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**INFLUENCE OF ENTERPRISE RESOURCE PLANNING SYSTEM ON PERFORMANCE OF NATIONAL SOCIAL SECURITY
FUND NAIROBI COUNTY, KENYA**

Muiruri, S. W., & Moronge, M.

INFLUENCE OF ENTERPRISE RESOURCE PLANNING SYSTEM ON PERFORMANCE OF NATIONAL SOCIAL SECURITY FUND NAIROBI COUNTY, KENYA

Muiruri, S. W.,¹ Moronge, M.²

^{*1} Master Student, Department of Entrepreneurship and Procurement, College of Human Resource Development, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

² Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

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ABSTRACT

The main objective of the study was to find out the influence of enterprise resource planning system in supply chain performance in Pension Fund Nairobi County, Kenya. Its specific objectives were to establish the role of distribution requirement planning, demand planning system, inventory scheduling system and supplier scheduling system on supply chain performance in Nairobi County, Kenya. The study used descriptive research design and the focused was on Pension Fund in Nairobi County. The unit of observation was Procurement Manager, Logistics Manager and Logistics Manager. The study used census survey design. The target population of respondents was 106 employees from different departments in County Pension Fund. The stratified sampling design was used to guide the study in obtaining the sample size of the selected departments. The data was collected through use of semi-administrated questionnaires. The data was analyzed using statistical package for social sciences (SPSS) Version 21.0 which was the computer software for analysis. The study concluded and found that inventory scheduling system and supplier scheduling system are the main contributors to supply chain performance in County Pension Fund. The departments engaging in the system enables the use of product formulations and replenishment algorithms which has added value to production of the firm hence allowing it to enhance its competitiveness. The study recommended that the management should come up with effective policy framework and policy measures to help in guiding the implementation of demand planning system in the firm. This would enable a rapid growth and development of the firm in terms of service delivery, reduction of cost and easy decision making hence, enhancing performance

Keywords: *Distribution Requirement Planning, Demand Planning System, Inventory Scheduling System, Supplier Scheduling System, Supply Chain Performance*

INTRODUCTION

Globally enterprise resource planning system is used to calculate quantities to be delivered to a location in order to match customer demand and maintain the desired service level. Enterprise resource planning system includes both heuristics and mathematical optimization methods to ensure that demand is covered and transportation, production, and warehousing resources are operating within the specified capacities. The interactive planning desktop makes it possible to visualize and interactively modify planning figures (Davis, 2013). Enterprise resource planning system (ERP) is a category of business-management software typically a suite of integrated application that an organization can use to collect, store, manage and interpret data from many business activities, including: product planning, cost manufacturing or service delivery, marketing and sales, inventory management and shipping and payment. ERP provides an integrated view of core business processes, often in real-time, using common databases maintained by a database management system.

ERP systems track business resource cash, raw materials, production capacity and the status of business commitments: orders, purchase orders, and payroll. The applications that make up the system share data across various departments (manufacturing, purchasing, sales, accounting, etc.) that provide the data. ERP facilitates information flow between all business functions, and manages connections to outside stakeholders (Payne, 2013).

According to Mark (2016) the advent of the web as a major means of conducting business transactions and business-to-business communications, coupled with evolving web-based supply chain performance technology, has resulted in a transition period from "linear" supply chain models to "networked" such as enterprise resource planning system. Various

software industry studies indicate that over the next five to seven years, inter enterprise business relationships, information structures, and processes was evolve dramatically. Enterprises were blend internal production and supply chain processes with those of their external trading partners.

Currently, organizations are finding creative ways to mitigate supply chain costs while maintaining operational efficiency. New approaches, technologies, and methodologies are aiding with these cost-cutting measures to drastically reduce supply chain costs and increase customer satisfaction. The background of supply chain planning and execution systems, their role in an organization, and how they are aiding in collaboration is among the major concern of the most companies globally. However, there has been a continuous and significance growth of enterprise resource planning system could has helped organization to be more effective (Lewis, 2013).

Enterprise resource planning system (ERP) integrates purchasing, manufacturing, distribution, and transportation so that comprehensive tactical planning and sourcing decisions can be simulated and implemented on the basis of a single, global consistent model.

Supply chain performance is the 21st century operations strategy for achieving organizational competitiveness. Kenyan public sector are attempting to find ways to improve their flexibility and responsiveness and in turn competitiveness by changing their operations strategy in order to match global perspective, methods and technologies that include the implementation of procurement and paradigm and enterprise resource planning system ERP. However, a thorough research and supply chain performance development is carried out with the objective of bringing out pertinent factors and useful insights into the role and implications of effective ERP

in supply chain performance of public sector in East Africa. Effective ERP requires a high degree of coordination and fast decision making process to allow for the supply network planner to perform its function of ensuring supply chain streamlining and efficiency in performance. The perils available on ERP have been classified using suitable criteria and then critically handled to develop an efficient ERP in supply chain performance (Omondi, 2014).

Statement of the Problem

As the economy grows, more requirements emerge and the operation and management of this needs become more complex. More than one department is required so that these operations can be effectively carried out.

According to Public Procurement Oversight Authority (2015) it is believed that the procurement department through the ERP system can contribute directly to helping in achieving maximum profit realization. This has been difficult more in public sectors more so in National social security fund because of delayed ineffective procurement procedures since they tend to be reluctant in implementing this system. When it comes to most public sectors it becomes more complicated to coordinate the planning and management of this operation. This is because of the lack of integration between the procurement department and the user department thus leading to lack of harmonization of the process thus creating shortages and also dissatisfaction both to the customers and organizational needs (Wayne, 2014).

Organizations exist to make profits from their operations, while minimizing costs. ERP system has proven to be a significant contributor to the minimization of costs. For example, Omondi (2014), organizations with ERP system report lower costs. For every \$1,000 spent on purchases, this difference amounts to \$0.31.

While at first glance, this may not seem much, for an organization with input costs of \$1 billion, this can

mean a difference of \$310,000. As such, there is a significant need for organizations to embrace ERP system to enable them to effectively address the high costs associated with the lack of the system. This has motivated CPF to slowly start on embracing ERP. A system among others is the enterprise resource planning (ERP) which is an organization's management system which uses a software application to incorporate the automation and facilitation the flow of data between critical back-office functions, which may include financing, distribution, accounting, inventory management, planning, human resources, manufacturing and other operating units (Lyson, 2013). Many analysts feel that today's global business environment-products and services customized to suit the individual needs of millions of customers, delivered over multiple timelines in a continuous basis would have been impossible without such enterprise software (Sadagopan, 2003)

Objectives of the Study

This study sought to examine the influence of enterprise resource planning system in supply chain performance in County Pension Fund Nairobi, Kenya. The specific objectives were:-

- To establish the role of distribution requirement planning of performance in National Social Security Fund in Nairobi County, Kenya
- To determine the demand planning system of performance in National Social Security Fund in Nairobi County, Kenya
- To establish the influence of inventory scheduling system of performance in National Social Security Fund in Nairobi County, Kenya
- To find out the influence of supplier scheduling system of performance in National Social Security Fund in Nairobi County, Kenya

LITERATURE REVIEW

Theoretical Framework

Institutional Theory

Institutional theory is a widely accepted theoretical posture that emphasizes rational myths, isomorphism, and legitimacy. Institutional theory focuses on the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemes; rules, norms, and routines, become established as authoritative guidelines for social behavior (Scott, 2014). Different components of institutional theory explain how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse. Scott (2014) asserts that Institutions are social structures that have attained a high degree of resilience. They are composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life. Institutions are transmitted by various types of carriers, including symbolic systems, relational systems, routines, and artifacts. Institutions operate at different levels of jurisdiction, from the world system to localized interpersonal relationships. Institutions by definition connote stability but are subject to change processes, both incremental and discontinuous.

According to Scott (2014) institutions are composed of cultural-cognitive and regulative elements that, together with associated activities and resources give meaning to life. The author explains the three pillars of institutions as regulatory, normative and cultural cognitive. The regulatory pillar emphasizes the use of rules, laws and sanctions as enforcement mechanism, with expedience as basis for compliance. The normative pillar refers to norms (how things should be done) and values (the preferred or desirable), social obligation being the basis of compliance. The

cultural-cognitive pillar rests on shared understanding (common beliefs, symbols, shared understanding) in Kenya, public procurement is guided by the PPDA Act (2007) regulations and guidelines which are from time to time issued by the PPDA Authority only and which must be complied with to the latter by all PPOA and providers

Contingency Theory

According to Hoffer (2005) contingency theory implies that firms adapt to changes in their environment by modifying their approach to competition in order to maintain or enhance performance. The willingness and ability of organizations to deal with changes in their operating environment has been documented as a cornerstone of firm strategy and performance. Contingency theory provides a basic rationale for emphasis on flexibility-based strategies that represent a strategic response to emerging threats argued that firms utilize resources as necessary to achieve specified objectives within a specific competitive environment and under specific conditions (Porter, 2000).

The ability to manage disruption and develop plans in case of a contingency involves early involvement of participants and improved visibility and communication. Risk management within the organization has placed many professionals in new territory and forced the application of new techniques. Previous experiences and training may not have adequately prepared managers to prepare contingency plans. Even when trained in plan development, many organizations lack the ability to modify planning processes to meet their specific needs. Clearly, in management and contingency planning, one size does not fit all (Christopher & Lee, 2004).

As a better understanding of the causes of risk, including the identification, assessment, and management of risk has been reached, the realization

that there is no single method of controlling risk has also been highlighted. Recent studies on situational risk management seek to identify potential methods that are appropriate for specific situations. Along with the development of new techniques comes the application of models from other disciplines (Niraj, 2001).

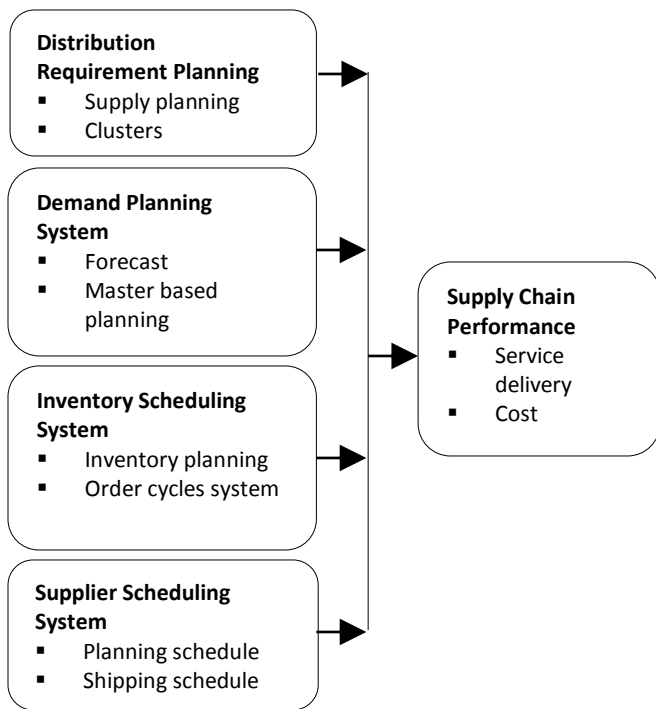
The aim of the contingency plan is to minimize potential loss by identifying, prioritizing, and safeguarding assets that need protection with the goal of the organization being able to save valuable resources in the event of a disruption or disaster. Contingency planning means developing a plan to be resilient or prepared to respond to and restore operations after an unexpected disruption occurs. Planning is the integration of formalized procedures and resource information that organizations can use to recover from a disaster that causes a disruption to business operations (Barnes, 2001).

Distribution Requirement Planning

Effective distribution requirement planning is described as a comprehensive set of processes, which engages all people in a company on process improvements in movement of goods. Distribution requirement planning has not been given the recognition it deserves in developing countries, in most retail sector, regardless of the effort by the partners like the World Bank, the International Trade Organization, the United Nations Conference on Trade and Development, the World Trade Organization and others. This could be deliberate or sheer ignorance on the value distribution requirement planning could contribute to any organization (Boer, 2012).

According to Wayne (2012) delaying will worsen the already deteriorating performance, loss of professionals, and organizations will continue incurring unnecessary costs. However, it is important that appropriate performances are implemented. It should not be any performance. The issue of basing on financial performance and neglecting or ignoring non-financial performance is not helping distribution requirement planning because only partial performance is considered. Distribution is the purposeful application of information in the design, production, and utilization of goods and services and in the organization of human activities. The role of distribution in shaping access to value chains should be understood in relations to changing features consumption. Consumption is increasing characterized by food user safety awareness of the parallel prices of globalization and localization of consumer tastes, social and environment concern. There has been increased important for issues of innovation may be seen as a question of competition or corporation. Innovation entails tangible, intangibles, high and intermediate (John, 2010).

Conceptual Framework



Independent Variables **Dependent Variable**

Figure 1: Conceptual Framework

Demand Planning System

Demand planning system is the ability to create a demand plan, based on historical sales data. The demand plan resulting from this function is the starting point for supply planning. The demand plan contains forecasted demand for an item, using standard forecasting methods. If the past data is inappropriate or insufficient, the forecast is entered manually. Good connectivity between the end customer and manufacturer through which the manufacturer has direct access about end customer order. In order to enable them to make better forecast and better respond to the customer inventory and adoption of supply chain management, customer who is the retailer provides manufacturer with demand forecast, which was used to determine stock up level and fill rate at customer's site. Demand volatility is key problem faced by most supply chain nowadays. Poor service level between firm and supplier may be influenced by a number of factors such as demand uncertainties, different planning calendars used by firm and supplier, un-notified product shortage and conflicting performance measures (Ochieng, 2014).

According to the findings of Southard (2002) he concludes that by using customer demand in implementing supply chain management, a firm's may help reduce firm costs in the whole supply chain. Higher demand variability will lead supplier in to inefficiency in delivering product and increase delivery costs. Eliminating one layer of information flow (supplier knowing demand outlook originally from end-customer through firm), demand variability for supplier has been reduced by 75% to 26%. This eventually reduced supplier cost through optimization of delivery schedule, on time product delivery and substantial inventory reduction, improved supplier lead time more predictable replenishment visibility and increased supplier performance in delivering correct product mix (Powell, 2011).

Inventory Scheduling System

Inventory scheduling system is the process of arranging, controlling and optimizing work and workloads in a production process or manufacturing process. Inventory scheduling system is used to allocate plant and machinery resources, plan human resources, plan production processes and purchase materials. Given that inventory in all its forms generally represents one of the top three expense lines for nearly all companies, there is a universal need for applying the right discipline to each step in the process.

While in the perfect world, all inventories are consumed daily, we must operate businesses in a less than perfect environment. The challenge is: how close can you get to perfect before Just in Time inventory scheduling system becomes a little too late. Inventory scheduling system in its most efficient form incorporates many different technical applications of inventory scheduling system models. Such concepts as safety stock, economic ordering quantity, cost of goods, inventory turnover, customer managed inventory and a vendor managed inventory, whole spectrum of underlying inventory scheduling system tools play a critical role in what is inventory scheduling system (Migwi, 2012)

Supplier Scheduling System

According to Simons (2014) supplier scheduling system is defined as a purchasing approach that provides suppliers with schedules rather than with individual hard-copy purchase orders. Normally, a supplier scheduling system will include a business agreement contract for each supplier, a weekly (or more frequent) schedule for each supplier extending for some time into the future. The process spans the whole life cycle from identification of needs, through to the end of services contract or the end of the useful life of an asset.

Modern day supplier scheduling system is managed by sophisticated system applications that are designed to manage complex inventory plans and to a large extent contain processes that initiate and streamline the operations and inventory management. In the wake of improvements in the communication technology, companies are deploying one single (ERP) system across all factories, offices, departments and locations, thereby ensuring seamless transactions, visibility and controls.

Supply Chain Performance

According to Alex (2011) supply chain performance ensures that there is no overstocking, obsolescence or deficiencies in organization which are all caused by poor inventory management system, moreover in some instances a low rate may be appropriate such as where higher inventory management occur in anticipation of rapidly rising prices or expected market shortages, conversely a high turnover rate may indicate inadequate inventory management which may lead to a loss in business as the inventory is low hence leading to stock shortages. Procurement function has not been given the recognition it deserves in developing countries, in most public entities. This could be deliberate or sheer ignorance on the value the supply chain performance function could contribute to any organization (Paul, 2013).

Customer satisfaction is improved by use of innovation because the raw materials are of the right quality required. It enhances quality of goods and services to be consistent in all circumstances. It also improves the productivity of the organization because the materials have no defects. The participation by both ERP and supply chain performance in development of clear specification and comprehensive standardization is required for the organization to evolve to world class supply management through modern innovation. Proactive development of specification and standardization can

aid an organization in reducing total cost of production.

Supply chain performance thus ensures that an organization is kept on toes with upcoming innovation because in case of poor procurement of raw materials the production volume can be reduced (Jessop, 2012).

METHODOLOGY

The study used descriptive research design, which is the most applicable for the study because the study focuses on describing independent variables which Electronic resource is planning. Orodho, (2009) observes that a descriptive survey involves collecting information about people's attitude, opinion. The sample population was from diverse backgrounds and be knowledgeable in the study area. The unit of analysis was National social security fund in Nairobi County and the unit of observation was one procurement manager, logistics manager and stores manager of the selected security funds firms respectively. The target population for this study constituted 106 staff from Procurement department from the selected pension funds firms in Nairobi County. The researcher used questionnaires to collect primary data. The study generated both qualitative and quantitative data from the questionnaire as there were both open and closed ended questions and prepared in readiness for analysis of editing. Descriptive as well as analytical techniques were used in analyzing the data. A multiple regression model was used to show the relationship between the independent variables to the dependent variable as follows;

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \Sigma$$

Where

Y=Influence of electronic resource planning and supply chain performance

X1=Distribution requirement planning

X2=Demand planning systems

X3=Inventory scheduling systems

X4=Supplier scheduling systems

In the model, β_0 = the constant term while the coefficient β_{1-4} was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables x_1, x_2, x_3 and x_4 . The error (Σ) term captured the unexpected variation in the model.

RESULTS

Distribution requirement planning

The respondents were asked to indicate their level of agreement on various statements relating to the influence of electronic resource planning on performance of National Social Security Fund in Nairobi County, Kenya using the scale where Strongly

agree -SA, Agree -A, Moderate -M, Disagree -D, Strongly disagree -SD. The findings of the study were in agreement with those of Ogunlana, (2012) that conducted a study and found out that the distribution requirement planning of performance can greatly influence the performance outcomes of the selected National social security fund in Nairobi county Kenya. If the procurement manager, logistics manager and the store's manager are well experienced, knowledgeable and well conversant with the overall performance of the organization, then there is a high likelihood of successful completion of the management of electronic resource planning by focusing on customers. The results were as shown in table 1.

Table 1: Distribution requirement planning

Statements	Strongly disagree	Disagree	moderate	Agree	Strongly agree	Mean	Std. Dev
The system enables replenishment of lead times.	4.1%	6.6%	9.9%	49.6%	29.8%	3.94	1.02
The system controls over inventory.	4.1%	10.7%	14.0%	69.9%	35.5%	3.88	1.14
The system enables prevention of shortages.	10.7%	5.0%	17.4%	79.3%	28.1%	3.69	1.24
The system enables forecasting of demands.	6.6%	9.1%	5.0%	56.2%	23.1%	3.80	1.10
						3.83	1.12

On influence of distribution requirement, the respondents were asked to indicate the extent at which distribution requirement planning influenced the performance of National Social Security Fund. The results indicated that managing distribution requirement planning is an essential requirement in the performance of National Social Security Fund. The findings were in agreement with the findings of Nyangilo (2012) who found that inadequate quality, dissatisfaction of distribution requirement planning needs and poor management systems are the major causes of poor performance of the security funds in Kenya.

The general observation made according to the findings was that majority of the respondents strongly believed that distribution requirement planning has a positive role in supply chain performance in County Pension Fund. It was also noted that its implementation leads to the following benefits the system enables replenishment of lead times, the system controls over inventory, the system enables prevention of shortages, the system targets safety stock and the system enables forecasting of demands. However, it can be noted that proper evaluation and development of this element should

be maintained in order to give assurance of the above benefits.

Planning System

The second objective of the study was to determine the influence of planning system on supply chain performance in National social security fund Nairobi County, Kenya. Planning systems were developed to Guide the performance Process. Respondents were asked to indicate the types of planning system they developed to guide the performance process. The findings were in consistence with those of Zwikael & Saleh, (2016) that budget involves continuous

planning and shows the required performance for each time period. The results were obtained by running data on frequencies through SPSS. The respondents were asked to indicate their level of agreement on various statements relating to determine the influence of demand planning system on performance in National social security fund in Nairobi County. The findings were in consistence with Ondari, (2013) who conducted a study and found out that government procedures for planning are bureaucratic and thus most tenders once approved by the parliament wait longer period before actual release of funds. The analysis was on Table 2.

Table 2: Demand planning system

	Strongly degree	Disagree	Moderate	Strongly Agree	Agree	Mean	Std. Dev.
The system creates statistical forecasts.	4.1%	15.7%	9.1%	39.7%	31.4%	3.79	1.17
The system secures constrained forecasts.	4.1%	4.1%	11.6%	40.5%	39.7%	4.07	1.03
The system helps in building consensus forecasts.	4.1%	5.0%	8.3%	42.1%	40.5%	4.10	1.03
The system enables importing of historical sales data.	4.1%	6.6%	9.9%	49.6%	29.8%	3.94	1.02
The system allows supply and demand collaboration.	6.6%	17.4%	5.0%	31.4%	39.7%	3.80	1.31
Average						3.94	1.11

On determining the influence of demand planning system on performance, the respondents were asked to indicate how demand planning system influenced the performance of National social security fund in Nairobi County, Kenya. The results implied that planning system is an essential requirement in the performance of National social security fund. The findings are in line with those of Sharma, (2012) who argues that system planning can influence the behavior and decisions of employees by translating business objectives, and providing a benchmark against which performance is assessed.

The general observation made according to finding showed that most of the respondents do support that demand planning system has an influence on performance in National Social Security Fund in Nairobi County. It was found out that most respondents strongly agreed that the system secure constrained forecasts which in turn increases the productivity rate of the firm however, the system allows supply and demand collaboration which enhances decision making which has a role in increasing service delivery in supply chain performance. This had however enabled a constant

growth and development of the firm for the past three years leading to the following benefits the system creates statistical forecasts, the system secure constrained forecasts, the system helps in building consensus forecasts, the system enables importing of historical sales data and the system allows supply and demand collaboration.

Inventory scheduling system

The third objective of the study was to establish the influence of inventory scheduling system of performance in National Social Security Fund in Nairobi County, Kenya. Respondents were asked to indicate the extent to which Inventory Scheduling system experience influenced performance in National Social Security Fund in Nairobi County,

Kenya. The findings were in agreement with Gundechea, (2012) who states that lean manufacturing experience, just-in-time method, are the most important success factors for the good performance in National Social Security Funds. The respondents were asked to indicate their level of agreement on various statements relating to determine the influence of inventory scheduling on performance in National Social Security Fund in Nairobi County. The findings were in consistence with Ondari, (2013) who conducted a study and found out that government procedures for continuous improvement are bureaucratic and thus most tenders once approved by the parliament wait longer period before actual release of funds.

Table 3: Inventory scheduling system

	Strongly agree	Agree	Moderate	Disagree	Strongly Disagree	Mean	Std. Dev
The system enables the use of product formulations and replenishment algorithms.	4.1%	6.6%	9.9%	49.6%	29.8%	3.94	1.02
The system creates procurement requirements for all raw materials as production schedules are developed.	4.1%	10.7%	14.0%	35.5%	35.5%	3.88	1.14
The system calculates daily time-phased raw material needs and recommend purchase.	10.7%	5.0%	17.4%	38.8%	28.1%	3.69	1.24
The system enables modification of key operating parameters such as product transitions.	6.6%	9.1%	5.0%	56.2%	23.1%	3.80	1.10
The system integrates raw material planning with production scheduling.	8.3%	10.7%	12.4%	32.2%	36.4%	3.78	1.28
Average						3.82	1.15

The general observation made according to the findings showed that majority of the respondents strongly agreed that inventory scheduling system has positive effects on performance for example the system creates procurement requirements for all raw

materials as production schedules are developed which ensures continuous and smooth flow of goods and services in a firm and the system integrates raw material planning with production scheduling which enhances reduction of cost were strongly supported by the respondents. This can be seen as a

development to the firm which in the long run it normally translates in increase in productivity rate hence, increasing its revenue income and enhances competition in Kenyan public sector and allows day to day innovation of new techniques that enables easy attainment organizational goals and objectives.

Supplier scheduling system

The fourth objective of the study was to find out the influence of supplier scheduling system of performance in National Social Security Fund in Nairobi County, Kenya. The respondents were asked to indicate the progress of supplier schedule system on performance on National Social Security Fund in Nairobi County, Kenya. From the findings, 44% of the

respondents indicated that supplier scheduling system was done annually, 40% indicated that it was done semiannually, 6% indicated supplier scheduling system was done quarterly, 5% indicated it was done monthly the other 5% indicated that was done weekly. Respondents were then asked to indicate the aspects that were assessed during quality planning. From the results, 42% of the respondents indicated that supplier progress was assessed during supplier planning, 27% indicated that all aspects were assessed, 18% indicated that supplier budget was assessed during supplier planning, 9% indicated performance quality. Majority of the respondents indicated that performance progress was assessed.

Table 4: Influence of Supplier scheduling system

Statement	Strongly disagree	disagree	moderate	agree	Strongly agree	Mean	Std. Dev
The system communicates long-range forecast information to suppliers.	4.1%	4.1%	8.3%	39.7%	43.8%	4.15	1.02
Planning schedules system provides a detailed view of expected delivery.	4.6%	4.1%	10.7%	34.7%	46.3%	4.15	1.05
The system builds revision schedules.	4.1%	9.1%	17.4%	42.1%	27.3%	3.79	1.07
Shipping schedules communicates firm requirements.	4.7%	6.6%	9.9%	49.6%	29.8%	3.94	1.02
The system builds simulation schedules for personal use.	4.1%	10.7%	14.0%	35.5%	35.5%	3.88	1.14
Average						3.98	1.06

The general observation made according to the findings was that majority of the respondents highly support that supplier scheduling system improves

supply chain performance in County Pension Fund. It was also noted that planning schedules system provides a detailed view of expected delivery which reduces production breakdown and the system

communicates long-range forecast information to suppliers which has a role on productivity rate due to continuous supply of goods and services this are among the key major elements in supplier scheduling system that has a role on supply chain performance however, it also enables the attainment of the following benefits planning schedules system provides a detailed view of expected delivery, the system builds revision schedules, shipping schedules communicates firm requirements and close monitoring of shifts in demand and the system builds simulation schedules for personal use.

Performance in National Social Security Fund in Nairobi County

From the findings in it was concluded that supply chain performance had a role in enchantment of efficiency in Kenyan Public Security funds however, it

was noted that distribution requirement planning which has a role in enhancing continuous production, demand planning system which enhances reduction of waste and inventory scheduling system which improves service delivery stands out as the key element of enhancing its performance however, it also enables the attainment of the following benefits supplier scheduling system encourages competition in public sector, demand planning system enhances reduction of waste, inventory scheduling system improves service delivery and distribution requirement planning encourages innovation and creativity hence, the firm has really underwent a tremendous growth and development in ensuring maximum customer satisfaction, this has however enabled the firm to attain its organizational and objective goals.

Table 5: Correlation Analysis

		Quality management	Customer focus	Continuous improvement	Lean management	Quality planning
Distribution requirement planning	Pearson Correlation Sig. (2-tailed)	1				
Demand planning system	Pearson Correlation Sig. (2-tailed)	0.68** 0.004	1			
Inventory scheduling system	Pearson Correlation Sig. (2-tailed)	.280** 0.002	0.017 0.504	1		
Supplier scheduling system	Pearson Correlation Sig. (2-tailed)	.746** 0.000	0.009 0.205	0.119 0.194	1	
performance	Pearson Correlation Sig. (2-tailed)	.911** 0.000	-.187* 0.040	0.012 0.463	.654** 0.000	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis

Table 6: Model Summary

Indicator	Coefficient
R	0.966
R Square	0.933
Adjusted R Square	0.931
Standard Error	0.1067847

Analysis of Variance (ANOVA)

The results indicate that the model was statistically significant. Further, the results implied that the independent variables, Distribution requirement planning, Demand planning system, inventory scheduling system, Supplier scheduling system were good predictor of the influence of enterprise resource planning on performance. This was supported by an F statistic of 405.814 which was greater than f critical of 7.4 and the reported p=0.000 which was less than the conventional probability of 0.05 significance level.

Regression of Coefficients

The results showed that Distribution requirement planning had a positive and significant effect on influence of enterprise resource planning on performance in National Social Security Fund (r=0.061, p=0.000). Demand planning system had a positively and significantly effect on the influence of enterprise resource planning on performance (r=0.182, p=0.000). Inventory scheduling system had a positively and significantly effect on the influence of

enterprise resource planning on supply chain performance (r=0.179, p=0.000). Supplier resource planning had a positive and significant effect on influence of enterprise resource planning on performance(r=0.537, p=0.000).

The specific model was;

$$Y = 0.160 + 0.537 X_1 + 0.182 X_2 + 0.179 X_3 + 0.061 X_4$$

Where; Y is influence of enterprise resource planning on performance

X1 is distribution planning system

X2 is demand planning system

X3 is inventory scheduling system

X4 is supplier scheduling system

The equation above reveals that holding Distribution requirement planning, Demand planning system, inventory scheduling system, Supplier scheduling system and enterprise resource planning of performance would be at 0.160

Table 7: Regression Model (Overall)

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	18.510	4	4.627	405.814	0.000
Residual	1.323	102	.011		
Total	19.833	106			

Table 8: Regression of Coefficients

	B	Std. Error	Beta	t	Sig.
(Constant)	0.160	0.134		1.199	0.023
Distribution requirement planning	0.061	0.020	0.074	2.993	0.003
Demand Planning system	0.182	0.018	0.245	10.118	0.000
Inventory scheduling system	0.179	0.030	0.197	6.063	0.000
Supplier scheduling system	0.537	0.022	0.793	24.097	0.000

CONCLUSIONS AND RECOMMENDATIONS

According to research question one which sought to find out how distribution requirement planning contributes to performance in National Social Security Fund in Nairobi County. It was concluded that distribution requirement planning significantly contributes to performance in County Pension Fund. Other respondents even noted that County Pension Fund management had formulated measures and policies that had helped in its maximum execution; they also indicated that the management created a department of distribution requirement planning. This however, comes with the following benefits the system enables replenishment of lead times which has a role in increasing productivity, the system controls over inventory which reduces waste and cost, the system enables forecasting of demands which enhances planning, the system enables prevention of shortages which enhances customer satisfaction and the system targets safety stock which reduces shortages. It can also be concluded that research and development on distribution requirement planning should always be carried out in order to enhance its performance.

According to research objective two, it was concluded that the respondents indicated that demand planning system suggestively contributes to supply chain performance in County Pension Fund with majority of the respondents indicating that since the adoption and implementation of an effective and flexible demand planning system the firm has always ensured effective coordination and synchronization of organizational operations, this had however, ensured smooth flow of goods and services of the firm thus

enabling easy attainment of organizational objectives and goals though, they also argued that the demand planning system of the firm lacks an effective policy framework and policy measures that govern its implementation and execution, this has however, became a major challenge to the organization in the process of implementing demand planning system in County Pension Fund management system.

According to objective three it was concluded that inventory scheduling system contributes to supply chain performance in County Pension Fund, they even indicated that firm is engaging in the system that enables the use of product formulations and replenishment algorithms which has in way added value to production of the firm hence allowing it to enhance its competitiveness however, they indicated that the organization does not fully support inventory scheduling system, it also indicated that the firm continuously changes its system approaches hence, proofing to be so hard for the firm to maintain long term maintenance of the system which that can be very indispensable to its productivity rate.

According to objective four, from the findings, it was concluded that supplier scheduling system contributes to performance in National Social Security Fund in Nairobi County. They even indicated that National Social Security Fund in Nairobi County had created a sub-department that monitors and controls supplier scheduling system of its product and services and it is really benefiting the firm in terms of customer satisfaction, flexibility, increase competitive advantage, service delivery and response to demand however, others stated that the policy measures and

framework that governs and guides the implementation of supplier scheduling system in the firm is outdated and they suggested that it is necessary for the management to conduct a research and development in order to come up with new policies and measures in the aim of improving effective supplier scheduling system.

Recommendations

The department should always ensure continuous and intensive research and development in order to ensure maximum exploitation of distribution requirement planning in enhancing contribution to performance in the firm, this greatly contribute to easy attainment of organizational goals and objectives. The study also recommended that the management should come up with effective policy framework and policy measures to help in guiding the implementation of demand planning system in the firm. This would enable a rapid growth and development of the firm in terms of service delivery, reduction of cost and easy decision making hence, enhancing performance. The study recommended that the management should always at all-time

regulate the rate of changing its system approaches and instead learn to maintain long term approaches that was in turn benefit the firm economically, in addition they should consider the research and development of existing systems. Finally the study recommended that an effective research and development should be carried out by the management in order to ensure that they come up with new ideas and techniques that will enhance the performance of supplier scheduling system.

Suggestions for Further Research

This study looked at four independent variables and established that distribution requirement planning and inventory scheduling system contributes up to 65% while demand planning system and supplier scheduling system contributes up to 35% on supply chain performance in National Social Security Fund in Nairobi County However, from the above views the researcher feels that more research should be carried out on supplier scheduling system but majorly on demand planning system since these are some of the major elements that contribute to performance in Kenyan public sector.

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