Stock Control Management Practices and Organizational Performance Of The Kenya Electricity Generating Company in Eastern Region, Kenya.

Njeru Kenneth Ngari and Dr. Anthony Osoro

Msc Procurement and logistics, Jomo Kenyatta University of Agriculture and Technology

DOI: 10.29322/IJSRP.14.03.2024.p14735 https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14735

> Paper Received Date: 18th February 2024 Paper Acceptance Date: 19th March 2024 Paper Publication Date: 26th March 2024

Purpose: The purpose of this was to establish the relationship between stock control management practices and organizational performance of the Kenya electricity generating company in eastern region, Kenya. The specific objectives of this study were; inventory optimization, EOQ, safety stock levels and tracking stock respectively. The study will employ a descriptive research design.

Index Terms- Inventory optimization, EOQ, safety stock levels, tracking stock and organizational performance

I. INTRODUCTION

S upply chain management is one of the most essential aspects of conducting business. Many people outside of the direct community (in research and industry) do not realize this because an ordinary consumer often experiences only its effects (Boateng, 2019). Bastas and Liyanage (2018), they recall the times when the item that you wanted was not available in your favorite garments or grocery store, recall how many times you got a great 'deal' at the end of the season, recall the sudden increases in gas prices due to shortages, recall the times when your e-commerce site promised availability but later could not send the required product or sent you the wrong product, or recall the times when your customized product (like a personal computer or kitchen cabinet) was delayed to a great extent.

1.1. 1 Inventory Theory

In order for this type of inventory policy to be successful, Zappone and his employees communicate often. He checks the level of his inventory and the price of copper daily, and discusses pending sales with his sales crew (Feidler & House, 1994). All in all, the mathematical models in this paper cannot help Zappone's company. Because the price of copper fluctuates so much from day to day, it is hard to say when exactly to order. Perhaps, with more studying and a more complex model, we could formulate an optimal policy for Zappone. This would require more complex statistical analysis in order to deal with the fluctuating price of copper. Another reason we would need a more in depth model is

This publication is licensed under Creative Commons Attribution CC BY. https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14735 that although Zappone orders the copper today, at today's prices, he will be charged the price of copper on the day it ships, roughly 5 weeks later. Even though he does not use a model, Zappone has done well for himself. He sells copper all over the world: Japan, South America, Europe, and all 50 states. In addition, he is environmentally friendly because about 80% of the copper he uses comes from recycled copper and only 20% comes from new copper being mined from the ground. However, the price of copper, whether it is reusable or new, does not differ, so this does not change his inventory policies. This shows that an inventory model is helpful but not necessary for all companies.

1.1.2 Resource Based Theory

Resource based theory is the study of how the exterior resources of an organization affect the performance of the organization. According to (Feidler & House, 1994), the procurement of exterior resources such as production scheduling software's is a significant tenet of both the strategic and tactical management of any company, an implication in the procurement efficiency of the buying firms especially in tapping into the connection with suppliers as their important and dependable associates through resources such as just in times systems of delivery. Thus, this theory props up the concept of supply chain management, resource-based theory proposes that actors lacking in crucial resources will seek to create relationships with others in order to acquire required resources such as sales scheduling resources (Eisenhard & Graebner, 2007). Just like sellers on buyers for precious markets and buyer will depend on suppliers for external resources. Also, organizations endeavor to alter their reliance relationships by lessening their own reliance or by increasing the dependence of other organizations on them.

1.1.3 Transaction Cost Economic Theory

Transaction cost economics (TCE) has been the predominant theory used to examine business sourcing and inventory control systems from a just in time perspective (Christopher, 2009). TCE tenets imply that sourcing decisions involve a comparison of the just in time and economic order quantity. The total transaction costs included in the inventory control systems include the direct economic costs associated with sourcing service development and

delivery, transaction-based monitoring and control costs incurred to ensure that the purchaser acts in the best interest of the firm. Inventory control transaction costs also increase with asset specificity, where the increased complexity of interactions required to produce sourcing outputs necessitates increased monitoring and control costs to protect source investments (Feidler & House, 1994). TCE offers a very rational view for evaluating make versus buy decisions, where the sourcing choice is made strictly based on the economic merits of market versus hierarchy costs associated with each individual inventory control systems. In such cases, the level of analysis implied by TCE moves from the individual transaction to the network of inventory control systems at the organizational level, with firms making inventory control systems that maximizes the economic value added from interactions with sourcing partners (Feidler & House, 1994).

2.1 Inventory Optimization

Inventory Optimization argues that mathematical inventory models can only take us so far with supply chain management. In order to optimize inventory policies, we have to use probabilistic simulations (Mogoi & Osoro.2022). The book explains how to implement these models and simulations step-by-step, starting from simple deterministic ones to complex multi-echelon optimization. Inventory management is a significant component of supply chain management (Ogunleye, 2016). We have discussed a method based on genetic algorithm to optimize inventory in supply chain management we also focus on how to specifically determine the most probable excess stock level and shortage level required for inventory optimization in the supply chain such that the total supply chain cost is minimized .we apply our methods on three stage supply chain studied model for Without inventory optimization, companies optimization. commonly set inventory targets using rules of thumb or single stage calculations (Mogoi & Osoro.2022).

Rules of thumb normally involve setting a number of days of supply as a coverage target. Single stage calculations look at a single item in a single location and calculate the amount of inventory required to meet demand (Aladejare, 2014). For the inventory Control to be more effective, the main primary objective is to predict where, why and how much of the control is required and such a prediction is to be made here through the methodology .In the proposed Methodology an appropriate stock levels to be maintained in the approaching periods that will minimize the supply chain inventory cost can be arrived. Supply Chain model is divided into three stages in which the optimization is going to be performed (Ogunleye, 2016). Optimizing inventory in the value chain and in individual firms has a positive effect on the company's profitability and longterm sustainability (Mogoi & Osoro.2022). Many companies have focused on reducing cash conversion cycle time and improving cash flow because of the economic opportunities provided. Although some corporations have successfully implemented changes to improve the cash position of the company, many others have struggled. Following is an overview of the evolution of manufacturing operations and the effect the evolution in practices has had on working capital management (Bittok, 2017),.

2.1.1 Economic Order Quantity

This publication is licensed under Creative Commons Attribution CC BY. https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14735

In terms of the order quantity, finding the appropriate quantity for replenishment that minimizes total inventory costs will contribute to the company's budget performance (Bittok, 2017). From a theoretical point of view, the convenience of small and frequent deliveries was analyzed based on the EOQ model. As a calculating method to minimize purchasing cost, inventory carrying cost, and ordering cost, the EOQ method is complementary to the safety stock optimization that focuses on finding the optimal threshold to trigger the reorder (Mogoi & Osoro.2022). Knowing the best timing of placing an order is crucial for the purchasing department regarding inventory optimization. The easiest way to arrange this is to define a reorder level, which can assure that each order can arrive just as existing stock runs out. In the reorder point planning procedure, the inventory control system is intended to compare current available stock level with the reorder level. If available stock falls below the reorder level, an order project is generated. The reorder level (also known as the reorder point) is made up of the sum of the safety stock plus the expected average consumption within the replenishment lead time. Therefore, when determining the reorder level, the safety stock, previous consumption values or future requirements, and the replenishment lead time need to be taken into consideration (Ogunleye, 2016).

The process of determining the economic order quantity turned out to be more complicated. Like mentioned before, unfortunately some variables are mere estimates such as ordering cost, carrying cost percentage, and average inventory value (Mogoi & Osoro.2022). The total ordering cost for the year 2014 was defined as the sum of ordering making cost, monitoring and control cost, warehouse personnel cost, transportation cost, purchasing invoicing cost, and the cost for entering data into the system, etc. And the ordering cost per unit was assumed to be fixed, and it was calculated by the total ordering cost divided by the estimated number of yearly orders. However, some other issues may also affect the ordering cost (Bittok, 2017). Taking the costs of materials handling as an example, the costs were generated not only by the working hours put in, but also the potential risk of damage to the items. In this case, the calculating process became even more challenging. And the inventory carrying cost was 68 calculated by multiplying the estimated inventory value by the estimated inventory carrying cost percentage. As the thesis considered the stocks situation of trading parts only, currently it is too hard for the company to exclude the manufacturing parts from the total stock. The estimated inventory value used for calculation is the total stock value of trading parts on the data collecting day (Ogunleye, 2016).

2.1.2 Safety Stock Levels

In order to define the accurate level of optimized safety stock and reorder point, it would be advisable to perform a detailed analysis of some relevant factors such as service level, lead time, and demand standard deviation (Mogoi & Osoro.2022). Meanwhile it would be also useful to know the earlier reorder levels accurately so that they can be compared with the theoretically optimized levels. However, because of the unavailability of precise data, the service level was assumed to be the same for all products, the lead times were defined depending on the class of items, and the demand standard deviations were estimated based on the consumption trend of products generally. Moreover because the reorder level of Company X was defined according to different suppliers and different lead times or even some other factors, it was challenging to know the accurate reorder point for every single product (Ogunleye, 2016).

Safety stock level and location determination in the supply chain with a stochastic environment is a challenging task; therefore, there are many different assumptions in the models and approaches provided in this area to make it simpler. For example, some of these approaches exclude the suppliers' variability, some of them have limitations in their applications, and some of them put limitation on the demand distribution, among others (Mogoi & Osoro.2022). A general safety stock optimization model with the objective of logistics cost minimization by considering both internal and external variabilities is presented (Bittok, 2017). And then the total value of safety stock of each finished product will be compared with its total value of sales in the past (for example last year) and this comparison will give us an idea of whether the current value of safety stock for each finished product is aligned with its sales value or not. It may be even determined that the same value of safety stock is keeping for two different finished products while the sales value of one was even twice of the other one. For example, although the volume of finished product AB is really lower than the volume of AF, still the value of its safety stock is somehow equal to the safety stock value of AF. On the other hand, that manufacturing makes the biggest portion of AB's safety stock value (Ogunleye, 2016).

2.1.3 Tracking Stock

Structuring a tracking stock culture, however, does not lead to the formation of separate entities. Tracking stock remains the equity of the parent corporation and holders of tracking stock continue to be, or become, shareholders of the whole corporation and not of the tracked business segment whereas in carve-outs and spin-offs, conversely, the subsidiary's assets are transferred to a new company (Mogoi & Osoro.2022). Accordingly, preferred stockholders as well as general and secured creditors of the parent corporation, are basically unaffected by the implementation of a tracking stock culture because all assets of the corporation remain available to satisfy all liabilities. 3 Regardless of how the firm organizes the structure of issued stock and conducts its accounting and financial reporting system, the subject of private liability always will be the same (Bittok, 2017). In sum, it is not the relationships between the shareholders on the one hand and the corporation and its creditors on the other that are affected, but mainly the relationship between the owners of tracking stock and owners of the residual class of common stock (Ogbonna et al.,2016).

In Germany, publicly held corporations still do not issue a financial tool like tracking stock. Of course, the implementation of a tracking stock culture is often discussed among investment banks and law firms (Mogoi & Osoro.2022). Many companies are now attempting to broaden their shareholder base, and the creation of "shareholder value" has become a goal of some larger German companies. However, until now no German company has faced the challenges and opportunities of tracking stock in praxis. What are the reasons for this? German reluctance regarding American financial innovations? A legal system that is not established and prepared for new ways to finance a company and to enhance

This publication is licensed under Creative Commons Attribution CC BY. https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14735 shareholder value? Indeed, it is often argued that the inefficiency and inflexibility of German corporate law is responsible for the nonexistence of tracking stock. Only the shares of the nominal capital of a stock corporation may be quoted on stock exchanges, but never, so some might guess, can "virtual" shares linked to the performance of a particular business unit be so quote. In Germany, the effect of tracking stock could only be reached by equity carveouts or spin-offs (Ogbonna et al., 2016).

2.1.4 Performance of Electricity Generating Company

The Kenyan Government hopes to continue investing heavily in the development of power sectoring Kenya. It is estimated that Kenya could have 5,040 MW of installed capacity by 2020, representing 2,700 MW of new generation capacity coming online over the next 5 years (KenGen, 2016). The need to increase generation and installed electricity capacity in Kenya has called upon key industry players to initiate mega projects in the power sector towards the realization of this goal. Ken Gen, as government parastatal was tasked with a great responsibility of increasing its generating capacity through construction of additional power generation. New generation power projects at Olkaria that have been constructed include 85MW Wellhead Projects, 280MW OlkariaI (Additional Units 4 and 5) and Olkaria IV. New power plants under construction include 156MWOlkaria V and 70MW Olkaria (Bittok, 2017), Other power related projects include construction of new access road to Olkaria IV and V power plants and construction of relocation houses for Projects Affected Persons (PAP) (KenGen, 2016) The Kenyan Government identified development of key physical infrastructure in the power sector as one of the key enablers to transform the country into an industrialized nation by 2030 (GOK,2007). Power Africa (2016), a U.S led government partnership with African Governments in the area of development of the power sector noted in their report, Development of Kenya's power sector 2015-2020 (Mogoi & Osoro.2022).

Kenya has an opportunity to take its power sector from good to great by delivering 2,700 MW of new generation capacity by 2020, through new financing and partnership models and construction and development of efficient power plants that will ensure availability of electrical power (Power Africa, 2016). The Government of Kenya therefore committed resources for both research and development of key electricity infrastructure developments in Kenya. Power Africa (2016) also noted that Kenya has made considerable strides in the development of the Electricity Power Sector. These include the construction of the largest geothermal power planting Africa, the 280 MW Geothermal Power Plants at Olkaria, Naivasha. Government owned Ken Gen contributes up to 70% of installed generation capacity of power in Kenya (Power Africa, 2016). Independent Power Producers (IPPs) are also playing a major role in the development of the power sector in Kenya (Ken Gen, 2016). Around 30% of Kenya's installed electricity capacity.

3.1 Research Design

Research design refers to a <u>detailed outline</u> of how the overall strategy integrates the different components of the study in a coherent and logical way to effectively address the research problem (Kothari, 2011). It is the plan on how to answer research questions. The different types of research designs included

descriptive research design (Creswell, 2014). The study adopted a descriptive research design since the study gathered quantitative and qualitative data was described by the nature and characteristics of the effects of inventory automation on performance of distribution firms in Kenya. Descriptive survey research design is the type of design used to obtain information concerning the current status of the phenomena to describe 'what exists' with respect to variables or conditions in a situation. It was also in deriving quantitative measures that helped in making inferences about possible relationships that exists between independent and dependent variables (Kothari 2011).

3.1.1.Inventory Optimization

Table 1 1. Inventory Ontimization

Respondents were requested to give their opinion on the variable Inventory optimization. From table 1.1, the respondents unanimously agreement that Inventory optimization ensured performance of electricity generating company and periodic review in eastern region in Kenya viable with agreement of a mean Kenya.

was 3.742, and Standard Deviation of 1.0602; Through tender documentation in eastern region the respondents gave neutral response with a mean of 3.533 and Standard Deviation of.9202; tender committees assessment has contribution to the quality and innovation of the inventory optimization with strongly agree a Mean of 3.903, and Standard Deviation of .9007; assessment of tender duration in Inventory optimization it is important to put in place and maintain procurement the respondents gave a strongly agree with a Mean of 4.061, and Standard Deviation of .19951; The management of eastern region in Kenya implements performance of electricity generating company award the respondents disagreed with a Mean of 3.541 and SD=1.3020); and Inventory optimization enhances performance of electricity generating company at eastern region in Kenya, they agreed with a Mean of 3.566, Standard Deviation of .7017. This finding agrees with the findings of Nyile et al. (2022) who observed that clear description of Inventory optimization, enhance effective performance of electricity generating company in eastern region,

agreed with a Mean of 4.094 and Standard Deviation of .8005;

electricity generating company in eastern region in Kenya, the

respondents gave a strongly agree with a Mean of 4.252 and Standard Deviation of .8165. These findings was in agreement

with the findings of Ongeri and Osoro (2021) that the goal of

Tender proactive planning is to ensure performance of electricity

generating company in eastern region in Kenya. Effective EOQ

minimizes or eliminates problems and potential claims and

disputes. This results agrees with the finding of Ominde et al.

(2022). It is essential for EOQ to understand the provisions of the

supplier evaluation, have the ability to perform to all practices

involved, and maintain control over the performance of electricity

generating company in eastern region .

Online advertisement has enhances performance of

Table 1.1: Inventory Optimization				
Statement		Mean		Std. Dev.
My In Kenya ensures tender documentation				
Sharing through Real time basis		3.3742		1.0602
Through tender documentation in eastern region Kenya has				
been able to make decisions on timeliness		3.533		.9202
Responsiveness of tenders has contribution to performance				
of eastern region, Kenya		3.903		.9007
By Quick, frequent & accurate EOQ				
It is important to put in place Inventory optimization	4.061		.19951	
The management of supplier evaluation				
Tender duration in inventory optimization		3.541		1.3020
Inventory optimization enhances performance				
of eastern region, Kenya.		3.566		.8017

SECTION: C EOO

From table 1.2, respondents agreed that: The eastern region in Kenya considers Strategic alliances on EOQ with a mean of 3.551 and Standard Deviation of.8312; A EOQ is likely to circulated based on tender period on performance of electricity generating company in eastern region in Kenya agreed with a Mean of 4.033 and Standard Deviation of.19906; Early technology application involvement on performance of electricity generating company in eastern region in Kenya the respondents were neutral with a Mean of 4.041 and Standard Deviation of.7302); Through tender target groups towards performance of electricity generating company in eastern region in Kenya; the respondents strongly disagreed with a Mean of 4.111 and Standard Deviation of .7117; proper EOQ and preference groups access to bids in the earliest possible has improved performance of electricity generating company in eastern region in Kenya, the Table 1.2: EOO

Statement

Statement	Mean	Std. Dev.
My In Kenya considers Strategic alliances on		
performance of electricity generating company in eastern region		
in Kenya	3.551	.8312
Early supplier involvement enables performance		
of eastern region in Kenya	4.033	.19906
Joint coordination of production activities enhances		

This publication is licensed under Creative Commons Attribution CC BY. https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14735

www.ijsrp.org

International Journal of Scientific and Research Publications, Volume 14, Issue 3, March 2024 ISSN 2250-3153

Performance of electricity generating company in eastern			
region in Kenya	4.041	.7302	
Financial stableness enhances performance of			
eastern region in Kenya	4.111	.7117	
Sound finance enhances procurement performance			
of eastern region in Kenya	4.0)94	.7005
Stability of supplier can boast procurement			
performance of electricity generating company eastern			
region in Kenya	4.252	.9165	

SETION D: SAFETY STOCK LEVELS

The findings presented in table 1.3 show that respondents agree that: Network has effect on performance of electricity generating company in eastern region in Kenya (M=3.505, SD=.19902); safety stock levels criterion on performance of electricity generating company in eastern region in Kenya city County, Kenya; the respondents agreed with a Mean of 3.411 and Standard Deviation of .19934;evaluation criterion on performance of electricity generating company eastern region in Kenva city County, Kenva they gave strongly agree with a Mean of 4.603, Standard Deviation of .19936; Safety stock level is significant when you want performance of electricity generating company in eastern region in Kenya; the gave strongly agree response with a mean of 4.603, Standard Deviation of .6909; contract sections enhances on performance of electricity generating company in eastern region in Kenya; the disagreed with a Mean of 3.596, Standard Deviation of .7024; and through

Table 1.3: Safety Stock LevelsStatement

Statement		Mean		Std. Dev.
Our county use safety stock levels on performance				
of eastern region in Kenya		3.505,		.19902
Our use safety stock levels criteria on performance to performance				
of eastern region in Kenya		3.411		.19934
Through devices on performance of electricity generating company				
Eastern in Kenya		4.603		.19936
Input of evaluation on performance				
of eastern region in Kenya		4.603		.8909
Supplier evaluation enhances our performance of electricity				
generating companyin Kenya	3.594		.7024	
Through of safety stock levels best practise on performance				
of eastern region in Kenya		4.105		.7045

SETION E: TRACKING STOCK

From table 1.4, respondents, respondents agreed that tracking stock ensure performance of electricity generating company eastern region in Kenya; the respondent gave a Mean of 4.039 and Standard Deviation of.7307; post tender negotiation on performance of electricity generating company eastern region in Kenya , they gave strongly disagree with a Mean of 4.004 and Standard Deviation of .7307; My county ensures that contract award of fairness on performance of all preference groups in eastern region in Kenya; the gave strongly agree with a Mean of 4.207, Standard Deviation of .19907; In cases of contract management systems to embrace better performance of electricity generating company in eastern region in Kenya they gave a Mean of 4.010 and Standard Deviation of .8073; Alternative value

reaction process contributes to performance of electricity generating company in eastern region in Kenya ;most of the respondents were neutral with a Mean of 3.926 and Standard Deviation of .7306; and to enhance dispute resolution results, our county has in recent time conducted supplier evaluation resolution towards performance of electricity generating company in eastern region in Kenya; they gave a Mean of 4.105 and Standard

Deviation of .7055. These findings are in line with the findings of Nyile *et al.* (2022) who observed that the characteristic of tracking stock are the best value reaction to sort out non-performance of, after Tracking stock, for resolving return on investment. The problem areas giving rise to disputes are mainly related to eastern region's matters.

evaluation, the organization is able to identify problems and find solutions in a timely manner to ensure high quality of the goods and services delivered Strongly disagreed with a Mean of 4-.011, Standard Deviation of .7045).

The findings concurs with the finding of Boit and Osoro (2021), who argued that it is critical to Safety stock level frequently and at regular intervals after award to ensure that the supplier is providing the goods and services on schedule and within the procurement plan, and that quality standards are being met, especially for the highest-risk and most complex contracts. Evaluating post-award performance entails several activities to ensure that the delivery of services meets the terms of the contract (Aladejare, 2014). These include identifying performance criteria, such as key performance indicators, at the time of contract formulation, and providing adequate monitoring resources and a capable workforce for overseeing contractor evaluation, by so doing performance of electricity generating company in eastern region in Kenya was improve communication a mong.

International Journal of Scientific and Research Publications, Volume 14, Issue 3, March 2024 ISSN 2250-3153

Table 1.4: Tracking stock			
Statement	Mean	Std. Dev.	
My county a embrace post tender negotiation on			
performance of eastern region in Kenya.	4.035	.7307	
My county embrace fair contract award activities on			
performance of eastern region in Kenya.	4.004	.7307	
My county embrace contract management on			
performance of eastern region in Kenya	4.010	.19973	
In cases of tender disputes on			
performance of electricity generating company in eastern region in Kenya		3.926	.8306
Alternative tender methods for money process on			
performance of electricity generating company eastern region in Kenya		4.105	.8055
To enhance tracking stock processes on performance			

of eastern region in Kenya

4.054 .7105

3.1.2 Model of Goodness Fit

Regression analysis was used to establish the strengths of relationship between the performance of electricity generating company in eastern region in Kenya (dependent variable) and the predicting variables; Inventory optimization, EOQ ,Safety stock level and Tracking stock (Independent variables). The results showed a correlation value (R) of 0.765 which depicts that there is a good linear dependence between the independent and dependent variables. This finding is in line with the findings of Ongeri and Osoro (2021). They observed that this also to depict the significance of the regression analysis done at 95% confidence level. This implies that the regression model is significant and can thus be used to evaluate the association between the dependent and independent variables. This finding is in line with the findings of Ittmann (2015), who observed that analysis of variance statistics examines the differences between group means and their associated procedures.

Table 1.5: Model of Goodness Fit

R R2 Adjusted R Std. Error of the Estimate 0.765 0.891 0.731 0.064 a. Predictors: (constants); Inventory optimization, EOQ, ,Safety stock levels and Tracking stock

b. Dependent Variable: performance of electricity generating company

With an R-squared of 0.891, the model shows that Inventory optimization, EOQ ,Safety stock level and Tracking stock an contribute up to 199.1% on performance of electricity generating company in eastern region in while 11.9% this variation is explained by other indicators which are not inclusive in this study or model. A measure of goodness of fit synopses the discrepancy between observed values and the values anticipated under the model in question. This finding is in line with the findings of Mwakubo and Ikiara (2007).

Table 1. 6 Regression coefficient Results

3.1.3 Regression Coefficients of Determination

To determine the relationship between the independent variables and the dependent variable and the respective strengths, the regression analysis produced coefficients of determination. Findings in table 1.6 reveal a positive relationship between the performances of preference groups in eastern region in Kenya,

oemcient	Result	S				
Unstandardized coefficients			ardized coeffi	Sig.		
В	Std. E	rror	Beta		-	
134		.060	-1.144		4.004	.002
470		.132	555		5.472	.003
.219	.067	.162		2.471	.001	
.141		.059	.563		4.355	.004
	.115	.321		2.657	0.001	
	a coefficie b 134 470 .219 .141	a coefficients B Std. E 134 470 .219 .067 .141 .115	B Stands 134 .060 470 .132 .219 .067 .162 .141 .059 .115 .321	a coefficients Standardized coeffi B Std. Error Beta 134 .060 -1.144 470 .132 555 .219 .067 .162 .141 .059 .563 .115 .321	Generative Resultsd coefficientsStandardized coefficients TBStd. ErrorBeta134.060-1.144470.132555.219.067.1622.471.141.059.563.115.3212.657	Generative Resultsd coefficientsStandardized coefficients TSig.BStd. ErrorBeta134.060-1.1444.004470.1325555.472.219.067.1622.471.001.141.059.5634.355.115.3212.6570.001

A unit change in inventory optimization would thus lead to a .470 effect on performance of electricity generating company in eastern region in Kenya sector ceteris paribus; while a unit change in EOQ would have an effect of .219 change in performance of electricity generating company in eastern region of eastern region; also unit change of put traceability would lead to .262 of performance of eastern region in further unit change in safety

stock levels management would lead to .141 of sector can also have effect change in on performance of electricity generating company in eastern region and finally a unit change in dispute resolution would have an effect of .31 of performance of eastern region in Kenya. This finding is in line with the findings of Ongeri and Osoro (2021). This implies that among other factors, Inventory optimization, EOQ, Safety stock level and Tracking

stock are significant determinants of performance of electricity generating company in eastern region, Kenya.

II. SUMMARY

This section summarizes findings based on each specific objective of the study. The specific objectives of the study were to: factors affecting supply relationship management on performance of electricity generating company in eastern region in Kenya; assess the role of Inventory optimization, EOQ, and Safety stock levels and Tracking stock on performance of electricity generating company in eastern region in Kenya in supply chain practices. this study concludes that Inventory optimization have broadly impacted on performance of electricity generating company in eastern region, Kenya. The findings conclude that any in Kenya should drive to embrace the best performance of electricity generating company in eastern region after improving supplier evaluation in Kenya. When publicprivate partnerships is embraced through EOQ, Safety stock level, and Tracking stock then the implementation of performance of electricity generating company in eastern region, Kenya.

REFERENCES

- [1] Ajibade, P. (2018). Technology Acceptance Model Limitations and Criticisms: Exploring the
- [2] Practical Applications and Use in Technology-related Studies, Mixed method, and Qualitative Researches. Research Gate,
- [3] Altounjy, R.; Alaeddin, O.; Hussain, H.I.; Kot, S. Moving from Bricks to Clicks: Merchants'
- [4] Acceptance of the Mobile Payment in Malaysia. Int. J. e Business eGovernment Stud. 2020, 12, 136–150.
- [5] Adeoye, O. S. and Bamisaye A J. (2016): "Performance evaluation and analysis of Omotoso powerplant in Nigeria", Innovative Energy and Research, 5(134): 2-4.
- [6] Adesina, K. (2016): "An Operator's Perspective of the A comprehensive guide on Materials
- [7] Management N.d. Accessed on 5 January, 2015
- [8] Advantages and Disadvantages of ABC Analysis Inventory N.d. Small Business – Choron.com.
- [9] Accessed on 11 January, 2015
- [10] Advantages & Disadvantages of Just-in-Time InventoryN.d. Small Business - Choron.com.
- [11] Accessed on 10 Februray, 2015 Nigerian Power Sector", Presentation to LagosBusiness School, Sahara Power Plc, 1-19.
- [12] Akinbola, O. A., Zekeri, A. and Idowu, H. A. O. (2017): "The power sector and its impacts on
- [13] industrialization of businesses in Nigeria", Archives of Business Research, 5(12), 294-305.
- [14] Aladejare, S. A. (2014): "Energy, growth and economic development: A case study of the
- [15] Nigerianelectricity sector", American Journal of Business, Economics and Management, 2(2): 41-54.
- [16] Bastas, A., and Liyanage, K. (2018). Sustainable supply chain quality management: a systematic
- [17] review. Journal of Cleaner Production, 181, 726-744.
- [18] Basta, T., & Aziz, K. I. (2018). Adoption and outcomes of a strategic esourcing system at
- [19] Bravo Solution.
- [20] Bastl, M., Johnson, M. and Finne, M. (2019), "A mid-range theory of control and coordination

This publication is licensed under Creative Commons Attribution CC BY. https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14735

- [21] in service triads", Journal of Supply Chain Management, Vol. 55 No. 1, pp. 21–47.
- [22] Bittok, K. K. (2017, December). Effects Of E- Procurement Adoption On Procurement
- [23] Performance Of Kenya Electricity Generating Company. 9. Kisii, Westerm, Kenya
- [24] Boateng, A. (2019). Supply chain management in the Ghanaian building construction industry: a
- [25] lean construction perspective. 430-439.
- [26] Boit, J,S & Osoro, A. (2021), Factors Affecting Women in Strategic Management on
- [27] Performance of County Government in Trans Nzoia, Kenya. The International Journal of Business & Management ISSN 2321–8916 October 2021 Vol 9Issue 1
- [28] Creswell, J. W. (2014).Research Design: Qualitative, Quantitative, and Mixed Methods
- [29] Approaches.London, UK: Sage Publications Inc,
- [30] Eisenhardt, K.M. and Graebner, M.E. (2007), "Theory building from cases:
- [31] Feidler, F., & House, R. (Eds.). (1994). Leadership theory and research: A report of progress.
- [32] Utilization of ABC/XYZ analysis in stock planning in the enterprise. Annals of Warsaw
- [33] University of Life Sciences SGGW, Agriculture 61, 89-96. Accessed on 11 January, 2015.
- [34] The Relevancy of Just-in-Time (JIT) Concept in Government purchasing. Jurnal Teknologi
- [35] 35(A), Universiti Teknologi Malaysia, 1-4 Accessed on 9 Februray, 2015
- [36] Economic situation and outlook 4/2014 2014 The Federation of Finnish Technology Industries.
- [37] Accessed on 20 December, 2014
- [38] The Academy of Management Journal 38, 1326-1333 Accessed on 7 February, 2015
- [39] Jakovljevic, P.J. N.d Is There a Smarter Way to Handle Excess Active and Obsolete
- [40] Inventory?technologyevaluation.com. Accessed on 17 March, 2015
- [41] Just-in-Time Inventory Definition N.d. Small Business Choron.com. Accessed on 9 Februray,
- [42] 2015 Retrieved from
- [43] Latham and Watkins Africa Practice. (2016): Nigerian power sector: opportunities and challenges for investment in 2016", Latham and Watkins Africa Practice, Client White Paper, 1-57.
- [44] KenGen. (2016).Caacity of Electricity Generation on kenya. Stima Plaza, Nairobi.
- [45] Kenya Vision 2030. (2018). Retrieved from Kenya Vision 2030
- [46] King, Bill (11 January 2017). "Inventory Optimization & Its Role inBusinesses". AvidXchange. Retrieved 26 April 2017.
- [47] Kothari, C. R. (2011). Research Methodology methods and techniques, (second edition). New Delhi: New age International
- [48] Mogoi, M,M. & Osoro,A. (2022). Influence of Logistics Optimization on Performance of Agricultural Firms in Murang'a County, Kenya. International Journal of Scientific and Research Publications, Volume 12, Issue 2, February 2022 63 ISSN 2250-3153
- [49] Nyile, E. K, Ismail, N, S, & Osoro, A.(2021). Influence of Supply Chain Leagility on Performance of Humanitarian Aid Organizations in Kenya. Journal of Business and Economic Development. Vol. 6, No. 1, 2021, pp. 37-57.
- [50] International Journal of Scientific and Research Publications, Volume 5, Issue 10, 2250-3153
- [51] International Journal of Production Economics 59, 77-84 Accessed on 24 March, 2015
- [52] Antic, Ljilja & Bojana Novicevic
- [53] 2012 Just in Time and Total Quality Management for Need of Achieving Competitive
- [54] Advantage of Companies. Series: Economics and Organization 9, 195-198. Accessed on 8 Februray, 2015.

- [55] Ogbonna, O. S., Idenyi, O. S. and Nick, A. (2016): "Power Generation Capacity and Economic Growth in Nigeria: A Causality Approach", European Journal of Business and Management, 8(32): 74-90.
- [56] Ogunleye, E. K. (2016): "Political economy of Nigerian power sector reform", WIDER
- [57] Working Paper, 9:

AUTHORS

First Author – Njeru Kenneth Ngari, Msc Procurement and logistics, Jomo Kenyatta University of Agriculture and Technology

Second Author – Dr. Anthony Osoro, Msc Procurement and logistics, Jomo Kenyatta University of Agriculture and Technology