status of the external and internal cargo movement along the supply chain.

The Mombasa port container terminal has introduced the Kilindini Waterfront Automated Terminal Operating System (KWATOS) since 1st July 2008 to automate key port operation area; Container Operation, Conventional Cargo Operations, Marine operations, ICD operations, Nairobi and Kisumu (IDG News Service, 2008). The cargo owners supported the efforts by the Port authority to automate its systems with the hope that this would streamline the cargo release process and reduce dwell time, reduce cost and enhance competitiveness, although the system has achieved some benefits there are challenges such as Network instability, lack of proper truck Company registration (the requirement that all truck companies operating at the port are registered in the system database) and integration with the Customs systems. The system success depends on the full integration with the customs systems (KPA handbook, 2008). Information from shipping Agents/Shipping lines are expected to be submitted electronically and consumed by user adaptation/clients. The information includes Manifests, delivery orders, and stowage bay plan.

KWATOS has not fully led to maximization of ICT due to internet failure and other invisibilities. The solution should provide information of anticipated documentation procedures prior to the arrival of external trucks to the port and also display the status of the orders at the port. This could be part of a track and trace system of the port that allows visibility of the container cargo for the different stakeholders of the port logistics chain.

The VMS should be conceptualized as a support system for coordinating the vehicles at the port

and managing vehicle orders. There are two main vehicle flows to coordinate: (a) vehicle flows from and to the hinterland to the port terminal (full containers) because sometimes they affect the performance of container ships due to direct loading of dangerous cargo from the ships and vehicle flows from ECD with empty containers for direct loading to the ships or to the pre-stack. (b) Internal terminal tractor flows within the port for stacking cargo from/to the ship for import/export respectively.

Solutions related to Vehicle Booking Systems (VBS) should be implemented, so as to control and reduce congestion and provide more efficient resource capacity utilization of the port terminals. All these operations if well-coordinated will lead to improved container ship performance because containers either imports or exports are loaded/discharged from ship in time thus minimizing delays of the ship at port.

Strategic Information Communication

Technology and operational performance

The world is becoming into global village by embracing Information Communication Technology (ICT) and as such everyone in business must embrace technology to be connected to the global business world and the global customers, shippers, ports, clearing agents, inland transporters, and suppliers. Referring to Hahn and Buckland (1996) Information Communication Technology (ICT) is defined as use of computers and other electronic media in managing information thus promoting information visibility among maritime container supply chain business members. It has a vast potential to facilitate collaborative planning among maritime container supply chain partners by sharing information on demand forecasts, shipping status and production schedules that dictate supply chain activities (Karoway, 1997).

Information Systems (IS). Information systems are the means by which people and

organizations increasingly utilize technology, gather, process, store, use and disseminate information. It is thus concerned with the purposeful utilization of information technology, not the technology per se. Some information systems are totally automated. For example, air lines, banks and some public agencies have systems where no human intervention is required. This 'suite' of interconnected information systems is underpinned by a variety of different technologies, servers, storage, software, routers, sensors and network.

Information Technology (IT): Strategic information communication technology is transforming more than just the enterprise. It's making traditional infrastructure and operations models obsolete, challenging infrastructure and operations leaders to bring fresh ideas that deliver business outcomes. People can find it difficult to distinguish between IS and IT (the T of IT) seems to overwhelm their thinking, obscuring the business information system that the technology is intended to support or enable. This perhaps also explains why organizations may fail to realize benefits from many of their investments in IT.

Technology investments are often made without understanding or identifying the business benefits that could or should result from improving the performance of activities by using IT. It is important to acknowledge that IT has no inherent value; the mere purchase of IT does not confer any benefits on the organization. These benefits must be unlocked, normally by making changes to the way business is conducted, how the organization operates or how people work. Achieving organizational change on any scale can be difficult, even without the introduction of the new technology.

Information Technology has become an essential part of the rapid and accurate transfer and processing of enormous volumes of data processed in international transport firms and

port organizations. The proper management of systems which process this information and communicate it to those who manage port operations is vital for efficient transport. This explains why container tracking systems are given high priority among operational computer applications in ports. Further to this, electronic market business models integrate ports in supply chain; ERPs, wireless sensor based systems. (Kia et al.2000).

Information System applications are primarily about how port authorities can or should effectively deal with the challenges and pressures to reduce risks and accidents (Price, 2004; Ronza et al. 2003). However, ports are now concerned with how to adapt to strategic advanced information technology and how technology and management can improve ports in these areas (Kia, Shayan, & Ghotb, 2000; Lee-Partridge Teo, & Lim, 2000).

During the past two decades, the maritime industry has witnessed the evolution of one of the most important trends in the history of ports and shipping community with the increased sophisticated use of computers (Burt, 1996). KPA has also put efforts to increase efficiency at the port of Mombasa by use of KWATOS which is an operation's management tool which has been running since 2008 to enable the users lodge manifests, loading list, delivery documents on-line and improve the operational performance of container terminal at the port of Mombasa because of the timely documentation of container cargo (News24 Kenya) to shorten time spent by vessels in port. The overall efficiency of a container terminal depends ultimately on total time the ship takes to complete the voyage, as time spend in port is unavoidable in the sense that it takes some time for the cargo to be loaded and unloaded.

In order for KPA Container Terminal to maximize productivity of the port, special emphasis is required to be placed on receiving container information from all the shipping industry players and cargo interveners through

integrated port community computer systems which provide data sharing information among interested parties (e.g. shipment, physical location) prior to the arrival of the vessel as is the case with liner ports to reduce the ship port time cost estimated at USD45,000/day stay for a third generation containership or USD65,000 for a large vessel at port (Haywood and Peck, 2004).

Hence, container shipping is accompanied by the application of computerized tele-transmission of manifest and stowage plan details from the port of loading to the port of discharge. Transmitted data are used to plan discharging operations, as well as to print required documentation reports. For a container terminal equipped, for example, with ship-to rail technique, accurate and current information on all container operations is vital as this will enable to achieve container ships performance (Chen, 2003).

A properly-designed, Computerized Container Control System (CCCS) increases the operating efficiency of the terminal. However, the main benefits provided by such a system are the following: faster discharging and loading of containers; increased productivity through faster turnaround of containers; better monitoring of the storage of containers (leading to increases in stacking area's capacity); high level of accuracy of information; and high level of consistency of the information given to various parties in the chain of transport. This is the area that provides necessary information to the freight forwarders.

IT Application. An application of IT to handle information in some way refers to software, or combination of software and hardware, used to address general accounting, production scheduling, customer order management or enable collaborative working or for an individual to book service tickets, check in for a flight or pay for parking; word processing, preparing presentation materials or conducting online meetings.

These applications can be purchased, pre-written software programmes for a particular business activity or developed 'in-house' to provide a particular functionality. Many application software packages can be tailored or customized to the specific requirements of an organization such as (ERP) and Customer Relationship Management (CRM) software that can be configured to some extent, to meet the specific way in which an organization operates.

This third type of strategic ICT offers the possibility for communication of yard operations via computer, particularly between the operator of the crane and container management personnel are the VDU. The cabin of the crane operator is equipped with visual display units (VDU) and simplified keyboards. The driver receives on the VDU an order to move a container. This solution makes it possible to follow container movements very closely and also facilitates execution of loading or discharging operations. Within a port community, the effective flow of information is considered to be an important variable. A highly sophisticated information technology is required to provide reliable and timely information for hundreds of people within the port/shipping, transport community.

Research and development of microwave technology automated container identification procedures were conducted collaboratively by the shipping operators (World Cargo News, 1997). This frequency range is sometimes referred to as super high speed. Microwave RFID technology has come into use fairly recently and rapidly developing. This is the area in which significant ship's time including human resources can be saved thus improving the operational performance of port terminals. "EDI, GPS, Automatic Identification Systems and similar technologies are also playing a continuously central role in freight terminals with significant impact on the performance of transportation systems, particularly intermodal transportation, and logistics chains. Progress

has been accomplished in introducing automation and advanced information and (some) decision technologies to freight terminals, port container terminals in particular (e.g. Arendt and Speidel, 1999; Bozzo et al, 2001; Durr and Giannopoulos, 2001; Giannopoulos, 2003; Giannopoulos and Shinakis, 1999; Lee-Partridge, Teo and Lim, 2000).

Strategic Training and operational Performance

In the fifth discipline, Senge (2002) describes a learning organization where the members are continually gaining knowledge and enhancing their capabilities to aid the organization in adapting to dynamic environments and remain competitively superior over competitors.

In supply chain partners (individual organizations) become learning partners, the supply chain then becomes a "learning supply chain" that is able to use knowledge to attain its purposes and remain competitive in dynamic markets. For the maritime supply chain partners to turn information into knowledge and to manage that knowledge effectively, training of employees becomes key.

Training leads to greater innovation and tacit skills. Decker & Nathan (1985), Robertson (1990) in their research found that training affects change in the worker skills through "a change in trained knowledge structure or mental model. Training may not only affect declarative or procedural knowledge but also may enhance strategic knowledge which is defined as knowing when to apply a specific knowledge or skill (Kozlowski et al. 2001, Kraiger et al 1993).

Training benefits employees to perform their jobs in a different culture and / or adjust psychologically to living in that culture (Bhawak & Brislin 2000, Lievens et al 2003). Studies made by (Morey et al 2002, Salas et al, 2001) indicate that training improves declarative knowledge, planning and task co-ordination, collaborative

problem solving, and communication in novel team task environments.

Several studies have also documented the impact of training on organization performance. Results of the research by Aragon-Sanchez et al. (2003) indicate that training activities were positively related to most dimensions of effectiveness (i.e. employee involvement, human resources indicators, and quality) and profitability. Ubeda Garcia (2005) study on the organization's training policies suggested that training programs oriented towards human capital were directly related to employees, customer, and owner/shareholder satisfaction as well as objective measure of business performance.

Supply chain training provides employees with vision and understanding so as to improve the performance of container terminal operations thus being responsible at their work (Fourgeaud, 2000). Such training is further necessary because the shipping industry is developing rapidly with technology to improve efficiency and performance of container terminal operations, thus use of modern handling equipment such as modern Ship- to-shore gantry cranes with twin spreader handling capacity and this necessitates training of operators on how to operate and also use VDU to convey container information. Maritime supply chain requires more than a change in mindset from adversarial to collaborative Firm's interaction. It requires a change in day to day decision making strategy, practices, and human interaction.

A multi-skilled workforce helps to support efficient operations. On the yard, the multi-skilled members are capable of operating reach-stackers, the gantry crane and a shunt locomotive, as well as undertaking various ground staff duties. Well motivated employees are crucial to running an effective Container terminal with improved container ships performance and clients' satisfaction due to timely service delivery (Cullian et al 2004).

Having the most efficient machinery and the most up-to-date terminal management systems require knowledgeable and skilled work force in strategic training in core competencies to deliver the organizational strategic goals to gain competitive advantage over its competitors.

Kenya Ports Authority has taken cognizance of the importance of strategic training to deliver on its vision and mission. In every aspect of the Port capacity improvement in infrastructure, equipment acquisition, and cargo clearance process automation, human resource development has stood out as a common denominator. Knowledge and skill gaps that are considered critical are identified and the trainings are specially designed and tailored to enable staff manage and control, operate, administer and provide leadership in the activities the Authority is engaged in.

Strategic leadership and operational performance

According to Hitt et al (2003), strategic leadership is "the ability to anticipate, envision, maintain flexibility, and empower others to create strategic change as necessary". Strategic leadership is further defined as the influence process that facilitates the performance of the top management team to achieve objectives (Clegg et al, 2011). In addition to "influence", long term decisions are as important as short-term decisions in the strategic leadership. Setting directions, purpose, and meaning; and ability of influence, maintaining, and sustaining competitive advantage are also other vital traits of strategic leadership according to definitions. The most distinguishing aspect of a strategic leader is his/her ability to manage the uncertainty imposed by the rapid change (Tutar, et al, 2011). It can be deduced from definitions that strategic leadership is multifunctional, involves managing through others, and helps organizations cope with change that seems to

be exponentially in today's globalized business environment (Jooste and Fourie, 2009).

Moore (2009) observes that Corporate leadership is the totality of the institutional and organizational mechanisms, and the corresponding decision-making, intervention and control rights, which serve to resolve conflicts of interest between the various groups which have a stake in a firm and which, either in isolation or in their interaction, determine how important decisions are taken in a firm, and ultimately also determine which decisions are taken. Healey (2003) notes that the quality of decisions being taken by directors does not rely solely on their aptitudes in adopting the right course of action, but also to which extent these resolutions is congruent to the long term goals of shareholders. This concerns the relationship between stakeholders in a company. It is the way a company is managed taking into consideration interests of all stakeholders. Stakeholders includes: shareholders, employees, customers, consumers and other corporations having relationships with the firm. It indicates whether the company is meeting the requirements of every stakeholder. Different stakeholders have different demands from the company.(Chamisaet.al, 2011).

Babu (2012) said that corporate governance is the set of practices that best provides for the effective, open, and visible management of an organization. The comprehensive study of corporate governance is an acknowledged necessity for good performance in business (Horwitz, 1992). Corporate governance involves detailed understanding of communication, policy and procedure, and performance management. Bratton (2009) argues that corporate governance includes codes of conduct and ethics, leadership, human resources management, and corporate compliance.

Corporate governance deals with Corporations and decision making structures. One of its main

purposes is to ensure the efficient confluence of otherwise competing interests that are affected by companies' activities (Doh, 2011). The debate about the relationship between shareholders' interests (those of investors and owners of the issued shares of the Corporation) and other stakeholders' or other constituents' interests (those related to a varied number of constituents such as employees, citizens of the Community where the Corporation interacts) is as old as Corporations.

Corporate leaders are responsible for resources allocation. Organizations require adequate resources to achieve desired performance. Strategic Resource allocation begins with an appreciation of the need for various resources. Scholes, et.al (2002) note that once the manager has identified the organizational goals then he/she can work backwards to identify the resources that will be required to achieve the goal. Proper management and optimal use of resources is key for an organization to realize its business strategy. With intelligent resource management, an organization can develop and retain a world-class workforce. Strategic resource allocation guarantees the process of using a company's resources in the most efficient way possible. These include tangible resources such as goods and equipment, financial resources, and labor resources such as employees. Soft resources include: Knowledge, Information, Technology, Skills, Work methods, Structure and support systems, Policy support, Networks and linkages and Time (Mckinsey, 2012).

Resource allocation, a ubiquitous process in organizations, represents a curious dilemma for strategic leaders. This is especially true for conglomerate organizations interacting with numerous task environments representing multiple and differing industry sectors. The resource allocation process in a conglomerate organization is critical to the enterprise's ability to undergo strategic adaptation to realign the corporate mission and strategic goals during

environmental shifts (Johnson et al., 2012). The resource allocation process is influenced by the antecedent events of environment shifts and strategic leadership assessment. As the organization recognizes environmental shifts like; technology advances, interest-rate changes, and competitor moves, the organization's dominant coalition is faced with the need to assess how to allocate resources to maintain or enhance organizational competitiveness given the dynamic nature of most task environments, the open-system orientation results in exogenous influences changing past resource allocation patterns. Competitor moves and technology advances typically influence an inherently imitative, strategic adaptation that results in the emulation of best industry practices (Scholes et al., 2002).

Although first mover firms receive the most attention for their entrepreneurial prowess, firms are compelled to respond to the actions of other firms. Often the response is mere imitation of the first mover, but significant entrepreneurial activity also occurs when firms incorporate lessons learned in what may be termed innovative imitation (Johnson et al., 2002). Thus, firms operationalize their strategic thinking by allocating resources among productive internal activities. Often a firm's mission statement and strategic planning documents suggest one emphasis for the firm, but resource allocation indicates the firm's real priorities and true intentions.

Resource allocation cannot give misleading signals. Firms realize strategic adaptation proactively or by default. Strategic adaptation occurs by default through the accumulation of successive allocation decisions, unless a firm's leadership intentionally defines a strategic vision (Blaxill et al., 2011). Also corporate leaders conduct strategic risk management. Ndaa (2012) claimed that Strategic risks are the uncertainties and untapped opportunities embedded in a strategic intent and how well

they are executed. As such, they are key matters for the board and impinge on the whole business, rather than just an isolated unit.

Strategic risk management is an organization's response to these uncertainties and opportunities. It involves a clear understanding of corporate strategy, the risks in adopting it and the risks in executing it. These risks may be triggered from inside or outside your organization. Once they are understood, you can develop effective, integrated, strategic risk mitigation. Far from holding back the business, strategic risk management is about augmenting strategic management and getting the full value from your strategy.

In a typical instance, a conventional approach to setting and executing strategy might look at sales growth and service delivery. Rarely does it monitor the risks of a shortfall in demand. Effective strategic risk management is built around a clear understanding of how much risk your business is prepared to take to deliver its objectives, and a timely and reliable evaluation of how much risk it is actually taking (Ndaa, 2012). Today port operations are faced with larger uncertainties and risks than ever before. These not only include risks of cargo and ship traffic demand, but also technological risks, risks of competition, market risk, risk in labour availability, and more (Frankel, 1987).

Measurement of operational performance

Mentzer and Konrad (1991) define performance as an investigation of effectiveness and efficiency in the accomplishment of a given activity and where the assessment is carried out in relation to how well the objectives have been met. The primary measures of container terminal performance are the ship turn-round time and the tonnage handled per ship day in port.

The ship turn-round time is the duration of the vessel's stay in port and is calculated from the time of arrival to the time of departure.

Traditionally expressed in days, it is now common to express turn-round time in hours. Since the duration of a vessel's stay in port is influenced by the volume of cargo that it works, a more useful measure of vessel performance is the tonnage handled per day or hours that the vessel is in port. The average tonnage handled per ship day or ship hour would be obtained by dividing the total tonnage of cargo that is loaded and discharged by the total number of hours that all vessels spend in port.

In compiling data that would enable the port to determine ship turn-round time or the tonnage handled per ship day (or ship hour), a port would normally split total time in port into time at berth and time off the berth and within each, the opportunity would be taken to record for each service activity the amount of delay (idle time) as well as the reasons for the delay (waiting for cargo, opening/closing hatches, waiting for gears, rain, waiting for berth).

UNCTAD (1999) suggests two categories of port performance indicators: macro performance indicators quantifying aggregate port impacts on economic activity, and micro performance indicators evaluating input/output ratio measurements of port operations (Bichou and Gray, 2004). Fourgeaud (2000) implies that container terminals performance depends on: (a) Ratio loaded verse unloaded containers: empty boxes are not always included in the port statistics (they may be considered as other tare weights) but have to be handled, (b) Unproductive moves, i.e., the handling of all the containers that do not have to be unloaded but have to be moved: mostly empty and light containers and those containing hazardous materials, loaded on top or on the deck, (c) The level of automation of the gantry-cranes; one of the limiting phases of the handling cycle is the time spent positioning accurately the spreader on a container (loading/unloading), or the container on a trailer.

METHODOLOGY

The research design was descriptive survey that aimed at determining the challenges facing performance of container terminal operations. According to Cooper (1996), a descriptive study was concerned with finding out who, what, where and how a phenomenon which are the concern of this study. The model that was used to test hypotheses was multiple linear regression models which were as follows:

$$OP = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \varepsilon$$

Where:-

OP = Dependent variable (Operational performance)

$\beta_1 x_1$ = Change in operational performance resulting from effect of Collaborative

Competition
 $\beta_2 x_2$ = Change in operational performance resulting from effect of Strategic Information Communication Technology

$\beta_3 x_3$ = Change in operational performance resulting from effect of Strategic Training

$\beta_4 x_4$ = Change in operational performance resulting from effect of Strategic Leadership

$\beta_1 - \beta_4$ = Regression coefficient for each Independent variable

β_0 = Constant or intercept (value of dependent variable when all independent variables are zero)

ε = Random or Stochastic Term.

RESEARCH FINDINGS

Collaborative Competition and Operational performance

Objective one sought to investigate the effect of collaborative competition on operational performance of container terminal. Table 1 below summarizes respondents' level of agreement on how collaborative competition affects operational performance.

Table 1: Collaborative Competition on operational performance

Statement	N	Mean	S.D
We develop cooperative ties with other organizations	110	3.48	1.10
We use alliance as a way to enhance capacity to serve clients	110	2.85	1.13
Services are provided more efficiently through cooperation with other organizations than if they are done alone	110	3.70	1.05
There is minimal time difference between the truck or vessel booked time of arrival by the customer and actual time of arrival	110	3.81	1.06
There is timely and accurate sharing of information	110	2.50	1.01
The ease with which the customer's issues are resolved increases with the strength of collaborative relationships	110	2.43	1.00
Kenya National port community System has reduced cargo clearance time	110	2.34	1.09
East Africa single customs territory systems have reduced cost of cargo movement within the region	110	2.20	1.02
East Africa customs cargo tracking system will reduce cargo theft and diversion	110	2.25	1.06

Most of the respondents agreed that there is minimal time difference between the trucks or vessel booked time of arrival by the customer and actual time of arrival as shown by a mean of 3.81. Most of the respondents also agreed to the fact that Services are provided more efficiently through cooperation with other

organizations than if they are done alone reporting a mean of 3.70.

Strategic ICT and Operational performance

Objective two sought to establish the effect of strategic ICT on operational performance. The Table 2 below gives the result.

Table 2: Strategic ICT on Operational performance

Statement	N	Mean	S.D
Online and offline service availability to clients	110	3.98	1.23
Improved operational performance	110	3.47	0.92
Rate of cargo loss	110	4.45	0.91
Real time online operational performance reports	110	1.98	1.18
Real time online availability of customer feedback data	110	2.05	1.02
Real time online availability of trucks/ vessels bookings data	110	2.30	1.05
Acquisition of automated equipment and gadgets	110	2.15	1.15
Acquisition of high capacity servers, routers and updated software programmes	110	2.35	1.07
Connection to stable Local Area Network and wireless LAN	110	2.41	1.03

From the findings indicated in Table 3, most of the respondents agreed that the strategic ICT reduced the rate of cargo loss with a mean of

4.45 being obtained. The findings on whether there were Online and offline service availability to clients and improved operational

performance obtained a mean of 3.98 and 3.47 respectively. The Connection to stable Local Area Network and wireless LAN was rated low having obtained a mean of 2.41.

Strategic Training and Operational performance

Objective three sought to establish the effect of strategic training on operational performance. Table 3 below depicts the results.

Table 3: Strategic Training on Operational performance

Statement	N	Mean	S.D
Learnt knowledge exchange between employees and management	110	2.74	1.16
Formal information from external experts	110	3.77	1.09
Information from competitors as a source of training new business methods and services	110	2.49	1.09
Information interpretation through the container terminal intranet	110	4.09	0.49
Use of meetings, committees, telephones and reports in information management	110	3.81	1.08
Subordinates facilitated with internal training schemes	110	2.25	1.02
Internal and external learning influences our adaptability to organizational challenges	110	2.15	1.87
Access to new work approaches and ideas	110	2.10	1.50
Organizational goals and policies are communicated through internal training channels	110	2.35	1.70

Respondents agreed that the information interpretation through the container terminal intranet improved operational performance as depicted by a mean of 4.09. Most of the respondents agreed that there was use of meetings, committees, telephones and reports in information management as depicted by a mean of 3.81 and a mean of 3.77 was obtained

on the question whether there was formal information from external experts.

Strategic leadership on Operational performance

Objective four sought to determine the effect of strategic leadership on operational performance. Table 4 below depicts the results.

Table 4: Strategic leadership on Operational performance

Statement	N	Mean	S.D
Managers involve other employees in decision making process	110	4.00	0.68
The employees are free to do what they think is right	110	3.15	0.93
There is leadership support in our assignments	110	4.04	0.59
Our managers are authoritarians in their management style	110	3.54	0.83
Managers give orders on what is to be done at every stage of operational performance	110	2.45	0.55
Managers do not involve employees but leave operational performance to take its course	110	2.30	0.65
Our managers are both friendly and involving in their dealings	110	2.25	0.35
The leadership style has influenced the operational performance	110	2.27	0.47
The rules are not followed strictly in the operational performance	110	2.35	0.38

Most respondents agreed that there is leadership support in our assignments obtaining

a mean of 4.04. The other questions that were asked; managers involve other employees in

decision making process, our managers are authoritarians in their management style and the employees are free to do what they think is right obtained a mean of 4.00, 3.54 and 3.15 respectively.

Operational performance

A number of questions were asked to establish how container terminal had been performing with regard to market and financial outcomes. The results are shown in Table 5.

Table 5: Operational Performance

Statement	N	Mean	S.D
Improvement in profits	110	3.45	0.59
Improvement in quality of clientele served	110	4.30	0.70
Growth of repeat sales	110	4.47	0.80
Growth of existing customers	110	3.22	0.91
Growth in market share	110	2.40	0.87
Growth in new customer	110	2.47	0.88

Respondents agreed that operational performance increased with growth of repeat sales obtaining a mean of 4.47. The study further investigated whether improvement in quality of clientele served affected operational performance and a mean of 4.30 was obtained. The study further requested the respondents to indicate whether growth of existing customers affected operational performance and a mean of 3.22 was obtained.

Pearson bivariate correlation coefficient was used to compute the correlation between the dependent variable (operational performance) and the independent variables (collaborative competition, strategic ICT, strategic training and strategic leadership). Relationship is assumed to be linear and the correlation coefficient ranges from -1.0 to +1.0 (Sekaran, 2008). Hence, Kothari (2013) asserts that the correlation coefficient was calculated to establish the strength of the relationship between dependent and independent variables. Table 6 below shows the results.

Correlation Analysis

Table 6: Correlation Results

		CC	SICT	ST	SL	OP
CC	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	110				
SICT	Pearson Correlation	.136	1			
	Sig. (2-tailed)	.434				
	N	110	110			
ST	Pearson Correlation	.008	.350**	1		
	Sig. (2-tailed)	.757	.001			
	N	110	110	110		
SL	Pearson Correlation	.338	.345	.206	1	
	Sig. (2-tailed)	.085	.076	.333		
	N	110	110	110	110	

OP	Pearson Correlation	.486**	.066	.065	.685**	1
	Sig. (2-tailed)	.004	.432	.413	.004	
	N	110	110	110	110	110

** . Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed)

From the Table 6 above, the results generally indicated that except for strategic ICT and strategic training, other independent variables (collaborative competition and strategic leadership) were found to have positive and highly significant correlations on operational performance at 1% level of significance. There was a moderate positive significant correlation between collaborative competition (CC) and operational performance ($r=0.486$, $P<0.01$). There was a weak positive but insignificant correlation between strategic ICT (SICT) and operational performance ($r=0.066$, $P>0.05$). There was a weak positive but insignificant correlation between strategic training (ST) and operational performance ($r=0.065$, $P>0.05$). There was a moderate positive and high significant correlation between strategic leadership (SL) and operational performance ($r = 0.685$, $P<0.01$). The results imply that collaborative competition (CC) and strategic

leadership (SL) significantly affected operational performance of the container terminal of Kenya Ports Authority.

Multiple Regression Analysis

Multiple Regression analysis was carried out to investigate the effect of independent variables (collaborative competition, strategic ICT, strategic training and strategic leadership) on the dependent variable (operational performance). Sekaran (2008) recommends standard multiple regressions for hypotheses testing.

Model Summary

In order to test the research hypotheses, a standard multiple regression analysis was conducted using; CC, SICT, ST and SL as independent variables and OP as the dependent variable. Table 7 depicts the model summary results.

Table 7: Model Summary

Model	R	R-squared	Adjusted R-Squared	Std error of the Estimate
1	0.511 ^a	0.261	0.193	0.357

a. Predictors: (Constant),CC, SICT, ST, SL

From the Model Summary in Table 4 above, it is clear that R-squared was 0.261 indicating that a combination of collaborative competition (CC), strategic ICT (SICT), strategic training (ST) and strategic leadership (SL) explained 26.1 percent of the variation in the operational performance

of container terminal but leaving a balance of 73.9 percent that required a further study to explain the attributable variables.

Analysis of Variance

The ANOVA in Table 8 shows the degree of fitness of the regression model.

Table 8: Analysis of variance ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.193	4	0.523	3.114	0.004 ^a
Residual	6.203	105	0.127		
Total	8.396	109			

a. Predictors: (constant),CC, SICT, ST, SL

b. Dependent variable: OP

From the ANOVA Table 8 above, it was clear that the overall standard multiple regression model was significant in predicting how collaborative competition (CC), strategic ICT (SICT), strategic training (ST) and strategic leadership (SL) determine operational performance of container terminal. The regression model obtained a high degree of fit as shown by R-square of 0.261 (F=3.114; P=0.004<0.05).

Regression coefficients

It was also important to determine how collaborative competition (CC), strategic ICT (SICT), strategic training (ST) and strategic leadership (SL) affected operational performance (OP). Table 9 below presents the regression results.

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Error	Beta	t	Sig.
(Constant)	2.070	0.687		3.592	0.001
CC	0.269	0.170	0.313	2.315	0.030
SICT	-0.091	0.188	-0.232	-0.618	0.463
ST	0.218	0.047	0.321	0.503	0.526
SL	0.383	0.010	0.347	2.488	0.033

a. Dependent variable: OP

Table 9 above presented the regression results on how the four strategic management drivers; CC, SICT, ST and SL determined operational performance (OP). The multiple regression equation was that: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ and the multiple regression equation became: $Y = 2.070 + 0.269X_1 - 0.091X_2 + 0.218X_3 + 0.383X_4$. As depicted in Table 4.13, there was positive and significant effect of collaborative competition (CC) on operational performance ($\beta = 0.313$; $t = 2.315$; $P < 0.05$). There was positive and significant effect of strategic leadership (SL) on operational performance ($\beta = 0.347$; $t = 2.488$; $P < 0.05$). However, there was negative but insignificant effect of strategic ICT (SICT) on operational performance ($\beta = -0.232$; $t = -0.618$; $P > 0.463$). There was positive but insignificant effect of strategic training (ST) on operational performance ($\beta = 0.321$; $t = 0.503$; $P > 0.05$). The results of the standard multiple regression analysis in Tables 4.11 to 4.13 indicate that when the four independent variables are

combined together, only collaborative competition and strategic leadership have positive significant effect on operational performance of container terminal. This necessitated the study to conducted stepwise multiple regression analysis in order to establish the best consideration of independent variables to predict the dependent variable and to establish the best model of the study.

Tests of hypotheses

A hypothesis is an intelligence guess or a possible answer of the problem. It is a tentative solution of the problem. It helps in collecting evidence to solve or choose an alternative way to the problem. At the end it has to be accepted or rejected in the light of the findings. In order to test the research hypotheses, standard multiple regression analysis was conducted using the four strategic management divers; CC, SICT, ST and SL as the predicting variables and OP as the dependent variable.

Objective One: To determine the effect of collaborative competition on operational performance of container terminal of Kenya Ports Authority.

Hypothesis One: HO₁: Collaborative competition has no significant effect on operational performance of Kenya Ports Authority.

Hypothesis test results: Since the results shows a p-value of 0.030 which is lower than the alpha at the level of significance of 0.05 (5%), the researcher failed to reject the HO₁ that collaborative competition has no significant effect on operational performance of container terminal but accepted the Ha₁ that collaborative competition has significant effect on operational performance of container terminal of Kenya Ports Authority. The results in Table 4.13 fail to provide support for HO₁. Therefore, collaborative competition was found to have significant effect on operational performance ($\beta=0.313$; $t=2.315$; $P<0.030$ at 0.05 level of significance) and hence accept the HA₁.

Objective Two: To examine the effect of strategic information communication technology on the operational performance of container terminal of Kenya Ports Authority.

Hypothesis Two: HO₂: Strategic information communication technology has no significant effect on operational performance of container terminal of Kenya Ports Authority.

Hypothesis test results: At a level of significance of 0.05(5%), the p-value was 0.463 which was higher than the alpha and therefore the HO₂ was accepted that strategic ICT has no significant effect on operational performance of container terminal of Kenya Ports Authority whereas the researcher failed to reject the Ha₂ that strategic ICT has significant effect on operational performance of container terminal of Kenya Ports Authority. The results in Table 4.13 provide support for HO₂ and therefore these results fail to reject the Ha₂. Therefore, strategic ICT was found to have insignificant effect on operational performance ($\beta = -0.232$; t

$= 0.618$; $P>0.463$ at level of significance of 0.05) and hence accepted H₀₂.

Objective Three: To assess the effect of strategic training on operational performance of container terminal of Kenya Ports Authority.

Hypothesis Three: HO₃: Strategic training has no significant effect on operational performance of container terminal of Kenya Ports Authority.

Hypothesis test results: At level of significance of 0.05(5%), the p-value was 0.526 which was higher than the alpha and therefore the HO₃ was accepted that strategic training has no significant effect on operational performance of container terminal of Kenya Ports Authority but failed to reject the Ha₃ that strategic training has significant effect on operational performance of container terminal of Kenya Ports Authority. The results in Table 4.13 provide support for HO₃ and hence, the researcher accepted the HO₃. Therefore, strategic training was found to have insignificant effect on operational performance ($\beta = 0.321$; $t = 0.503$; $P>0.05$ at level of significance of 0.05).

Objective Four: To determine the effect of strategic leadership on operational performance of container terminal of Kenya Ports Authority.

Hypothesis Four: HO₄: Strategic leadership has no significant effect on operational performance of container terminal of Kenya Ports Authority.

Hypothesis test result: At level of significance of 0.05(5%), the p-value was 0.033 which was lower than the alpha and therefore the researcher failed to reject the HO₄ that strategic leadership has no significant effect on operational performance of container terminal of Kenya Ports Authority but accepted the Ha₄ that strategic leadership has significant effect on operational performance of container terminal of Kenya Ports Authority. The results in table 4.13 failed to provide support for HO₄ and therefore HO₄ was rejected and instead the Ha₄ was accepted. Hence, strategic leadership was found to have statistically significant effect on

operational performance ($\beta = 0.347$; $t = 2.488$, $P < 0.033$ at level of significance of 0.05).

Multiple Linear regression models

Stepwise multiple regression analysis was conducted in order to establish the best combination of variables that would predict the dependent variable and to establish the best model of the study (Cooper & Schinder, 2013). Table 10 presented the regression results on how collaborative competition and strategic leadership affect operational performance. As depicted in, there was statistically positive significant effect of collaborative competition (CC) on operational performance ($\beta = 0.0298$; $t = 2.250$; $P < 0.05$) and statistically, positive significant effect strategic leadership (SL) on the operational performance ($\beta = 0.323$; $t = 2.443$; $P < 0.05$). These results indicated that when collaborative competition (CC) and strategic leadership (SL) are combined together, they explained statistically significant portion of the variance ($R^2 = 0.227$) associated with the extent of operational performance of container terminal of Kenya Ports Authority.

Therefore, the best econometric model for this study was: $Y = \beta_0 + \beta_1 X_1 + \beta_4 X_4 + \epsilon$, where Y = represented operational performance (the dependent variable), β_0 = intercept, β_1 = regression coefficient of collaborative competition, β_4 = regression coefficient of strategic leadership, X_1 = collaborative competition, X_4 = strategic leadership and ϵ = stochastic term. This then becomes $Y = 2.211 + 0.153X_1 + 0.159X_4$. The best model for this study has established that taking all factors into account (collaborative competition and strategic leadership) Constant at zero, operational performance was 2.211. The result has further established that taking all other independent variables at zero, a unit increase in collaborative competition led to 0.153 increases in operational performance. The results has further established that taking all other independent variables at zero, a unit increase in strategic leadership led to 0.159 increase in operational performance. Tables 11, 12 and 13 presented the results of the stepwise multiple regression analysis.

Table 11: Model summary of stepwise multiple regression

Model	R	R- Squared	Adjusted R- Squared	Std error of the Estimate
1	0.476 ^a	0.227	0.209	0.35313

a. Predictors: (Constant), CC, SL

From Table 11, it was clear that the R-Squared was 0.227 indicating that a combination of the two strategic management drivers of operational performance; collaborative competition and strategic leadership explained 22.7 percent of the variation in the operational performance of container terminal of Kenya Ports Authority. This, therefore, implied that

other strategic management drivers of operational performance not included in this model explained 77.3 per cent of the variation in the operational performance. Hence, further studies can be conducted to assess the other strategic management drivers of operational performance.

Table 12: ANOVA of stepwise multiple regression

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.861	2	0.880	6.861	0.002 ^a
Residual	6.335	107	0.225		
Total	8.196	109			

a. Predictors: (Constant), CC, SL

b. Dependent Variable: OP

From the ANOVA Table 12 above of the stepwise multiple regression analysis, it was evident that the overall stepwise multiple regression analysis model (the model involving constant, collaborative competition and strategic leadership) was significant in predicting and affirming how collaborative

competition and strategic leadership established operational performance of container terminal of Kenya Ports Authority. The regression model achieved a high degree of fit as depicted by R-squared of 0.227 (F=6.861; P=0.002<0.05).

Table 14: Coefficients of stepwise multiple regression

Model	Unstandardized B	Coefficients Std. error	Standardized Coefficients Beta	t	Sig.
1 Constant	2.211	0.409		5.652	0.000
CC	0.153	0.069	0.0298	2.250	0.023
SL	0.159	0.106	0.323	2.443	0.14

b. Dependent variable: OP

CONCLUSION

The results revealed that collaborative competition and strategic leadership had significant and positive effect on operational performance while strategic ICT and strategic training had insignificant effect on operational performance of container terminal of Kenya Ports Authority. These findings indicated that the existing strategic ICT and strategic training were not so suitable for improving operational performance of container terminal of Kenya Ports Authority. The Stepwise multiple regression analysis, revealed that two strategic management drivers of operational performance namely; collaboration competition and strategic leadership explained statistically significant portion of the variance related with the extent of operational performance of container terminal of Kenya Ports Authority. The stepwise multiple regressions indicated that among the strategic management drivers of operational performance, collaborative competition and strategic leadership had more effect on improving operational performance of container terminal of Kenya Ports Authority. This result was an emphasis on the role of collaborative competition and strategic

leadership in providing a suitable environment for developing operational performance of container terminal of Kenya Ports Authority.

RECOMMENDATIONS

- The existing strategic ICT and strategic training should be modified so as to improve operational performance of container terminal of Kenya Ports Authority.
- Managers of container terminal should focus more on collaborative competition and strategic leadership so as to improve operational performance.
- In modifying strategic training, education programs on training for employees and managers should be given key priority in container terminal.
- Policy makers should establish how collaborative competition and strategic leadership could be modified so as to facilitate operational performance of container terminal of Kenya Ports Authority.
- Policy makers should decide on the mechanisms to encourage strategic training of container terminal.
- The government should develop very clear and elaborate regulatory framework and

policies so as to guide the operations of the container terminal in operational performance.

SUGGESTIONS FOR FURTHER RESEARCH

The strategic management drivers covered in this study were not exhaustive hence further research could be carried out to unearth other

strategic management drivers of operational performance. Similarly, further studies need to be carried out to establish container terminal based challenges that Kenya Ports Authority face and how best these challenges could be addressed to enhance growth and operational performance.

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