INFLUENCE OF SUPPLIER MANAGEMENT ON PROCUREMENT PERFORMANCE
OF SIDIAN BANK IN NAIROBI COUNTY, KENYA

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Abstract

Purpose: *The main objective of this study was to determine influence of Supplier management on procurement performance of Sidian Bank in Nairobi County.*

Materials and methods; the study adopted the descriptive research design. Research design is defined as a plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance. The primary data of the study was collected by the use of a questionnaire. The study adopted the descriptive research design. Research design is defined as a plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance. The primary data of the study was collected by the use of a questionnaire. The primary data of the study was collected by the use of a questionnaire. The Statistical Package for Social Sciences (SPSS) computer software version 23.the found that a unit increase in Supply Chain Integration would lead to an increase in Sidian Bank procurement performance

Results: The study concludes Supplier management delivers a competitive advantage by harnessing talent and ideas from key supply partners and translates this into product and service offerings for end customers. Developing inventory monitoring performance and identifying areas for improvement is the joint, two-way performance scorecard.

Recommendations: The study recommends that strategic supplier management create shareholder value. Improving supplier strategies is a starting point, the application as well as the development of any long-term approach depends on company-specific conditions: the business design; the strategies on corporate, business, and functional levels.

Keywords: Supplier management, Early Supplier Involvement, Strategic Alliances, Vendor Managed Inventory

1.0 INTRODUCTION

1.1 Background to the Study

The study analyzed the influence of demand forecasting ,this chapter provides information on the global perspective of demand forecasting on supply chain ,Demand forecasting is the art and science of forecasting customer demand to drive holistic execution of such demand by corporate supply chain and business management (Connelly & Hult 2013).Demand forecasting approach involves qualitative and quantitative methods, such as the use of historical information and statistical techniques calculation based on the

information obtained from the market . Demand forecasting is used in production planning, inventory management, and used in making market predictions and marker requirements for specific given region needs in different economic cycles times (Day & Moeller2010).

According to Angeles & Nath, (2013), States that to maximize sales and marketing performance, organisation must accurately predict future customer demand requirements and use the information to strategies on competitive strategies based on product differentiations and customer segmentation (Fayezi & O'Loughlin,2016).This need for accurate predictions of demand is important for the organizations performance involved in e-business due to the ease with which buyers find alternative sellers that can satisfy their demand (Chiang & Pai 2010).

According to Day& Moeller (2010), discusses that Conventional methods of forecasting demand analyze the trend of past sales results and performed with the goal of the forecaster being to apply the most accurate statistical analysis techniques and econometric modeling to provide the most accurate forecast possible (Madhani, 2013). In the conventional methods, time series forecasting is performed which develops and uses various forecasting algorithms that attempt to describe the knowledge of the business and fluctuation trend of sales results as evidenced by past history in the form of a rule (Jonsson & Carey 2011).

According to Mutuerandu & Iravo (2014), Calculating demand forecast correctly is the process of determining the accuracy of forecasts made regarding customer demand for a product Palmatier, (2013) Understanding and predicting customer demand is vital to manufacturers and distributors to avoid stock-outs and maintain adequate inventory levels. While forecasts are never perfect, they are necessary to prepare for actual demand. In order to maintain an optimized inventory and effective supply chain, accurate demand forecasts are imperative (Potter & Christopher 2015).

According to Day& Moeller (2010), Demand Forecasting estimating the sales proceeds or demand for a product in the future there are several methods of demand forecasting applied in determining the products requirements in the market the purpose of forecasting, data required, data availability and the time frame within which the demand is to be forecasted is important as well different method varies from other techniques been used and hence the forecaster must select that method which best suits the requirement (Sherer, 2010).Under the survey method, the customers are contacted directly through market engagements and are asked about their intentions for a product and their future purchase plans. This method is often used when the forecasting of a demand is to be done for a short period of time (Jonsson & Carey 2011).

1.1.1   Global Perspective of Demand forecasting

According to Vorster. (2010). the objective to reduce excess inventory and to reduce shadow demand. In developed economies in the United States and India, the sales data is available at the retail shelf level even in smaller stores Sukati. & Anuar (2012), Added to that the certainties of lead times, demand forecasting and replenishment planning is a predictable and a repeatable process in japan. Demand forecasting tools used by the car manufacturing companies in Tokyo japan like DE mantra, APO and JDA; give very good forecast accuracy even at the manufacturing level. It has been noticed that in India, there are many factors which make it appropriate to just fit forecasting software to generate a sales forecast. It has been observed that the forecast by doing so is very accuracy even at the depot level (Palmatier, 2013).

According to Sherer, (2010). Most of the manufacturing firms in Europe and Canada develop a Master Production Schedule (MPS), the systems enables the procurement planners to establish distribution channels based on the customer demand requirement. The inventory policy system provides essential help with this

process to identify specified levels of inventories to be kept in the SKU and requirements per units at different stages of supply chain operation which the supply chain depart for the competing industries in East London to keep the stock and inventory cost (Palmatier, 2013). The location of the inventory is also considered during this process. The inventory policy system builds upon the forecast and the driver for distribution and production planning. It formalizes the process of setting stock policy and allows the planner to look at the tradeoffs between inventory investment and service levels. Naturally, the key objective of the strategies is to ensures that stock out levels are not experienced to maximize on the revenues as well keeping the inventory cost at minimum levels (Vorster, 2010)

According to Jonsson & Carey (2011). The use of cost and revenues analysis in the supply chain is also a useful approach for changing distribution practices, to meet increasing service demands of customers at higher labor costs and transportation cost management. The implementing a good systematic forecasting process is the foundation of a sound supply chain planning infrastructure. Benefit include a one-number forecast, greater stability of plans, less reactive decision making, improved morale, lower inventory levels, higher customer service levels, increased throughput in manufacturing, greater confidence throughout the organization, and reduced freight costs(Mutuerandu,2014).

1.1.2   Regional Perspective of Demand forecasting

productivity of the South African clothing industry was attributed to changing trends in the number of clothing production organizations, which together with a decline in manufacturing output and a fluctuation in employment had all contributed to complexities in demand planning. In effort to promote all-Africa production, the South African clothing industry has incorporated fashion products manufactured in the rest of Africa though effective demand forecasting process (Glover, 2017).

In order to improve demand planning practices in the clothing industry, South African clothing industry recommended to apply hierarchical and optimal demand planning approaches, which brought improvements to demand planning in the Gauteng clothing industry (Connelly & Hult (2013). recommended that clothing manufacturers consider the types of product offering before making decisions about adopting the hierarchical or optimal demand planning approaches. When planning for basic clothes, manufacturers considered a hierarchical demand planning approach, whereas the optimal demand planning approach was recommended for fashion clothes.

Chiang & Pai (2010), states that Supply chain demand forecasting systems help South African clothing industry tackle demand management with several targeted market, such as inventory forecasting and product requirements , all the way down to short-term tactical issues such as daily customer delivery scheduling. However, the length of the planning horizon determines the degree of flexibility and the methods used to manage the plant Another key area in which South African clothing industry planners and decision makers was proficient is inventory policy on relationship between safety stock, reorder point, reorder batch size and customer service levels (Angeles & Nath 2013).

 In West Africa an accurate forecast of customer traffic flow and product demand enables McDonald's subsidiaries to schedule enough servers, to stock enough food, and to schedule food production to provide high-quality service by developing distribution plans for the different targeted markets around days of supply or cover period (Fayezi & O'Loughlin,(2016). The forecasting application used by McDonald is JDA. It has taken steps to continuously evaluate and report its data. Daily point-of-sale (POS) data at item level, the product list, stock levels at the restaurants, and inventory and shipments at the distribution center are used as input for the forecast. In addition, the marketing plan is taken into consideration –whether the data concerns a standard

product or one on promotion as are the plans of each franchisee, whose own promotional campaign or local adaptations may need to be factored in. The forecast's output is validated by forecast accuracy measures (Jonsson & Carey 2011).

1.1.3   Local Perspective of Demand forecasting

Bernard Langat (2015), states that with consumption levels rising in Kenya, the possibility of selling to the East African country continues to attract international and local companies of all sizes. Manyega (2015), The distribution services sector include a few large supermarkets, a good number of medium-sized wholesalers and retailers and thousands of independent and often informal small retail shops but the sector is modernizing quickly, especially with the development of formal retail outlets such as shopping malls (Bernard ,2015).

The typical product distribution chain has links: manufacturer–agent–distributor–stockiest–customer. For example, South African Liquor Company Distell supplies local agents Distell Wine masters who supplies distributor Mwalimu Wines & Spirits. Mwalimu then sells to stockiest Checkered who in turn sells to bars and such outlets (Palmatier, 2013). Nakumatt, distributors are increasingly being locked out of the supply chain as more operators adopt vertically integrated business models.

First customer moving goods Enterprises in Kenya are seeking accurate forecasting of demand to stay ahead of the competition and also to increase their top lines and bottom lines. With shrinking lead times, enterprises need to not only control supply chain costs but also manage their inventories better and respond to global supply needs at increased speed and accuracy. (Kepher & Oduma, 2015). Tyson Foods, Unilever and United Biscuits Demand Forecasting Services have a proven track record of helping enterprises overcome these bottlenecks by improving forecasting accuracy, thereby enabling better capacity and production planning, and formulation of pricing and promotion strategies (Mutuerandu & Iravo, 2014).

According to Chiang & Pai (2010), Demand forecasting and customer needs analysis are critical for inventory management which mostly involves customer moving goods Enterprises. Businesses buy inventory based upon demand forecasts in Kenya the grocery stores increase their stock of certain items during holiday's season because they know from past data that demand increases (Connelly & Hult, 2013). The businesses mostly rely on the accurate demand forecasting and estimation methods, as well not over purchasing or under buying much since this lead to Businesses with too much inventory adding on the operating cost some of it to time and expiration dates. Businesses with too little inventory will upset customers and miss revenue opportunities (Manyega, 2015).

Kepher & Oduma (2015) states that The ERP system in Tyson Foods, Unilever and United Biscuits systems are integrated at several data points, careful consideration been taken to ensure all data is up to date and accurate. The ERP system are highly customized and/or spread over multiple servers and databases. Therefore, the best results are usually achieved through an integrated ERP system that covers all the underlying business functions within the manufacturing industries in Kenya and the east Africa market (Connelly & Hult, 2013).

1.1.4   Overview of Sidian Bank

Sidian Bank Ltd is a leading fast-growing commercial Bank, headquartered in Nairobi, with almost 40 branches throughout the country. In addition to microfinance services, the Bank also provides a wide range of other Banking services. (Michira, 2010). Sidian Bank is rooted in a charity project that started in 1984 to support micro- and small enterprises through NGO-run programmers. The Bank is a medium-sized financial services provider, serving the urban and rural poor and small-to-medium business enterprises in Kenya (Mutegi, 2017).

Sidian Bank re-organized itself into four entities: Sidian Bank Group This is the parent company. It owns, either wholly or partially, the other three subsidiaries Sidian Bank Development Agency, This agency carries out research and developmental assistance work for the group Sidian Bank Advisory Services, This Company provides consultancy services for a fee. In 2015, Centum Investment Company completed its acquisition of a majority stake in the Bank (Mutegi, 2017).

Supply planning has been evolving in Sidian Bank to create distribution plans from plants to distribution centers (DCs) in its 40 subsidiaries to stores based on forecast and target inventory levels, respecting storage, production and transportation constraints. Multi-echelon inventory planning that leverages target customer service levels to determine inventory required at distribution centers and retail locations have been developed with economic order quantities to determine replenishment cycle that minimizes transportation and carrying costs, with constraints on case on available stock.

1.2 Statement of the Problem

The Banking industries face the challenges on demand forecasting due to a lack of knowledge regarding forecasting and planning techniques. Often, key decision makers have little formal training in the areas of forecasting, inventory planning, production planning, distribution planning or scheduling and processes. Many are simply following past practices, which may be outdated, overly simplistic, and yield undesirable outcomes (Mutegi, 2017).

According to Bernard (2015), states that Sidian Bank with inventory typically comprising between 25% and 40% of assets, demand uncertainty is also often the single largest influence on stock levels. With one considers the fact that improvements in forecasting that can reduce forecast error by 15% and a system can help increase Bank operational output by 10% while reducing inventory levels by 20%. According to Mutegi (2017), conducted study and found that the poor demand forecast inaccuracy was in the range of 10%-25% significantly lowering buffer inventories safety stock and finished goods inventory hence increasing operational cost at 30 %, With the Poor inventory planning and ineffective distribution effect another 15-30% hence reduction in critical goods inventories, thus increasing costs and building up of dead stock in the Sidian Bank warehouse. This Impacted to the user department and their orders of ksh 100,000.00 every week. Due to the mismanaged demand Impact before this resulted in 7-10 lead time on deliveries hence disruption on finance, sales, and marketing and human resource operations (Mutegi, 2017).

According to Wathe & Arasa (2015), therefore, implementing good systematic forecasting process is the foundation of a sound supply chain planning infrastructure. The above studies didn't focus on aspect of supplier management in demand forecasting. According Madhani (2013) Demand Chain Management on Enhancing Customer Value Proposition the study focused on Increasing Customer Satisfactions hence factors addressing demand management and supply chain integration were not antiquity addressed .There for this study seeks to fill this gap by establishing the influence of demand forecasting on procurement performance of Sidian Bank in Nairobi County

1.3 Objectives of the Study

1.3.1 General Objective of the Study

The main objective of this study was to determine influence of Supplier management on procurement performance of Sidian Bank in Nairobi County

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

i.   To determine how Early Supplier Involvement affects procurement performance of Sidian Bank in Nairobi County

ii.   To assess how Strategic Alliances Procurement performance of Sidian Bank in Nairobi County.

iii.   To evaluate how Vendor Managed Inventory affects Procurement performance of Sidian Bank in Nairobi County

LITERATURE REVIEW

2.1 Introduction

This chapter presents previous studies that have been done, and theories advanced towards demand forecasting. Therefore, it has theoretical review focusing on theories that demand forecasting. Secondly, it has the empirical review of the studies that have been done on demand forecasting. A conceptual framework included summarizing the literature reviewed.

2.2 Theoretical Review

The theoretical literature review helps establish what theories already exist, the relationship between them, to what degree the existing theories have been investigated, and to develop new hypotheses to be tested. Often, this form is used to help establish a lack of appropriate theories or reveal that current theories are inadequate for explaining new or emerging research problems. The unit of analysis can focus on a theoretical concept or a whole theory or framework (Fink, 2005). Defee (2010) provide a summary analysis of the theories being used in demand forecasting on procurement performance.

2.2.3 Partner Selection Theory

The study was based on Partner Selection Theory in establishing influence of Supplier management in determining the influence of Demand Management demand forecasting on procurement performance of Sidian Bank in Nairobi County. Partner selection literature is very limited and focused on the criteria for choosing partners rather than on the process of partner selection), and then analyzes the then need to use a scenario-based approach to represent demand uncertainty and develop a stochastic programming model that selects suppliers to minimize expected procurement and agreement costs while meeting service requirements associated relational contract, an ongoing relationship in which these interactions occurring (Saffu, 2000). Most articles assume a rational decision-making process based on very specific selection criteria. Existing partner selection literature assumes a straight-line start-to-finish selection process (Saffu & Mamman, 2000). The main supplier collaboration activities include sharing information about product design and manufacturing, solving quality-related problems jointly and work out future development plans together (Maritim & Ochiri 2015)

Sustainable supplier development and sustainable supplier collaboration have positive relationships with supplier performance, while sustainable supplier selection, sustainable supplier monitoring and sustainable supplier collaboration have positive influence on buyer some business alliances form as a result of personal ties between key decisions makers (Sherer, 2010)

They used questionnaires to gather data from 152 respondent firms on their trading partner selection criteria. Six factors appeared to be most important including strategic commitment, trading partner flexibility, and

communications. Some articles and theories have been developed regarding partner selection in international alliances. Resource-based and Public Hospitals al learning theory support observed partner selection among emerging and developed markets in North America and Europe (Hitt & Dacin, 2000). Buyer–supplier relationship is a vital sub-dimension of buyer–supplier performance. It focuses on the relationship commitment and quality between buying firms and key suppliers. Developed market firms from Canada, France, and the USA chose their partners based on unique competencies and local market knowledge and access (Saffu & Mamman, 2000).

2.2.3 Supplier management

Supplier management is the discipline of strategically planning for, and managing, all interactions with third party organizations that supply goods and/or services to an organization in order to maximize the value of those interactions (Tynjala, 2012). In practice, supplier management entails creating closer, more collaborative relationships with key suppliers in order to uncover and realize new value and reduce risk of failure.

Early Supplier Involvement (ESI) is a form of vertical collaboration between supply chain partners in which the manufacturer involves the supplier at an early stage of the product development process (Thirlwall, 2013). Involving suppliers early in the NPD process is to gain better leverage of suppliers' technical capabilities and expertise to improve product development efficiency and effectiveness (Tynjala, 2012).

Strategic alliance is a processes when one or more business assets or have expertise that will help the other by enhancing their businesses (Black and Schrieffer, 2010). Strategic alliances develop in outsourcing relationships where the parties desire to achieve long-term win-win benefits and innovation based on mutually desired outcomes.

Palmatier, (2013). Vendor Managed Inventory is a business models in which the buyer of a product provides certain information to a supplier vendor of that product and the supplier takes full responsibility for maintaining an agreed inventory of the material, usually at the buyer's consumption location. A third-party logistics provider can also be involved to make sure that the buyer has the required level of inventory by adjusting the demand and supply gaps (Tynjala, 2012)

2.2.4 Supply Chain Performance

Supply Chain Performance crosses company boundaries since it includes basic materials, components, subassemblies and finished products, and distribution through various channels to the end customer (Betty, 2011). Building overall performance measures and essential performance indicators is vital to keeping track of demand and potential intervention (Larson and Halldorsson 2014). The accumulated data result in better demand forecasts, which be incorporated with an extensive supplier-communications program. These details help suppliers handle assets more effectively, which reduces expenditures (Vorster, 2010).

Inventory levels proper maintenance and information regarding inventories helps to make decisions like whether to take discounts or not, the size of an order to be placed, when to order. The total costs associated with inventory management may be reduced by analyzing the lot size to be acquired, the offer of a discount on a various lot sized and the timing of order (Tynjala, 2012). Palmatier, (2013). On Cost reduction to reduce material losses Inventory management focus to eliminate or remove the losses and misappropriation of materials. This is done by maintaining the proper stock of materials with utmost care.

According to Andreas and Robert, (2013) states that Keeping inventory without the proper analysis, there will be a chance of overstocking, which will increase the cost of carrying the inventories or under-stocking of

inventories that create a problem in a smooth operation of a business (Sherer, 2010). One of the main objectives of the inventory management is to minimize the risk caused due to overstocking of inventory

To win in the new environment, supply chains need continuous improvement. To achieve this organization need performance measures, or metrics, which support global Supply Chain Performance improvements rather than narrow company-specific or function-specific metrics which inhibit chain-wide improvements (Szymczak, 2013)
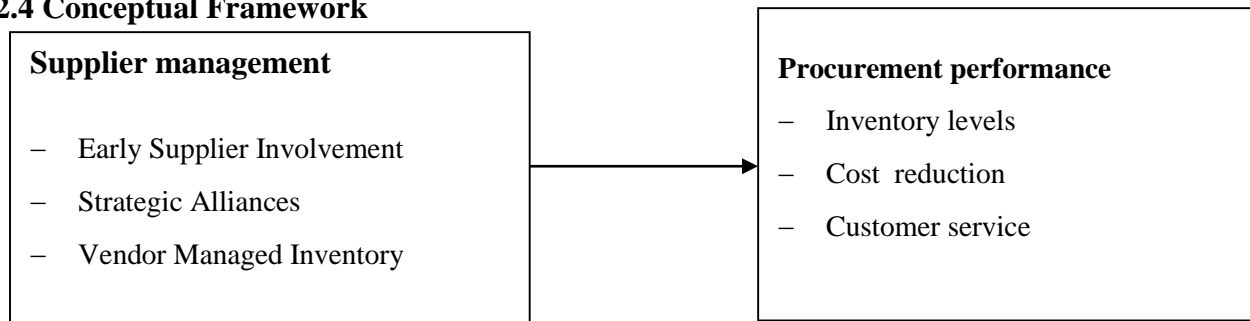
2.3.4 Supplier management

Manyega (2015), carried study on Effects of Supplier Selection on Procurement Performance of Public Institutions: The findings revealed Closer long-term relationships with suppliers imply the use of joint quality planning by forming of quality requirements and product specifications, use of quality control and joint production planning such use of JIT system) between buyer and supplier the study strongly recommended that Suppliers should be viewed as partners. They should be more involved in co-operative problem solving, in new product development and in workgroups with buyer's representatives in order to identify areas of improvement

Kepher, and Oduma, (2015) carried a study on the Role of Supplier Management on Procurement Performance in Manufacturing Sector in Kenya: the aim of the study was to identify the Supplier development activities which vary widely and when include raising performance expectations. The supplier management activities included education and training on quality requirements and know-how for supplier personnel, recognition of supplier's achievements and performance in the form of rewards. The study advised that it was important for the placement of engineering and other buyer personnel at the supplier's premises and direct capital investment by the buying firm in the supplier

Maritim and Ochiri (2015) conducted a study on the Effect of Vendor Rating on Procurement in Public Sector in Kenya. Strategic suppliers. The objective of the study was to identify the top tier of supplier classification which involves those suppliers termed strategic. The study revealed that these suppliers are long-term business partners that are committed to the utilization of strategic and operational capabilities of both firms. The study found that The more complex the supply market is, the fewer number of suppliers that will be deemed strategic from the study literature provide the study concluded that Strategic suppliers are in essence partners with the firm categorized by bringing high value to the firm

2.4 Conceptual Framework

Supplier management	Procurement performance
− Early Supplier Involvement − Strategic Alliances − Vendor Managed Inventory	− Inventory levels − Cost reduction − Customer service

3.0 METHODOLOGY

The study adopted the descriptive research design. Research design is defined as a plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance. The primary data of the study was collected by the use of a questionnaire. The study adopted the descriptive research design. Research design is defined as a plan, structure and strategy of investigation conceived to obtain answers to

research questions and control variance. The primary data of the study was collected by the use of a questionnaire. The primary data of the study was collected by the use of a questionnaire. The Statistical Package for Social Sciences (SPSS) computer software version 23 that found that a unit increase in Supply Chain Integration would lead to an increase in Sidian Bank procurement performance   . The study adopted the descriptive research design. Research design is defined as a plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance. The primary data of the study was collected by the use of a questionnaire. The study adopted the descriptive research design. Research design is defined as a plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance.

RESEARCH FINDINGS ANALYSIS AND DISCUSSION

4.1 Introduction

The study sought to determine influence of demand forecasting on procurement performance of Sidian Bank in Nairobi County. Specifically the study looked at supply chain strategy, supply chain maturity, supply chain power and supply chain distance. This chapter presents the data analysis and interpretation of study findings.

4.2. Response Rate

The results indicated in Table 4.1 indicated that out of 121 questionnaires administered, 108 were completed and returned. This constituted to 89.3% response rate. The drop and pick later technique was used to collect administer questionnaire and collect them. The commendable response rate was sufficient to make indicate the findings and draw implications based on research objectives. Mugenda and Mugenda (2013) indicated that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and above is excellent. Therefore the response rate of 85% was excellent for the study.

Table 4.1: Response Rate

Response	Frequency	Percentage
Returned questionnaires	108	89.3
Unreturned questionnaires	13	10.7
Total	**121**	**100**

4.3 Results of pilot test

Table 4.2 illustrates the findings of the study concerning the reliability analysis. In this study, reliability was ensured through a piloted questionnaire that was subjected to a sample of 12 respondents. This represented 10% of the sample size. From the findings, the coefficient for Demand Management was 0.7905, Cronbach's alpha coefficients for Inventory Planning was 0.7980, Cronbach's alpha coefficients for Supplier management was 0.8261while Cronbach's alpha coefficients for Supply Chain Integration was 0.7370. These were greater than 0.6- 0.7 thresh hold for this study. According to Sekaran (2006), this implied that the study survey instrument was reliable and met the requirement of an acceptable data collection instrument

Table 4.2: Results of pilot test

Variable	Cronbach's	No of Item
Demand Management	0.7905	12
Inventory Planning	0.7980	12
Supplier management	0.8261	12

Supply Chain Integration	0.7370	12

4.4 Demographic Information

4.4.1 Gender of the respondents

To get a better understanding of the research demographics of population in general and the sampled population in specific, the study enquired about the gender of the participants. A presented in the figure 4.1 below provides that, 52% of the participants were male, while the remaining 48 were female. This gender composition in the sampled population was relative to the number of male and female employees working in the Bank .Perceptions differ among survey respondents when they are compared by gender:
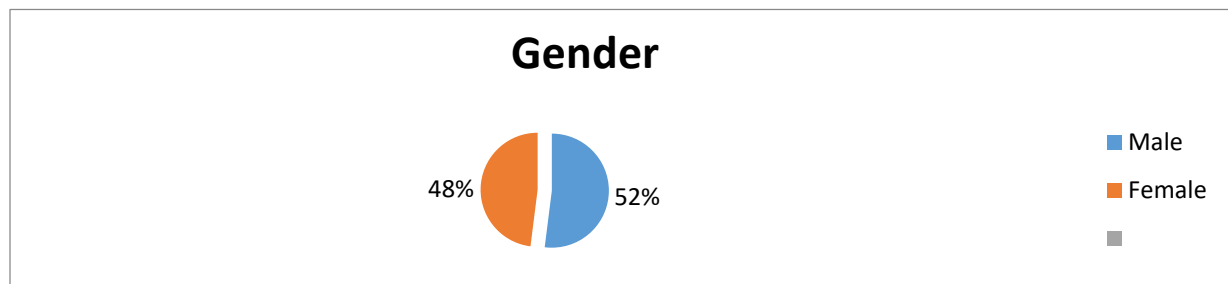

Figure 4.1: Gender Distribution

4.4.3 Education Level of the respondents

As observable form the table Table4.3, majority of the participants had a bachelor's degree or university diploma. The college graduate and a population of 42.5%, Bachelor's degree with 43.7% of the population and Master's degree 13.8 % This implied that with half of the population of all procurement specialists with college diploma and master's degree. Proving that they had a better understanding of the importance of the demand forecasting benefits to the Bank and the entire Banking industry

Table 4.3: Education Level of the respondents

Education level	Frequency	Percent
college	46	42.5
Bachelor's degree	47	43.7
Master's degree	15	13.8
Total	**108**	**100.0**

4.4.4 Job designation of the respondents

The study obtained the job designation of the respondents picked from a sample of staff members involved in inventory handling as provided in the table 4.4. The respondents were requested to indicate their job category. From the findings in Table 4.4 which showed that the percentage of staff working as Branch Manager was 9.25 % of the population, Procurement Ass. 6.48%. Majority of the respondents working Store Keepers with 26.85% whiles those in Dispatch at 15.54 %Officers and Logistics & Customer Service38.88 % of the respondents This implied that data was collected from Bank employees who were majorly involved in the management of

Bank inventories and supply chain operations. The response to a problem is possible determined by the type of occupation respondents are engaged in and hence variable occupation viable for the accurate information.

Table 4.4: Education Level of the respondents

Designation	Frequency	Percent
1 Branch Manager	10	9.25
2 Procurement Ass.	7	6.48
3 Store Keepers.	29	26.85
4 Dispatch & service delivery Officers.	20	15.54
5 Logistics & Customer Service	42	38.88
Total	**108**	**100.0**

4.4.5 Respondents Period of Working

From the findings, the respondents had worked at Sidian Bank as indicated in Table 4.5 below, 32.4 % had worked for a period of 6 to 10 years, followed by those who had worked for duration of 11 to 15 years, with 26.9% And 17.6% of the respondents had worked for less than 5 years. This is a clear indication that most of the respondents had worked long enough in Sidian Bank and were well experience in the demand management strategies. Incorporate demand planning to help predict future demand patterns to respond more nimbly to changing customer needs. The increasing need to sense market demand and quickly translate the requirements into supply chain responses experiences.

Table 4.5: Respondents Period of Working

Years	Frequency	Percent	Cumulative Percent
1-5 years	19	17.6	17.6
6-10 years	35	32.4	50.0
11-15 years	29	26.9	76.9
over 16 years	25	23.1	100.0
Total	**108**	**100.0**	

4.5 Descriptive Analysis

4.5.3 Supplier management

Early Supplier Involvement

The respondents were asked to indicate the extent to which the various factors influenced Early Supplier Involvement on procurement performance. The finding is shown in Table 4.10 that respondents strongly agreed that engaging suppliers early in the component development and design process improve the odds for success and provide advantages in today's competitive and global marketplace supported by a mean of 3.85 and standard deviation of 0.87.the research provided that Relying on the expertise of the supplier in areas of material and component suitability save time and cost in the development process with majority of the respondents agreeing with a mean 4.29 and standard deviation of 0.76 . The respondents further contributed that automatically propagates demand information to all trading partners and internal departments and external suppliers early enough to manage inventory levels which was supported by mean score of 4.08 and standard deviation 0.91.This finding is consistent with that of Madhani (2013). engaging in a collaborative forecast with the supplier provide your supplier partner with better forecast information they can provide a better fill rate.

Table 4.6: Early Supplier Involvement

Statements	Min.	Max.	Mean	SD
Engaging suppliers early in the component development and design process can improve the odds.	1.00	3.00	3.85	0.87
Relying on the expertise of the supplier in areas of material and component suitability can save time	2.00	4.00	4.29	0.76
Automatically propagates demand information to all trading partners and internal departments and external suppliers early enough	1.00	4.00	4.08	0.91

Vendor Managed Inventory

From the findings in Table 4.10 the respondents strongly agreed that VMI makes it less likely

that a business will unintentionally become out of stock of a good and reduces inventory in the supply chain due to the fact that inventory is basically managed by the supplier with 21.30 %, with 69.44% of the respondents agreeing only 2.78 % of the respondents disagreed. The finding in the study further provided that the need for purchase order corrections and reconciliation is removed which further reduces purchasing costs which enhances Cost saving can also be found in reduced warehouse costs with 70.37% 0f the respondents agreeing 2.78% of the respondents been neutral .the respondents further contributed that when Manufacturers work their customers' promotional plans into forecasting models, implies that enough stock is available when their operations during high demand are running which was supported by 37.96 % of the respondents strongly agreeing ,42.59% agreeing and 13.89% been neutral only 1.85% disagreed. This finding is in agreement to that of Gattorna (2105) that VMI's goal is to reduce uncertainty that arises when the supplier is blind to the customer's inventory status. Supplier carries out its task of maintaining predetermined inventory and avoiding stock outs
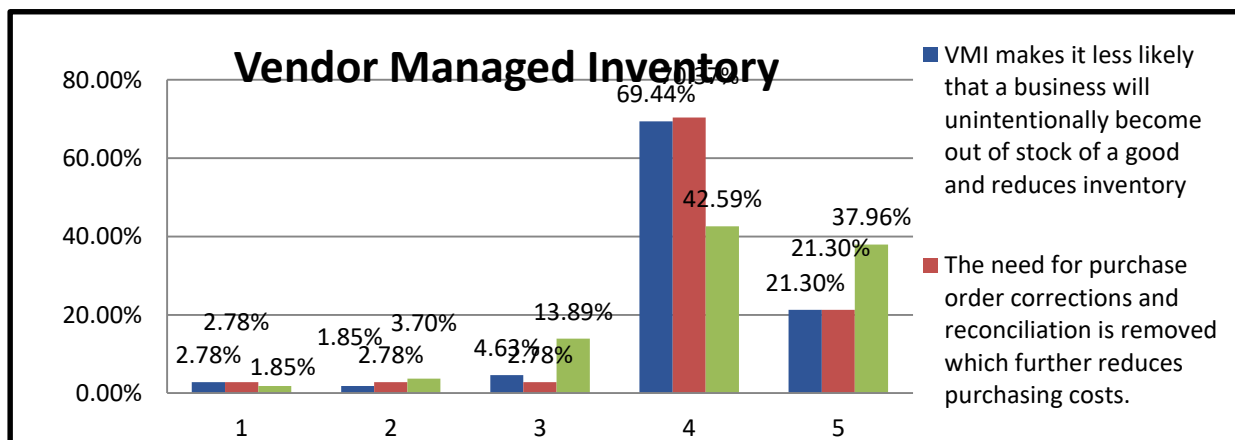

Figure 4.2: Vendor Managed Inventory

4.5.5 Procurement Performance

Inventory Stock outs

Various statements on Inventory Stock outs strategies implementation were identified and the respondents were asked to indicate the extent they agree with each of the identified statements using a scale of 1 to 5 where; 1= SD - Strongly Disagree 2=D - Disagree, 3=N - Neutral, 4=A - Agree and 5= SA - Strongly Agree. Mean and standard deviation were calculated for ease of comparison and generalization of findings. The respondents

to great extend agreed that Safety stock protects organization operations against unforeseen variation in supply and/or demand with a mean of 4.17 and standard deviation of 0.76 .the findings further provided that when organizations avoid stock outs they keep customer service and satisfaction levels high with a mean 4.07 and standard deviation of 0.94the respondents to concurred that To compensate forecast inaccuracies only in case demand is bigger than the forecast, Its purpose is to prevent disruptions in manufacturing or deliveries supported by mean of 3.94 and standard deviation of 0.72This finding is in line with Sukati & Anuar (2012) that of Organizations can capitalize on market opportunities through a customer-centric lens and mobilize quickly to respond to changes in customer demands.

Table 4.7: Inventory Stock outs

Statements	Min.	Max.	Mean	SD
Safety stock protects against unforeseen variation in supply and/or demand	1.00	4.00	4.17	0.76
Avoid stock outs to keep customer service and satisfaction levels high	1.00	3.00	4.07	0.94
To compensate forecast inaccuracies (only in case demand is bigger than the forecast, Its purpose is to prevent disruptions in manufacturing or deliveries	2.00	4.00	3.94	0.72

Efficiency &effectiveness

The Table 4.8 shows the respondents response of the level to which the agreed with the given statements that relate to the improved operational efficiency on performance of Sidian Bank in Nairobi. From the findings, majority of the respondents strongly agreed that Through predicted delivery lead-times, logistics expenses, and inventory assets are good data points to find a path to efficiency and effectiveness with a mean score of 3.92 and standard deviation of 0.87.the respondents further provided that through the studies efficient supply chain has great impact on its services, customer satisfaction and it also helps to reduce the cost supported by a mean 4.00 and standard deviation of 0.77 .the respondents strongly agreed that The technology and resources that third-party logistics companies provide create flexibility, contain or reduce costs, increase space, enhance visibility, and most importantly, enables the organization to focus on their products and customers with a mean score of 4.01 and standard deviation of 0.93.The following studies support the findings of this study Wathe & Arasa (2015) that the integration of demand management into the supply chain focus on profitability often leads organizations to streamline their processes and develop flexibility and fluid scheduling so they can respond to market fluctuations in a nimble manner.

Table 4.8: Efficiency &effectiveness

Statements	Min.	Max.	Mean	SD
Through predicted delivery lead-times, logistics expenses, and inventory assets are good data points to find a path to efficiency and effectiveness.	1.00	3.00	3.92	0.87
An efficient supply chain has great impact on its services, customer satisfaction and it also helps to reduce the cost.	2.00	4.00	4.00	0.77
The technology and resources that third-party logistics companies provide create flexibility, contain or reduce costs,	2.00	4.00	4.01	0.93

4.6 Regression Analysis

The study found in the table below, the R Square, which is the coefficient of determination, was used to measure the dependent variable variations and their effect on the dependent variables. As observed, The R

Square value was 0.632; this value is between 0 and 1. Analytically, this shows that 63.2% of variations in the dependent variable can be explained by the independent variables. That 63.2% of variation in Sidian Bank supply procurement performance which is explained by Early Supplier Involvement, Strategic Alliances, Vendor Managed Inventory while the remaining 36.8% is associated with factors that re not within the scope of this study. This study hence identifies the three variables as important aspect to consider in demand forecasting of the banks operation to achieve procurement performance.

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.737[a]	.632	.702	.321

a. **Dependent Variable:** procurement Performance
b. **Predictors: (Constant)** Early Supplier Involvement, Strategic Alliances, Vendor Managed Inventory

4.7 Beta Coefficients

The established regression equation was

Table 4.10: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.186	.161		8.376	.002
	Early Supplier Involvement	.114	.125	.316	3.135	.001
	Early Supplier Involvement	.179	.312	.227	2.068	.011
	Vendor Managed Inventory	.689	.102	.683	6.679	.022

a. **Dependent Variable:** procurement Performance
b. **Predictors: (Constant)** Early Supplier Involvement, Strategic Alliances, Vendor Managed Inventory

From the regression findings, the regression equation becomes:

$Y = 1.186 + 0.114X_1 + 0.179 X_2 + 0.689 X_3 + \varepsilon$

From the findings in the regression analysis, if the factors Early Supplier Involvement, Strategic Alliances, Vendor Managed Inventory) were held constant procurement Performance would be at 1.186.

A unit increase in Early Supplier Involvement,, would lead to an increase in Sidian Bank procurement performance by 0.114 In view of this finding, Liu (2016) established that By developing and validating a multi-dimensional construct of Early Supplier Involvement, and by exhibiting its value in improving operational performance of firm, it provides SCM managers with useful tool for evaluating the efficiency of their current SCM practices. A unit increase in Strategic Alliances, would lead to an in Sidian Bank procurement performance by 0.179A unit increase in Vendor Managed Inventory would lead to an increase in Sidian Bank procurement performance by 0.689

The model is given as follows;

$Y = 1.186 + 0.114X_1 + 0.179 X_2 + 0.689 X_3 + \varepsilon$

Where:-

Y = procurement performance

β_0 = constant

X_1= Early Supplier Involvement,

X_2= Strategic Alliances

X_3= Vendor Managed Inventory

ε=Error Term

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter the researcher makes summary of the study then draws conclusion and gives recommendations based on the research findings and analysis done in previous chapter. The summary is a brief overview of the research process while conclusion is the report of the crucial findings and the recommendations are suggestions and advice based on the research findings

5.2 Summary of the Finding

This study sought to ascertain the influence of demand forecasting on procurement performance of Sidian Bank in Nairobi County. The specific objectives that guided that study included to find out the role of Demand Management on procurement performance of Sidian Bank in Nairobi County.to establish the role of Inventory Planning on procurement performance of Sidian Bank in Nairobi County; to determine the role of Supplier management on procurement performance of Sidian Bank in Nairobi County and to examine the role of Supply Chain Integration on procurement performance. This study employed a descriptive research design to achieve these objectives.

5.2.3 Supplier management

The study determined that effect of Supplier management on procurement performance of Sidian Bank in Nairobi County it was found that Supplier Identification and Engagement are critical step in developing a collaborative program that defines the relevant level of intervention with suppliers. Being able to give your supplier a time-phased forecast is one approach by leveraging a solution that automatically compares future orders to supplier capacity thresholds. These way future orders are automatically adjusted to fit within the supplier's production capacity with known supply chain disruption events are also accounted for automatically. It is end-to-end collaboration made easy additional segments of the demand plan such as event or promotion uplift and daily profiles

5.3 Conclusion

The study concludes Supplier management delivers a competitive advantage by harnessing talent and ideas from key supply partners and translates this into product and service offerings for end customers. Developing inventory monitoring performance and identifying areas for improvement is the joint, two-way performance scorecard. These KPIs are shared between customer and supplier and reviewed jointly, reflecting the fact that the relationship is two-way and collaborative, and that strong performance on both sides is required for it to be successful.

5.4 Recommendations

The study recommends that strategic supplier management create shareholder value. Improving supplier strategies is a starting point, the application as well as the development of any long-term approach depends on company-specific conditions: the business design; the strategies on corporate, business, and functional levels;

the overall professionalism of a company's purchasing management the supply market the portfolio of supply and the variability in purchasing volumes.

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