

EFFECT OF STRATEGIC CAPACITY PLANNING TECHNIQUES ON THE ORGANIZATIONAL PERFORMANCE IN KENYA GOVERNMENT PARASTATAL

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Abstract: Effectively capacity management is an essential concept in business operations. It involves planning, analyzing, and optimizing capacity to satisfy demand promptly and at a reasonable cost. It leads to improved service quality in the operations within an organization and advances relationships between an organization and its stakeholders. The general objective of this study was to establish the effects of strategic capacity planning techniques on the organizational performance in Kenya Government Parastatal, using a case of Kenya Medical Supplies Agency (KEMSA). The specific objectives of this study were: to establish the effects of organizational structure guiding the strategic capacity planning on the performance of KEMSA in Mombasa County, to find out the influence of top management commitment to the strategic capacity planning on the performance of KEMSA, to determine the impact of the involvement of valuable knowledge in the strategic capacity planning exercise on the performance of KEMSA, Mombasa County branch and to evaluate the role of availability of funds for strategic capacity planning on the performance of KEMSA, Mombasa County branch. The study was guided by three theories, which include the institutional theory, the resource dependency theory, and the structure follows strategy theory. This study will adopt a descriptive research design. The target population consisted of various stakeholders of KEMSA Mombasa County branch. The study targeted a population of 300 respondents randomly chosen through a simple random sampling method. It will use a sample made up of 30% of the total population generating a sample size of 90 respondents. The study used open-ended and structured questionnaires to collect primary data. Drop and pick method was adopted as the procedure for data collection. Research assistants were recruited and trained on data collection techniques before they were deployed to assist in the data collection. A pilot study was conducted to establish any validity and clarity errors that may arise from the design of the questionnaires. The study used regression analysis to examine the relationship between dependent and independent variables. The researcher adhered to the principle of voluntary consent, thereby allowing the respondents to agree to participate in the research willingly. The study revealed that all respondents had education levels ranging from secondary to above secondary and therefore were able to read and respond to the questions asked appropriately. The study revealed that practices like aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning, and strategic capacity planning practices had a positive effect on performance at the KEMSA Mombasa County branch.

Keywords: aggregate strategic planning, capacity scheduling, valuable knowledge, and strategic capacity planning.

1. INTRODUCTION

1.1.1 Background of the Study

The term capacity has over time been of great concern to most scholars, and most of them regard it as the know-how related to the amount of output that a system can achieve over a specific period (Jacobs & Chase., 2014). On the other hand, Jacobs (2014) and Vinzant and Vinzant (1996). View strategic capacity as planning as a tactic which is related to

the determination of the total levels of capitals in the organization. Many governments deal concern themselves with capacity decisions as to the ability to meet customer demand and to retort to variations in demand over time (Jacobs & Chase 2014; Hope & Mühlemann 2014).

Strategic capacity planning is a dynamic concern of conscious level directors on how to mollify the request of the customers, especially about the dissatisfied clients and lost opportunities. According to Jacobs and Chase (2014), being with more volume than required means under-utilization of assets in an association, which often means higher costs than necessary, notably higher unit costs. On the other hand, Dilworth (2012) points out that actual capacity is the size that a procedure station can produce in a given period under typical operating environments. Another understanding of effective capacity is that it determines the actual maximum consignment that a demand system can handle. However, effective capacity can be influenced by several factors including age and state of the apparatus, skills, training, and flexibility of the employees, accessibility of raw materials, among others. According to Jacobs and Chase (2014), capacity decisions are short-lived verdicts and relate more to the team and particular resource level as opposed to the decentralized network which is concerned with a longer-term increase or decrease in building a new facility and recruiting new personnel. The sustainability of such volumes is also of great concern of the top leadership of the organization.

Internationally the perception of strategic capacity is of role in the design and execution of critical decisions within and without the body notwithstanding its size or type. Jacobs & Chase 2014 asserts that “The verdicts regarding amenities and equipment can barely be changed easily and certainly not in the short term once they are ratified.” However, there can often be more flexibility in deciding how to manage those facilities.

Additionally, capacity choices inevitably affect an organization’s ability to serve markets from any location (Barnes. 2008). Most operations do not typically work at their full capacity for fear of putting a strain on resources. Thus, they are left to work at a below their full capacity so that they can be sustained more contentedly over the period. According to Barnes. (2008), there are two capacity procedures. The first is a premeditated capacity, which is concerned with the theoretical edge that can be achieved under ideal conditions with no disruptions or problems of any kind. The second and more realistic one is effective capacity, which relates to the maximum output that can be sustained over the long term under normal conditions. The later allows for adequate set-up times, interruptions, slowdowns, and conservation. Thus, capacity is mostly not a static or absolute value, but rather an agreed quantity that can vary according to particular circumstances. Effectiveness tests examine how well an organization sets and achieves its goals (Slack, Chambers & Johnston. 2010). Various launches extreme run below processing capacity, either as a result of lack of case to justify complete ‘fill’ of capacity or as a deliberate policy to react quickly to every new order. Often, some parts of governments’ activities run below capacity and others at their capacity ‘ceiling’. It is the parts run at capacity ‘ceiling’ which are the capacity constraint and which cause bottlenecks for the whole operation. Thus, these parts need improvement to ease bottlenecks that constrain the whole operation (Armistead & Clark., 2011). Good practice requires increasing awareness on when the limits of matching demand and adequate capacity are being reached to take timely action. To do this, a firm needs to manage its capacity to match demand continuously. This directs the significance of capacity management in operations management and why its success or failure to attain a competitive strategy results in a perceived added value/price (Armistead & Clark 2011).

1.1.2 State Corporations in Kenya

The State Corporations Acts (1987) revised in 2013, outlines ten criteria for judging whether an institution is a state corporation. The government of Kenya controls the most important criteria among the ten. Thus, a state corporation is a unit which the régime has significant influence over. By law, state establishments in Kenya are guided by government regulations and reorganized institutions such as the State Corporations Advisory Committee (SCAC), the Efficiency Monitoring Unit and Public Procurement Oversight Authority (PPOA). The terms and conditions guidelines of state corporations prepared by the State Corporations Advisory committee stipulates that state corporations have no possibility but to embrace modern business management practices (GOK, 2004). The guidelines further point out that every corporation is expected to have a corporate strategy with clear goals and a set of values.

According to Njiru (2008), the Kenya government forms state corporations to achieve monetary among other goals. They are aimed at correcting market failure, manipulating social and party-political objectives, providing edification, well-being, redistributing income, developing marginal areas, among others. The Government of Kenya has since June 2005, it is mandatory for all Boards of state corporations to sign performance contracts with the Government and all the Chief

Executive Officers of all the state corporations to do the same with their respective Boards and the same is cascaded down to individual staff members. Performance contracting is an attempt to improve state corporations by ensuring improved and sustained performance as well as improved service delivery. State corporations in Kenya are grouped into eight broad categories based on their directive and roles. The eight categories are financial corporations, commercial corporations, regulatory corporations, public academies, service corporations, local growth authorities, tertiary education and training corporations and training, and research corporations.

1.1.3 Kenya Medical Supplies Agency

Kenya Medical Supplies Agency (KEMSA), previously known as Medical Stores Coordinating Unit (MSCU) was set up to coordinate a supply chain system that can react to the demands of the health facilities, by distributing medicines and medical supplies as indicated by specific needs in the country. Before KEMSA was established, the responsibility of distributing drugs and medical supplies in Kenya belonged to the MSCU. However, MSCU was not able to perform procurement, warehousing, and distribution of medical materials adequately due to several operational and organizational challenges. Thus, lack of medicines and other medical supplies in many government health facilities became a major hindrance towards attaining meaningful health care outcomes. In Kenya (KEMSA Report, 2016/2017).

The critical roles of KEMSA include: progressing and working out a feasible commercial service for the procurement and sale of high-quality medicines and other medical supplies, providing a secure source of drugs and other medical supplies to government health facilities and advising the Health Management Boards and the overall public on procurement as well as cost-effectiveness and balanced use of medicines and other medical supplies. The KEMSA Chief Executive Officer administers the daily running of the organization in consultation with the eleven participant Board of Directors composed of members with varied and extensive skills in the area of medical supply chain and business management. The board membership include a non-executive chairman; Principal Secretary (Ministry of Health-), Director of Medical Services, Chief Pharmacist, Registrar of Nursing Council, Chief Executive of KEMSA and representatives of the Pharmaceutical Society of Kenya, the Federation of Pharmaceutical Manufacturers of Kenya, District Health Management Boards, the Kenya Medical Association, the Kenya Institute of Management.

KEMSA is a brainchild of a Health stakeholders meeting held at KCCT Mbagathi between 7-10 June 1998 and that recommended creation of an independent corporate body to plan, acquire, store and distribute drugs and other medical supplies to Public Health Facilities (PHFs). KEMSA was set up through Legal Notice No. 17, Kenya Gazette Supplement No. 8, Legislative Supplement No.5 of the 11th February 2000 under the State Corporations Act, Cap 446. KEMSA as a state corporation was established with objectives that included to develop and operate a viable commercial service for the procurement and sale of drugs and medical supplies, to provide a secure and reliable source of drugs and medical supplies for public health institutions, provide advice to the health boards and the general public on materials relating to the procurement, cost-effectiveness and use of medicines and other medical supplies. KEMSA Board of Directors was established in February 2000 and began their official work on 30 November 2000 (KEMSA Report, 2016/2017).

1.2 Statement of the Problem

Changes in the environment have radically influenced how organizations function. Many organization faces challenges in determining capacity to acquire and maintain optimum operation and service delivery. A low capacity can result in loss of customers and slow service while overcapacity, on the other hand, can bring with it the need to reduce prices to stimulate demand, carry too much inventory or leave workforce and equipment idle (Yang, Haddad & Chow, 2001). In addition, the decisions of determining capacity configuration in an organization can affect several aspects of performance, such as costs, revenues, working capital, quality of goods and services and dependability of supply (Slack, Jones & Johnston 2013) A study by Dekkers and Kannagi (2012) evaluated the practices for strategic capacity management in Malaysian manufacturing firms where they sought to investigate whether the strategic capacity management concept involves an alignment of production capacity with the strategic direction. The study found that the development of adequate manufacturing capacities that match the strategic objectives is at the heart of competitive advantage for firms. In Nigeria, Garba, Ogbadu, and Ademola (2012) studied capacity planning, and its implication on infrastructural development needs of institutions of higher learning in Nigeria. The study found out that the absence of capacity planning both by the government and institutions concerned resulted in shortages of infrastructure needs in the institution. Therefore, when making decisions on the capacity to acquire and maintain in organizations, there is a need to balance costs and benefits of over- or under-capacity. None of the reviewed studies dealt directly with the effect of strategic capacity planning on

organizational performance hence the desire of the researcher to bridge this gap by executing a study on the effects of aggregate strategic planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning on the organizational performance.

1.3 Objectives of the study.

1.3.1 General Objective of the study.

The general objective of the study was to establish the effects of strategic capacity planning techniques on the organizational performance, a case of Kenya Medical Supplies agency, Mombasa.

1.3.2 Specific Objectives of the study

The specific objectives of the study were:

1. To establish the effect of aggregate strategic planning on the performance Kenya Medical Supplies agency, Mombasa.
2. To find out the effect of capacity scheduling on the performance of Kenya Medical Supplies Agency, Mombasa.
3. To determine the effect of the valuable knowledge capacity planning on the performance of Kenya Medical Supplies Agency, Mombasa.
4. To evaluate the effect of strategic capacity planning on the performance of Kenya Medical Supplies Agency, Mombasa.

1.4 Research Questions

The research questions were:

1. What is the effect of aggregate strategic planning on the performance of the Kenya Medical Supplies Agency, Mombasa.?
2. What is the effect of capacity scheduling on the performance of the Kenya Medical Supplies Agency, Mombasa.?
3. What is the effect of valuable knowledge capacity planning on performance of the Kenya Medical Supplies Agency, Mombasa.?
4. What is the effect of strategic capacity planning on the performance of Kenya Medical Supplies Agency, Mombasa.?

1.5 Scope of the Study

The study was limited to establishing the effects of strategic capacity planning techniques on the organizational performance in Mombasa County, Kenya. It took a case study of Kenya Medical Supplies Agency. It was further limited to studying four specific objectives.

2. LITERATURE REVIEW

2.1 Introduction

This section reviews both theoretical and empirical literature related to the study. The researcher critically analyzed the literature relevant to the topic under study. The purpose of this section was to try to discover the extent to which researchers have studied strategic capacity planning techniques and its effect on organizational performance. It also provided the research gap and a conceptual framework for the study.

2.2 Theoretical Framework

Cooper and Schindler (2008) view theory as a set of systematically interrelated concepts, definitions, and propositions that are advanced to explain and predict phenomena (facts). In this section, four theories of strategic capacity planning techniques and their effect on organizational performance.

2.2.1 Principal-Agency Theory

The Principal-Agency Theory is the underpinning theory used to establish the framework for this study. The Principal-Agent Theory adopted an agency model developed by economists that deals with situations in which the principal induces

the agent to perform some task in the principal's interest that is not necessarily the agent's interest (Health & Norman, 2004). Eisenhardt (1988); Bergen *et al.*, (1992); and Rokkan and Buvik (2003) cited in (Pepper, & Gore, 2015) have also contributed to the literature on principal-agent theory sticking to one central theme which is the relationship between a principal and an agent.

In general, a contract is used to specify the terms of a principal-agent relationship. According to Eisenhardt (1989), Agency theory is concerned with a ubiquitous agency relationship in which one party (the principal) delegates work or tasks to another party (the agent) who performs the work. Agency theory describes this type of relationship using the metaphor of a contract (Jensen & Meckling, 1976). Agency relationships are realized in a broader social context in the adoption of policies about aligning incentives in order to discourage self-interest behavior of managers and to reduce agency costs. Several studies indicate that procurement forms about 60%-70% of an organization's expenditures.

For example, shareholders may seek to maximize their wealth in the form of profits (dividends) made by the company; management seeks to maximize their utility by way of earnings. Since the roles of these two parties differ in the organization, their risk tolerance levels also differ. For instance, shareholders' risk appetite levels are generally low due to the need to protect the value of their wealth, management usually tolerates higher risk, but all these need to be reconciled for the company to operate well. Procurement management is often a risky function that involves management decisions in an optimal allocation of the limited resources provided by the shareholders hence the need to minimize the risks involved to ensure competitiveness.

2.2.2 The Institutional Theory

The institutional theory outlines the effects of external institutional pressures on organizations and defines institutions as regulatory structures, government agencies, laws, courts, and professions, as well as interest groups and public opinion (Lowell, 1994). Various actors endorse the rules and norms set out by the institutions in an environment. When speaking of actors and institutional environment in this research project, reference is made to the norms represented by the actors in the environment and the pressure that these norms exert on other actors in the environment. A strength attributed to institutional theory is its ability to explain the non-choice behavior of organizations how they conform to norms without questioning them and undertaking public function (Lowell, 1994).

The PPDA (2005) cited in (Lusuli, & Rotich, 2014) emphasized that proper maintenance and keeping of records is critical in all public procuring institutions and thus there is need to have policies, norms, and rules to that effect. In this theory, public procuring entities are guided by rules and regulations, and thus the PPDA (2005), PPDR (2006) policies should be used in implementing the acts as well as the regulations, and there should also be policies on records management. From the three pillars of institutions proposed by Scot (2003) such as organizational culture, social influence, organizational incentives, and enforcement are identified as antecedents of compliance to procurement records management.

2.2.3 Legitimacy Theory

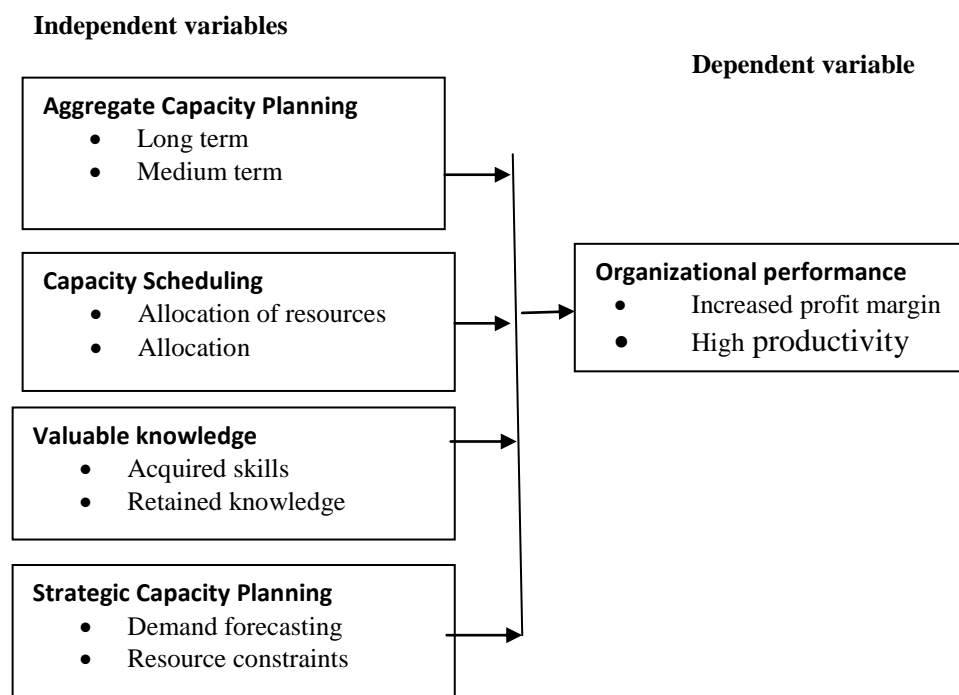
The Legitimacy Theory stipulates that a public organization has the mandate to state and its activities to the stakeholders, more specifically to the public and state the benefits the society will get from it (Mousa, & Hassan, 2015). A state is there when an organization's value system is in line with the value system of the society that the organization exists in (Lindblom, 1993). Legitimacy is a perception that the acts of the organization are acceptable in the constructed system of behavior in the society that it exists in (Suchman, 1995). Legitimacy Theory, therefore, brings in good understanding in the government procurement systems. The concept of legitimacy strongly suggests that the social contract which is between the government and the public can be eliminated. In government procurement context, there are concerns (such as cronyism and corruption) that could put in danger the objective and role of legitimacy practices by relevant authorities. In line with the theory of legitimacy is the believe that the government officers' choices of legitimizing implementation strategies are geared towards the interpretation of the local authority or department involved, and different government officers will likely have different insights of the duties and roles expected on him as a public servant from the public and whether the department or agency or local authority is viewed by the society as complying with the expectations that are expected from them (Deegan *et al.*, 2002). The theory further asserts that officers opt for the disclosure practice as a way of building a good reputation among the various stakeholders involved in their career line and the society at large (Magness, 2006).

2.2.4 Dynamic Capability Theory

This is a theory that asserts that strategy in an organization is a dynamic and interactive process. Dynamic capabilities can, therefore, be looked at as the firm's ability to integrate, build, and reconfigure internal and external competencies that are necessary to address, in a quicker manner, the ever-changing environments. Dynamic capabilities thus depict the ability of an organization to achieve new and innovative forms of competitive edge following the root of interrelations and market positions (Gathungu, & Mwangi, 2012). Addition, other scholars have defined dynamic capacities as the ability to renew capabilities to achieve a functional unity with the dynamic business environment by resorting to integrating, and reconfiguring internal and external organizational skills, resources, and functional competencies (Teece, 2014).

Dynamic capabilities focus on four main processes: reconfiguration, leveraging, learning, and integration (Ambrosini & Bowman, 2009). According to the authors, reconfiguration is concerned with transformation and recombination of assets and resources; for example, the consolidation of manufacturing resources that often occurs because of an acquisition. Leveraging refers to the replication of a processor system that is operating in one area of a firm into another area or extending a resource by deploying it into a new domain, for instance applying an existing brand to a new set of products. As a dynamic capability, learning allows tasks to be performed more effectively and efficiently, often as an outcome of experimentation and permits reflection on failure and success. Finally, integration refers to the ability of the firm to integrate and coordinate its assets and resources, resulting in the emergence of a new resource base.

2.3 Conceptual Framework Regarding the conceptual framework, the conceptual framework used in this study demonstrated the interrelationships between the independent and dependent variables of the study. The dependent variable for this study was organizational performance while the independent variables were: aggregate capacity planning, capacity schedule, valuable knowledge planning, and strategic capacity planning as depicted in figure 2.1 below.



Source: (Researcher, 2019).

Figure 2.1: Conceptual Framework

2.4 Empirical Literature Review

According to Jaafaru et al., (2012), aggregate planning is meant for increasing production level plan that ensures actual operation of the resources of an enterprise is in equilibrium with the predicted product by product request to link the tactical business plans to the operations processes. The scholar further asserts that aggregate planning governs the final output production of a firm, product by product, planned through the master production plan and the overall resources prerequisite using the material supplies plan guided by the sales projections. The concept, therefore, offers a secure

connection between amenities planning and scheduling. In the same line if thinking, amenities planning can be said to involve the process of determining the physical size that aggregate planning should not surpass at any given point. In contrast to this is scheduling that deals with the distribution of available resources to jobs and orders or workplaces.

As a medium-term measure, cumulative planning seeks out influence both demand and supply (Wairimu, 2014). Demand can be predisposed through pricing, promotions, backlogging or reservations, and the growth of similar products. On the other hand, supply can be influenced through dismissals, using overtime and under time, part-time workers, casuals, holding inventory, sub constructing, and capacity sharing (Certan & Koren, 2014). In a struggle to attain capacity balance, aggregate capacity organizers have a range of level workforces plans whereby any disparities in demand are met by either sub-contracting, holding stocks, part-time workers, overtime and back ordering (Kauda & Ebo, 2015). Neely (2012) states the view that when a fixed output rate is upheld, any demand differences are met by holding stocks as a buffer, sub-contracting, or back ordering.

On the other hand, the corresponding capacity to demand comprises presenting precisely what has been ordered. This is similar to the JIT concept. A blend of these two strategies would conveniently be the way forward. Johnson (2014) contributing it the same concept avers that a careful and well thought scheduling is fundamental since if schedules are not prudently prearranged bottlenecks and waiting queues of clients waiting to be attended to in a service center, unmet orders or increased work in progress stock, are the result. Well supposed manufacture schedules act as sources of competitive gain resulting from expanded deficiency of processes management and greater customer gratification (Wairimu, 2014). This according to the scholars result to the aptitude to supply orders to various clients on agreed due date by both the supplier and the client (delivery reliability) and the capability to transport faster than competitors can to for the same or other clients (delivery speed). To compete effectively enterprises need flexible manufacturing process processes that can rapidly respond to the clients' necessities.

Dewa, Mhlanga, Masiyazi & Museka (2013) assert that producers face various limitations like resource scarcities and changeable events, materials inaccessibility and a case of machines break downs. This results to the delays the production of orders anticipated by customers and compromises service level. Job orders should, therefore, be scheduled so that available capacity is exploited in an optimal manner. This demands for the use of finite capacity scheduling system. This kind of system is referred as finite for it is based on capacity that is available and exhaustible from the beginning of the planning process.

Various approaches can be used to create schedules. These include but not limited to Gantt charts, computer models like linear programming and most popular, the priority sequencing rules. This model uses the first come first served rule where the jobs incoming first at the work station are given the highest priority, the earliest due date rule which gives highest priority to the job with the earliest assigned due date, critical ratio and the Johnson's rule (Rossi et al., 2017). Jacobs et al., (2013) argues that firms dealing with perishable products that are not inventoriable like services do scheduling through various ways including elastic working hours, scheduled working shifts, offering overtime in peak periods and none in off-peak and part time workers among other strategies in an effort to match capacity to changing demand patterns (Neely, 2012).

According to Octavio and Morty (2017), strategic capacity planning deals with planning of total capacity of resources of an enterprise with the objectives of balancing total available capacity and overall forecasted demand in a cost optimum sense and long-term basis. De Azevedo et al., (2014) argued that the strategic capacity blue print integrates operations with business policy with a view to seeking to operationalize the operations strategy by ensuring obtainability of possessions necessary for enactment of the strategy.

For the scholar, Maina and Muya (2011) argues that, strategic capacity strategy is concerned with a quicker process of measuring the achievability of the leading production calendar. It helps the principal schedulers in determining the feasibility of changes to the plan by balancing the work load and system bottlenecks. Lawson (2011) states that irregular cut on capacity planning reveals resources deficiencies, any constrains on lead time, and any other volume matters that can lead to the development of a production plan and a principal productions agenda which can be executed successfully. Strategic capacity planning, therefore, enables testing the validity of both the production strategies and the MPS prior to any volume planning exercise. The scholar asserts that in addition strategic capacity planning guides any decision on mid and long-range alterations to capacity.

Operations bosses use Capacity planning in their respective organizations to minimize the trade-off between resources performance and quality by balancing between resource deployment and the related costs and quality. Quality and resource performance are key, too, as they influence on the capability of the service industry to achieve added value for their customer (Prajogoa and Goh,2005). Capacity planning and adoption of a Just-In-Time method increases efficiency, eliminates waste of money, resources and time and improve the overall profitability. Execution of capacity strategy advances the visibility of the organization making it easier to monitor and control (Sernola, 2011). Capacity utilization rate driven by capacity planning influences the productivity of any enterprise and a nation too according to Iraki (2014). The scholar argues there is a high positive correlation between capacity utilization and organization's growth even more than plant expansion. On the economic front, a nation that utilizes the resources at its disposal can achieve greater economic growth than embarking on very expensive investments.

2.5 Critique of the Existing Literature Relevant to the Study.

Leachman and Carmon (2012) projected a capacity planning model for substitutable and alternative apparatus. Escudero et. al (2013) applied a simulated scenario analysis approach for capacity and production planning. Agapiou et. al (2013) work is specific to the construction industry and expresses the emerging role of builder merchants. Ballard (2013) and Ballard et. al (1998) discussed some issues specific to the work flow and capacity management in the construction industry. Sasser (2016) and Klassen & Rohleder (2011) debated the synergy between product promotion and operations to manage the demand and capacity imbalances. Klassen & Rohleder (2012) claimed that due to vagueness of demand and perishability of capacity, service managers continue to struggle with the challenge of managing capacity and demand. Horman (2010) proposed the idea of buffer dynamics in capacity management of operations in a project management environment. Cakanyildirim and Roundy (2012) and Catay et. al (2013) provided an evaluation and extensive survey of fruitful capacity planning practices followed by the semiconductor manufacturing industry. Quantitative and mathematical optimization tactics to capacity expansion are provided in Ahmed and Sahinidis (2003) and Birge (2014).

Yu-Lee (2012) wished-for management accounting as well as marketing perspective in the sense that capacity management signifies a noteworthy element of a firm's costs, characterizes a large amount of a firm's assets, impacts a firm's ability to manage cash flow, resolves the aptitude of a company to run and can potentially impact the organization's brand image. The fragile nature of capacity and the need for watchful management is emphasized in Gu (2003) as idle capacity is non-recoverable and insufficient capacity can impact the business. Swaminathan (2012) and Chou et. al (2007) deliberates the case of uncertain demand and charges to assess the capacity strategies. Capacity expansion strategies under precise demand patterns such as random exponential and auto linked demands have been discussed in Ryan (2014). Huh et. al (2005, 2006) offer generic models under demand uncertainty. Hellermann (2006) provided a debate on the capacity selections available to air cargo industry to boost their income management systems and the ideas are easily moveable to other service industries as well. Walley (2011) proposed a demand driven capacity management model to manage the healthcare operations.

2.6 Research Gaps

Al-Ghamd (2017) conducted a survey research on obstacles to successful implementation of strategic decisions using Saudi Arabian Petrochemical Industry whose results identified seven out of twenty implementation problems most frequently cited in literature. Two of the problems were associated with human elements in the process of implementation. Research results also indicated the need for effective management support systems for staff employees, strategy-structure alignment, effective compensation systems, and top management involvement in order to facilitate the process of implementation. These results suggested managerial actions for improving strategy implementation commonly known as 4 I's: (i.e. Identify, Inform, Involve, and Incentivize). According to Alexander (2016) most of the literature have cited the formulation side of the strategy while giving a little attention to other side of the coin, namely strategic capacity planning techniques. Although studies focusing on strategic capacity planning techniques have been increasing in numbers, they are still fewer and less "glamorous" than those on strategy formulation (Atkinson, 2016). Otherwise, problems with organizational performance continue unabated signaling the need for studies geared towards balancing strategic planning with organizational performance.

3. RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the methodologies used to execute the study. It describes research, the target population, sample size and sampling techniques used in the study. It also describes data collection tools and techniques well as data processing and analysis methodologies used by the researcher.

3.2 Research Design

The study used a case study as its research design since the unit of analysis was one organization. The aim of the study was to get exhaustive information about the effects of strategic capacity planning techniques on the organizational performance in Mombasa County, Kenya by taking the case of Kenya Medical Supplies Agency. According to Ngechu (2006), a case study allows for an investigation to achieve a comprehensive and meaningful characteristic of actual events. In addition, case study research design enables the researcher to assemble quantitative data, which can then be analyzed quantitatively using descriptive and inferential statistics and allows for processing of collected data in order to test hypothesis or to answer the questions on the current status of the subject under study

3.3 Target Population of the Study

The target population of the study was comprised of staff members of Kenya Medical Supplies Agency based in Mombasa County. The study targeted eighty-nine (89) respondents consisting of managers, financial officers, procurement officers, logistics officers and operational officers in Kenya Medical Supplies Agency in Mombasa County.

Table 3.1: Target population

Population Respondents	Total Population
Managers	6
Finance Officers	12
Procurement officers	15
Logistic Officers	6
Quality Managers	5
ICT Officers	10
Operations Officers	35
Total	89

Source: KEMSA (2018)

3.4 Sampling Techniques and Illustrations

Stratified proportionate random sampling technique was used to select the sample for the study. According to Cooper and Schindler (2008), stratified proportionate random sampling technique is a technique used to produce estimates of the entire population parameters with higher exactness. It ensures that a more representative sample is derived from a relatively homogeneous population. Hence, stratification aims to diminish standard error by providing some control over variance.

Table 3.2: Sample size

Size Respondents	Total Population	Percentage	Sample size
Managers	6	50%	3
Finance Officers	12	50%	6
Procurement officers	15	50%	8
Logistic Officers	6	50%	3
Quality Managers	5	50%	2
ICT Officers	10	50%	5
Operations Officers	35	50%	18
Total	89		45

Source: Researcher, 2019

From each stratum the study used simple random sampling to select forty-five (45) respondents. According to Cooper and Schindler (2008), random sampling is a sampling technique that constantly reduces the sampling error in the populace. This in turn elevates the precision of any estimation methods used. Mugenda and Mugenda (2003) indicated a sample size of 10% -20% of the target population is adequate for a study. The study took 50% of the population as its sample size which translated to forty-five (45) people from the study population.

3.5 Data Collection instruments

The study collected both primary and secondary data. Primary data was collected using an unstructured questionnaire. It comprised of closed and open-ended questions to gather quantitative and qualitative data. This was used in order to gain a better understanding and possibly permit a better and more insightful interpretation of the results from the study. The unstructured questionnaire was structured into four sections. The first section addressed the background data, section B addressed dependable variable of the study, section C addressed organization performance and Section four addressed the relationship between the variables used in the study. The major merit of structured and unstructured questions is that they are easier to analyze, easier to administer and are inexpensive to use in terms of time saving. Secondary data was collected from published material and information from other sources such as annual reports, periodicals and company publications such as profit growth, return on asset, and market share of the company and customer base.

3.6 Data Collection Procedure

The researcher used drop and pick method as a procedure of data collection. She also made use of a research assistance, who she first trained on data collection techniques, to collect data for the study. Self-administered questionnaires allowed the participants to respond to the questions by themselves and at their own pace. They ease the respondents' burden by giving them the time to think through their responses (Monsen and Horn, 2007).

3.7 Pilot Testing

A pilot study was carried out to ascertain the validity and reliability of the design of the questionnaire as a data collection tool. The pilot study was conducted in two phases. Foremost, peers critiqued the questionnaires used for data collection and offer insights for improvements to ensure high validity and reality of the data collection instrument. Secondly, five respondents were randomly picked from the target population to fill in the pilot version of the questionnaire. The five respondents were not later used for the study as part of the sampled respondents. The basic aim of the exercise as to ascertain the validity and objectivity of the data collection instrument for the study. The response of the pilot study was used to make changes in to the questionnaires by removing unnecessary wordings in the questionnaire and adding the necessary but initially omitted ones

Reliability refers to a measure of the degree to which research gadgets yield consistent results (Mugenda & Mugenda, 2003). Reliability is concerned with steadiness, dependability or firmness of a test (Nachmias & Nachmias, 1996). The researcher measured the reliability of the questionnaire to ensure its consistency in testing what it was intended to measure. The test re-test technique was used to test the reliability of the devices. This was done by directing the same test twice at an interval of three days to the same group of respondents identified for the exercise. In this study the Cronbach's Alpha Coefficient was used to test the reliability of the unit used in the instrument. The test yielded a value of 0.7 which was an acceptable indicator of internal consistency, that is, items associate highly among themselves. Mugenda and Mugenda (2003) points out that reliability test of the instrument data with a coefficient closer to 1.0 is acceptable. This is illustrated in the table 3.3 below:

3.7.1. Reliability Analysis

Table 3.3: Reliability Analysis

Scale	Cronbach's Alpha	Number of Items
Aggregate capacity planning	0.789	5
Capacity scheduling	0.812	4
Valuable knowledge capacity	0.815	7
Strategic Capacity planning practices	0.820	4

A pilot testing was executed by the researcher to determine reliability of the questionnaires to be used for data collection in the study. It involved the sample of five respondents who were not later used during the data collection exercise. Reliability analysis was subsequently done using Cronbach's Alpha which measured the internal consistency by establishing if certain item within a scale measures the same construct. Gliem and Gliem (2003) established the Alpha value threshold at 0.6, thus forming the study's benchmark. Cronbach Alpha was conducted on each and every specific objective of the study which formed a scale. The results of the test is presented in the table showed above. The strategic capacity planning practices had the highest reliability ($\alpha= 0.820$), followed by valuable knowledge capacity ($\alpha=0. 815$), capacity scheduling ($\alpha=0.812$) and aggregate capacity planning ($\alpha=0. 789$). It can therefore, be concluded that the all the four independent variables were reliable as their reliability values surpassed the prescribed threshold of 0.6.

3.7.2 Data Processing and Analysis

The collected data of the study was summarized, coded and tabulated. The Statistical software Package for Social Sciences (SPSS, version 20) software was also used to analyze the data collected for the study. The presentation of the data was done using pie charts, percentages and frequency tables for easy understanding and interpretations. Descriptive statistics such as means, standard deviation and frequency distribution were used to analyze the data to that aimed at establishing the extent capacity planning techniques affects organizational performance at KEMSA in Mombasa County. Content analysis, on the other hand, was used to analyze data that was collected qualitative. The process involved observation and detailed description of objects, items or things that comprise the study as stipulated by Mugenda and Mugenda (2003). Furthermore, inferential statistics, correlation and regression analysis were done. The following regression model was used as follows to establish the correlation between organizational performance (independent variable) and the independent variables:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Organization Performance

β_0 = Constant Term

β_1 = Beta coefficients

X_1 = Aggregate strategic planning

X_2 = Capacity Scheduling

X_3 = Valuable knowledge

X_4 = Strategic capacity planning

4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The general objective of this study was to establish the effect of strategic capacity planning techniques on the organizational performance in Mombasa County, Kenya using a case of Kenya Medical Supplies Agency. This chapter presents the study results based on the responses to research questions. Questionnaires and observations were used for data collection for the study. From the study sample, forty (40) out of forty-five (45) respondents filled-in and returned the questionnaires administered to them by the researcher translating to a response rate of 88.8%. According to Kothari (2007), a response rate of 50% is acceptable to analyse and publish, 60% is good, 70% is very good and beyond 80% is an excellent response rate. Saunders, et al., (2003) on the other hand indicate that 30 to 50 percent response rate is reasonable enough for statistical generalizations.

Category	Frequency	Percentage
Completed and returned	40	88.89
Not returned	5	11.11
Total	45	100

4.2 Background Information

The study collected data on the highest level of education attained, designation and years of experience of staff at the Kenya Medical Supplies Agency based in Mombasa County.

4.2.1 Highest Education Level Attained

The researcher sought to find out the highest level of education attained by the respondents of the questionnaires and the following results were generated.

Table 4.1: Highest level of education attained

Level of education	Frequency	Percentage (%)
Diploma Level	20	50
Others	11	28
Degree	5	13
Postgraduate	4	9
Total	40	100

The study revealed that 50% of respondents held diplomas, 28% had other levels such as secondary school, artisan and primary school level of education with 13% having undergraduate degrees and 9% postgraduate level of education. Therefore, it can be concluded that majority of the respondents were well educated and were in a position to give the information required by the study.

4.2.2 Employment Departments of the Respondents

The study also sought to know the departments and cadres of the sampled respondents. The findings showed that 8% of the respondents were managers, 15% finance officers, 20% procurement officers, 8% logistic officers, 5% quality managers, 12% ICT officers and 32% operations officers. The study therefore concluded based on the positions held by the respondents that they were all had good knowledge about the departments in which they worked and therefore were in a position to respond to the questions on the topic of the study, that is, effect of strategic capacity planning process techniques on performance of the Kenya Medical Supplies Agency branch in Mombasa County.

4.2.3 Years of Work Experience in the Department

The study collected data on the respondents years of work experience in a department and findings were presented in table 4.2 below.

Table 4.2: Years of Experience in the Department

Frequency		Percentage (%)
5-6yrs	18	45
1-2yrs	10	25
over 6yrs	8	20
3-4yrs	4	10
Total	40	100

4.3 Strategic Capacity Planning Best Practices and Organizations Performance

The study sought to establish whether there were various best strategic capacity planning practices adopted by the organization and the results were as shown in the table 4.3 below: the study revealed that all the respondents had worked for the organization for periods not less than one year and therefore had enough experience to enable them understand the capacity planning techniques employed by the organization. This made the research to conclude that they had adequate experience to respond to give relevant information regarding effect of strategic capacity planning process techniques on performance of the Kenya Medical Supplies Agency branch in Mombasa County.

Table 4.3: KEMSA Adopted Strategic Capacity Planning Best Practices

Frequency		Percentage (%)
Yes	27	68
No	13	32
Total	40	100

The findings showed that majority of the respondents (68%) agreed that KEMSA in Mombasa County had adopted strategic capacity planning best practices while 32% of the respondents disagreed. The respondents indicated that KEMSA in Mombasa County, had adopted strategic capacity planning techniques such as building capacity relationships, team base approaches and strategic planning capacity. This implies that management addresses the issue of strategic capacity planning best practices that directly benefits all sections in the organization from top to bottom. These results can be comparing with findings of a study carried in Guth, (2010) which revealed that strategic capacity planning best practices can be equated to the continuous and rapid movement of the organization's growth resulting from practices such as benchmarking.

4.4 Strategic Capacity Planning Best Practices at KEMSA in Mombasa County

The study sought to know the extent to which strategic capacity planning best practices at the KEMSA in Mombasa County. The results are as shown in the table 4.4 below:

Table 4.4: Strategic Capacity Planning Best Practices at KEMSA in Mombasa County

Strategic Capacity Planning best practices	Mean	Std Dev
Information Communication Technology Planning	4.79	0.34
Organization risk planning	4.61	0.53
Staff hiring planning	4.56	0.21
Strategic Planning	4.53	0.41
Strategic Procurement planning	4.47	0.23
Strategic Stakeholder Relationship Planning	4.41	0.55

The findings in Table 4.4 indicate the extent to which strategic capacity planning best practices were adopted at KEMSA in Mombasa County. From the findings, it was revealed that majority of the respondents agreed that information communication technology planning, organizational risk management planning, staff hiring planning and strategic planning were employed to a greater extent in the organization recording means of 4.79, 4.61, 4.56 and 4.53 respectively. In contrast, the study revealed that organizational procurement planning and stakeholder relationship planning were also adopted but to a lesser extent represented by means of 4.47 and 4.41 respectively. Thus, the study established that adoption of ICT, procurement planning organization, risk planning and staff hiring planning were the strategic capacity planning best practices employed by KEMSA Mombasa County branch. Respondents explained that building a long-term relationship with the stakeholders can result into better organization performance and that these may prove to be more cost effective over time.

From the findings, it can be inferred that having strategic capacity planning practices in an organization is a collective responsibility and that this can raise morale in an organisation and improve strategic management approaches. This can be equated to a study findings carried in Arawati, (2011) which argued that the signs of best strategic capacity planning practices such as commitment to total quality management, commitment to just in time, commitment to total cycle time reduction, long range strategic plans, supplier relationships, strategic cost management, training and professional development, service excellence, corporate social responsibility, learning, management and leadership are positively related to organizational performance.

4.5 Organization Performance

The study sought to establish the extent to which achievement of organizational performance is focused on at KEMSA in Mombasa County using strategic capacity planning practices. From the findings, 62% (majority of the respondents) revealed that the KEMSA in Mombasa County focused on organizational performance through strategic capacity planning practices to a very great extent while 21% indicating a great extent and 17% moderate extent. This implies that strategic

capacity planning best practices are contribute to a greater part of an organization's success. This is in line with Parasuraman (2002), who suggested that service organizations must extend their concept of productivity to include a two-way perspective, that is customer-oriented and organization's-oriented perspective. He further asserted that organizations that have put in place strategic capacity planning practices are capable of delivering their products and services and gaining competitive merit over their rivals.

4.5.1 Organizational Performance Indicators

The study further sought to establish organizational performance indicators that KEMSA in Mombasa County focused on in dopting their strategic capacity planning practices and the outcome were as shown in the table 4.5 below:

Table 4.5: Organizational performance indicators

Performance Measures	Yes	No
Increase in customers base	96	4
Profitability	98	2
Increase in market share	95	5
Quality product development	93	7
Return on asset	90	10

The findings showed that 98% of the responses agreed that KEMSA in Mombasa County measured their organizational performance based on profitability, 96% indicates increase in customer base as a measure of performance, increase in market share (that attracted 95% of the responses and use of quality product development attracted 93% of responses. The study further revealed that KEMSA in Mombasa County uses return on assets as another measure of performance as indicated by 90% yes response rate. The study also revealed that the company used other measures of organizational performance which include quality and timeliness of processes, system productivity and system integrity, quality service delivery and return on equity for performance. These findings are in line with Gershon, (2004) who discovered that most business enterprises gauge their performance in terms of profits realized, networks scopes, increase in clientele base and expansion of market share.

4.6 Aggregating Strategic Planning and the Performance of Kenya Medical Supplies Agency in Mombasa County.

The study sought to determine effect of aggregating strategic planning on the performance of Kenya Medical Supplies Agency in Mombasa County. The researcher used the Likert scale to guide the respondents in their answers, where 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree. The results were presented in terms of mean and standard deviation as shown in table 4.6 below.

Table 4.6: Aggregate Strategic Planning affecting the performance Kenya medical supplies agency in Mombasa County

	Mean	Standard deviation
Clear definition of roles	4.88	0.75
Ensuring accountability	4.76	0.66
Meeting of strict deadlines	4.59	0.60
Building confidence on employees	4.38	0.40
Clear organizational direction	4.35	0.32

The results in table 4.6 above indicated a strong agreement that clear definition of roles, presence of accountability and realization of strict deadlines affect the performance of organization as indicated by a mean of 4.88, 4.76 and 4.59 with standard deviation of 0.75, 0.66 and 0.60 respectively. Most respondents agreed that confidence built in employees and clear organizational direction affected the performance of KEMSA in Mombasa. This is affirmed by means of 4.38 and 4.35 with standard deviation of 0.40 and 0.32 respectively. From this response it can be inferred that strategic capacity planning is a multidimension concept and can be expressed in a wider variation of features that forms the basis of organization's planning culture. This is also in agreement with the findings of Mouritsen et al (2003). He revealed that the strategic direction of the organization's activities depends on its strategic capacity plans.

4.7 Capacity Scheduling and the Performance Kenya Medical Supplies Agency in Mombasa County.

The second specific objective of study sought to find out the effect of capacity scheduling on the performance Kenya Medical Supplies Agency in Mombasa County

4.7.1 Capacity Scheduling and the Performance Kenya Medical Supplies Agency in Mombasa County.

From the findings, majority of the respondents strongly agreed that capacity scheduling affects organizational performance in terms of adoption of cost-effective design choices and promotes collaboration in products as indicated by a mean of 4.84 and standard deviation of 0.75. Most of the respondents strongly agreed that superior supplier performance improve company, supplier's relationship promotes rapid integration in the company, reduction in lead time and promote partnership in market as indicated by a mean of 4.79, 4.73, 4.60 and 4.57 with standards deviation of 0.69, 0.61, 0.62 and 0.54.

Table 4.7: Capacity Scheduling and the Performance Kenya Medical Supplies Agency in Mombasa County.

	Mean	Standard deviation
Capacity scheduling aid organization adoption of cost-effective design choices	4.89	0.78
Capacity scheduling promotes collaboration in products	4.84	0.75
Capacity scheduling performance improve company	4.79	0.70
Capacity scheduling promotes rapid integration in the company	4.73	0.61
Reduction in lead time	4.60	0.62
Capacity scheduling promote partnership in market	4.57	0.54

Majority of the respondents agreed that Capacity scheduling promotes mutual planning and problem-solving efforts recording a mean of 4.48 and standard deviation of 0.50. This implies that company dedicates resources to those relationships which will truly benefit from a partnership and supply management professionals and which are responsible for developing and maintaining effective business relationships with suppliers and customers. This is in line with Ragatz et al., (1997) who stated that supply partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more keys strategic areas such as technology, products and markets.

4.8 Valuable Knowledge Capacity Planning on the Performance Kenya Medical Supplies Agency in Mombasa County

The study sought to know the effect of valuable knowledge capacity planning on the performance Kenya Medical Supplies Agency in Mombasa County.

4.8.1 Valuable Knowledge Capacity Planning on the Performance Kenya Medical Supplies Agency in Mombasa County

Regarding this specific objective, majority of the respondents indicated that the valuable knowledge capacity planning has a significant positive effect on the performance of the Kenya Medical Supplies Agency in Mombasa County and thus there were documented reasons for recognizing knowledge capacity among various workforce in the organizational set up. This can be comparable with study findings carried in Thai (2001) which asserted that there exists a positive correction between valuable knowledge capacity planning and organizational performance which reassures the organization of its ability to engage in capacity planning process and hence instilling confidence in all stakeholders concerning the integrity of decisions.

4.9 Effect of strategic Capacity Planning on the Performance Kenya Medical Supplies Agency in Mombasa County.

In the fourth specific objective the study sought to investigate the effect of strategic capacity planning on the performance of the Kenya Medical Supplies Agency in Mombasa County. From the findings in table 4.4, respondents agreed that strategic capacity planning practices such as ICT planning, organizational risk planning, staff hiring planning, strategic procurement planning and strategic stakeholder relationship planning positively affect performance of Kenya Medical Supplies Agency Mombasa County branch. ICT planning recorded the highest mean score of 4.79 followed by organisation risk planning with a mean of 4.61. Generally, the results showed that all the investigated best practices enable the company to reorganize its cost structures, support the company in achieving critical efficiency improvements in

the short term directly or indirectly and thus enhancing manipulation of the key purchase levers of price of goods and volume of purchase. Implication of this in Kenya Medical Supplies Agency in Mombasa County is that the leadership adopts a culture of collaboration and continuous improvement, create and actively use management information to inform strategic capacity planning decisions, embed best practice, and improve organizational processes. These findings are comparable to (Hackler, D., & Saxton, G. D. 2007) which showed that ICT planning and adoption in organisations helps to address competition and accountability and meet the increasing demands placed on them.

4.10 Regression Analysis

In this study, a multiple regression analysis was used to assess the effect of independent variables on the dependent variable thus establishing the correlation that exist between these two types of variables. The researcher used statistical package for social sciences (SPSS) to analyze data. The data was coded, and entered to compute the measurements of the multiple regressions for the study. The results of the analysis were as shown in model summary table 4.4.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.832	0.692	0.660	0.09038

Adjusted R squared was used to work out coefficient of determination which expresses the variation in the dependent variable resulting from changes in the independent variable. From the findings in the above table the value of adjusted R squared was 0.660 an indication that there was variation of 66% on organizational performance due to aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning practices at 95% confidence interval. This indicates that 66% changes in organizational performance growth at Kenya Medical Supplies Agency in Mombasa County could be attributed to the aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning practices is the correlation coefficient which shows the relationship between the study variables. From the findings shown in the table above there was a strong positive correlation between the study variables as shown by 0.832.

Table 4.5 ANOVA

Model	Sum of squares	df	Mean	Square F	Sig
Regression	19.612	5	4.903	10,288	.00b
Residual	41.499	40	0.477		
Total	61.111	45			

From the ANOVA statistics in table 4.5, the processed population parameters, had a significance level of 0% which demonstrates that the data is perfect for inferring a conclusion on the population's parameter since the value of significance (p-value) is less than 5%. The calculated value was greater than the critical value ($10.288 > 1.984$) an indication that aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning practices significantly influence organizational performance specifically at Kenya Medical Supplies Agency in Mombasa County.

Table 4.6: Coefficient

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.032		.348	8.702	.000
	Aggregate Capacity Planning	.028	.127	.025	4.221	.026
	Capacity Scheduling	.148	.115	.160	3.292	.001
	Valuable Knowledge capacity	.080	.175	.064	2.459	.048
	Strategic capacity planning practices	-.067	.013	.116	4.455	.001

From the data in the above table the established regression equation that was used in this study was

$$Y = 3.032 + 0.028 X_1 + 0.148 X_2 + 0.080 X_3 + 1.112 X_4.$$

The above regression equation, therefore, revealed that aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning practices and organizational performance would be at 3.032, this means that a unit increase aggregate capacity planning would lead to increase organizational performance by a factors of .028, unit increase in capacity scheduling would lead to increase in organizational performance by factors of 0.148, a unit increase in valuable knowledge capacity planning would lead to increase in organizational performance by a factor of 0.080, a unit increase in strategic capacity planning practices would lead to increase organizational performance by a factors of 1.112. The study also found that p-value was less than 0.05, an indication that aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning practices significantly influence organizational performance.

Discussions

The study revealed that all the respondents had worked for the organization for periods not less than one year and therefore had enough experience to enable them understand the capacity planning techniques employed by the organization. This made the research to conclude that they had adequate experience to respond to give relevant information regarding effect of strategic capacity planning process techniques on performance of the Kenya Medical Supplies Agency branch in Mombasa County

The findings showed that majority of the respondents (68%) agreed that KEMSA in Mombasa County had adopted strategic capacity planning best practices while 32% of the respondents disagreed. This implies that management addresses the issue of strategic capacity planning best practices that directly benefits all sections in the organization from top to bottom. These results can be comparing with findings of a study carried in Guth, (2010) which revealed that strategic capacity planning best practices can be equated to the continuous and rapid movement of the organization's growth resulting from practices such as benchmarking.

From the findings, it was revealed that majority of the respondents agreed that information communication technology planning, organizational risk management planning, staff hiring planning and strategic planning were employed to a greater extent in the organization recording means of 4.79, 4.61, 4.56 and 4.53 respectively. From the findings, it can be inferred that having strategic capacity planning practices in an organization is a collective responsibility and that this can raise morale in an organisation and improve strategic management approaches. This can be equated to a study findings carried in Arawati, (2011) which argued that the signs of best strategic capacity planning practices such as commitment to total quality management, commitment to just in time, commitment to total cycle time reduction, long range strategic plans, supplier relationships, strategic cost management, training and professional development, service excellence, corporate social responsibility, learning, management and leadership are positively related to organizational performance.

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Most respondents agreed that confidence built in employees and clear organizational direction affected the performance of KEMSA in Mombasa. This is affirmed by means of 4.38 and 4.35 with standard deviation of 0.40 and 0.32 respectively. From this response it can be inferred that strategic capacity planning is a multidimension concept and can be expressed in a wider variation of features that forms the basis of organization's planning culture. This is also in agreement with the

findings of Mouritsen et al (2003). He revealed that the strategic direction of the organization's activities depends on its strategic capacity plans.

Majority of the respondents agreed that Capacity scheduling promotes mutual planning and problem-solving efforts recording a mean of 4.48 and standard deviation of 0.50. This implies that company dedicates resources to those relationships which will truly benefit from a partnership and supply management professionals and which are responsible for developing and maintaining effective business relationships with suppliers and customers.

5. SUMMARY, CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This section presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn are in quest of addressing the purpose of this study which was to determine the effects of strategic capacity planning techniques on the organizational performance of Kenya Medical Supplies Agency branch in Mombasa County. The specific objectives included to establish the effects of aggregate strategic planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning on the performance Kenya Medical Supplies Agency, Mombasa County branch.

5.2 Summary of Findings

The regression analysis revealed that aggregate capacity planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning practices and organizational performance would be at 3.032 ,this means that a unit increase aggregate capacity planning would lead to increase organizational performance by a factors of .028, unit increase in capacity scheduling would lead to increase in organizational performance by factors of 0.148, a unit increase in valuable knowledge capacity planning would lead to increase in organizational performance by a factor of 0.080 , a unit increase in strategic capacity planning practices would lead to increase organizational performance by a factors of 1.112.

5.2.1 Aggregate Capacity Planning

The study established that aggregate capacity practices were adopted in the Kenya Medical Supplies Agency as techniques of strategic capacity planning in their enterprise. These practices were found to be fundamental in building sound supplier relationships, team-based approaches to strategic capacity pat, proper use of technology, purchasing ethics, strategic capacity planning and capacity scheduling.

The study also discovered that the organization faces a number of challenges related to aggrege capacity planning as the process of planning and managing the overall capacity of organization's resources. Even though aggregate capacity planning aims at balancing capacity and demand in a cost-effective manner some organizations still fail to strike a balance in optimum management of cost demands. Often enterprise will admit they have capacity problem, but are unsure of what levers to pull to address capacity issues, nor are they sure of the ideal time to effect a change without causing major disruptions.

5.2.2 Capacity Scheduling

From the analysis the study established that there is capacity scheduling as a technique of strategic planning as adopted by the Kenya Medical Supplies Agency, Mombasa County at moderate level. The study also established that the managements desire to become more competitive in their respective enterprises and to increase profits through manufacturing. Client responsiveness, amplified output, lesser manufacturing costs, improved value, less cycle times, bottleneck control and operational predictability, among many other factors, are hot issues on manager's minds in most organizations. The attainment of the above-mentioned managerial desires calls for proper capacity scheduling.

5.2.3 Valuable knowledge Capacity planning

The study revealed that valuable knowledge capacity planning positively affects organizational performance at Kenya Medical Supplies Agency in Mombasa County. The study also determine that most business enterprises have access to ab elaborated pool of knowledge, be it their understanding of clients' wants and the business environment or the skills and experience of staff. This is also the case at Kenya Medical Supplies Agency in Mombasa County.

5.2.4 Strategic Capacity Planning

The results of the study indicate significant understanding on the relationship between capacity planning and performance of Kenya Medical Supplies Agency, Mombasa County, as an organization. The findings of this study revealed that majority of the respondents reached out into the study indicated that strategic capacity planning was adopted in their enterprise at a very high extent. The study established that the process of strategic capacity planning techniques in an organization required clear framework in order to enhance transparency and accountability. Strategic capacity planning practices and decisions that are open to reasonable scrutiny are capable of withstanding a public defensibility test in regard to fairness, equity and value for money in an organization. In addition, the study revealed that strategic capacity planning practices are more of part of a business's success for an enterprise. The study established that there is positive correlation between organizational performances the four specific objectives of this study, those are, aggregate strategic planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning.

5.3 Conclusion

5.3.1 Aggregate strategic planning

Thomson (2012) asserts that aggregate capacity offers a blue print on how an organization can determine the amount of yield and the time to produce it in to match sales to demand estimates in any manufacturing industry. According to Jaafaru et al., (2012), aggregate planning is meant for increasing production level plan that ensures actual operation of the resources of an enterprise is in equilibrium with the predicted product by product request with the objective of linking the business tactical plans to the operations processes. The study, therefore, concluded that aggregate capacity positively affects the performance of KEMSA, Mombasa.

5.3.2 Capacity scheduling

The concept of capacity scheduling is regarded as short range, shop floor day to day capacity planning action that concerns itself with the knowledge of how much work can be fashioned by a facility in a specified time frame. It is also about the understating of how to assign resources to ensure smooth and efficient running of organizational operations despite resource constraints that prevails in almost all enterprises (Otavio et. al., 2017). The study, therefore, concluded that capacity scheduling positively affects the performance of KEMSA, Mombasa.

5.3.3 Valuable knowledge capacity planning

Strategic capacity idea execution is not a top-down-approach. Consequently, the achievement of any execution effort rest on the level of involvement of middle managers. To generate the required reception for the execution, the affected middle directors' acquaintance (which is often underestimated) must already be accounted for in the building of the strategy. The study, therefore, concluded that valuable knowledge capacity planning positively affects the performance of KEMSA, Mombasa.

5.3.4 Strategic capacity planning

The study concluded that Capacity Planning is observed as a crucial component in operation management in any given organization. This is so it since it aids the association to manufacture products and services at its optimum level at a cost-effective and efficient manner. It, too, aids in abolition of wastes in general the operation management structure of an organization. Therefore, Capacity Planning in the Kenya Medical Supplies Authority in Mombasa County is as well weightier because it leads to a substantial percentage to the National GDP. It is very vital to note that from Capacity Planning Practices; Strategic Capacity Planning, Aggregate Capacity Planning and Finite Capacity Planning have been assumed in Kenya Medical Supplies Authority in Mombasa County at a very high extent and a moderate extent as well. Consequently, a lot of stress should be put in upholding them and even refining on them so that organizational performance at Kenya Medical Supplies Authority in Mombasa County will be sustainable in the long-run.

5.3.5 Organizational Performance

From the findings 98% of the responses agreed that KEMSA in Mombasa County measured their organizational performance based on profitability, 96% indicates increase in customer base as a measure of performance, increase in market share (that attracted 95% of the responses and use of quality product development attracted 93% of responses. The study further revealed that KEMSA in Mombasa County uses return on assets as another measure of performance as

indicated by 90% yes response rate. The study also revealed that the company used other measures of organizational performance which include quality and timeliness of processes, system productivity and system integrity, quality service delivery and return on equity for performance

5.4 Recommendation

5.4.1 Aggregate strategic planning

The study also recommends that Kenya Medical Supplies Agency in Mombasa County should have a clear framework for aggregate strategic planning in order to enhance transparency and accountability during the strategic capacity planning process

5.4.2 Capacity Scheduling,

The study also recommends that KEMSA, Mombasa, should improve its capacity scheduling practices. This will in return ensure decisions that are open to reasonable scrutiny are capable of withstanding a public defensibility test in regard to fairness, equity and value for money in an organization.

5.4.3 Valuable Knowledge Capacity Planning

The study also recommends that Kenya Medical Supplies Agency in Mombasa County should have a clear framework for valuable knowledge capacity planning in order to enhance transparency and accountability during the strategic capacity planning process. This will in return ensure decisions that are open to reasonable scrutiny are capable of withstanding a public defensibility test in regard to fairness, equity and value for money in an organization.

5.4.4 Strategic Capacity Planning

The study recommends that management of KEMSA in Mombasa County should guarantee that there is an appropriate focus on strategic capacity planning techniques owing to its positive effect on organizational performance. The above organization should continue to investing more aggregate capacity planning, capacity scheduling and valuable knowledge capacity planning.

5.5 Recommendation for further Study

From the findings, the R was 83.2% which means that the independent variables (aggregate strategic planning, capacity scheduling, valuable knowledge capacity planning and strategic capacity planning.) explained organisational performance to an extent of 83.2%. There are other effects which are not captured by the proposed model in this study which are captured by 16.8% which is not explained. Another study can be carried out to determine other effects explaining 16.8% of performance in view of the study context and scope. There are many effects of strategic capacity planning techniques on the organizational performance in Kenya government parastatal which the researcher did not evaluate including quality, delivery, flexibility among others. Future research would focus on on the following topics:Factor affecting strategic capacity planning in an organization , Impact of capacity scheduling in manufacturing industry in Kenya and Determinants of long-term aggregate planning in an organization.

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