WAREHOUSE CONSOLIDATION AND PERFORMANCE OF DISTRIBUTION FIRMS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

The performance of distribution logistics impacts tremendously on the performance of an entire organization, this is mainly because it links the organization to the customers and thereby has much influence on customer satisfaction which influences customer loyalty, arguably the single most important asset of an organization. Warehouses are a key aspect of modern supply chains and play a vital role in the success, or failure, of Distribution Firms. The general objective of this study is to establish the effect of warehouse consolidation on performance of distribution firms in Nairobi City County, Kenya. The study specifically focused on the effect of product placement, and warehouse layout on performance of distribution firms in Nairobi City County, Kenya. This study was anchored on institutional theory and the theory of Constraints (TOC). This study used a cross-sectional survey design. The target population in this study was 255 managers working in procurement, operations, distribution/logistics, and warehouse and finance departments in the 51 distribution companies in Nairobi City County. From the target Yamane (1969) sample size formula was used to select a sample size of the population. The study used simple random sampling to select 155 from the entire population. This study used both closed-ended questions and open-ended questions to collect the data. The pilot study comprised of 15 respondents which makes up 10% of the respondents. The pilot study was done at selected distribution firms at Nairobi City County. The researcher collected data using questionnaires, coded them, and enter them into the Statistical Package for Social Sciences version 26 for analysis. The descriptive statistical techniques of frequency, mean, and standard deviation was used to analyse the quantitative data acquired. The results are now displayed using frequency distribution tables, which kept track of how many times a score or response appears. The results were displayed using frequency distribution tables, which kept track of how many times a score or response appears. Qualitative data collected was analysed using content analysis and presented in prose form. Inferential statistics including regression and correlation analysis were used in the study. The study concludes and recommends that warehousing consolidation has effect on performance of distribution firms in Nairobi City County, Kenya.

Key Words: Warehouse Consolidation, Distribution Firms, Product Placement, Warehouse Layout, Performance

Background of the Study

The performance of distribution logistics impacts tremendously on the performance of an entire organization, this is mainly because it links the organization to the customers and thereby has much influence on customer satisfaction which influences customer loyalty, arguably the single most important asset of an organization (Green, Whitten & Inman, 2018). However, despite distribution companies being very vital, many production organizations perform short of customer expectations in this area. Having a strong distribution and warehousing strategy is critical to your success in today's global environment as a production firm. This is because it is paramount to be able to deliver quality products to its customers. Meeting specific customer service requirements around products and services can help grow market share by maintaining strong existing relationships and growing new ones (Gunasekaran, Patel & McGaughey, 2016).

Key Performance Indicators (KPIs) for distributors are measurements that indicate how well a company is performing in terms of specific business objectives. KPIs can be utilized to measure different areas of performance, such as sales, customer service, inventory, and financials. By tracking and analyzing these metrics, distributors can gain insight into the efficiency of their operations and identify areas where improvement is needed (Anand & Grover, 2015). Additionally, KPIs provide an important way for distributors to benchmark themselves against competitors in order to remain competitive. Some key performance indicators commonly used by distributors include sales growth rate, customer satisfaction rating, inventory turnover rate, net profit margin percentage and return on investment (ROI). Tracking these KPIs over time allows distributors to gauge their overall performance relative to the industry and make adjustments as needed to remain competitive (Chae, 2019).

Warehouses are a key aspect of modern supply chains and play a vital role in the success, or failure, of Distribution Firms (Hompel & Schmidt, 2017). Warehousing operations optimization has been considered an effective and powerful approach to improve the performance or design more efficient warehouse. Therefore, management of warehouse operations is one of the important steps in global supply chain and the impact of the improvement of warehouse operations' yield is crucial for cost reduction and increase of productivity in a supply chain company (Christopher, 2021). Optimizing a warehouse creates conditions in which high-demand items in-demand are always stocked, leading to timely order fulfilment. Warehouse consolidation is key to the efficient operation of warehouses of all sizes. A disciplined process, Warehouse consolidation includes automation and a determination of how to save time, space, and resources while reducing errors and improving flexibility, communication, management, and customer satisfaction. Other Warehouse consolidation considerations include warehouse flow, product placement,. Warehouse consolidation is vital to lean warehouses and agile supply chains. The most efficient warehouses are those that have been optimized to beat the competition on every level.

Modern logistic warehouses and distributions centers are designed on the basis of dozens optimization studies. In con sequence of that, Warehouse Management Systems (WMS) become important and more complex and users find it quite hard to manage. The software market offers large variety of solutions with different system requirements and possibilities, and to choose the suitable system for every company is not quite an easy task, because it is influenced by many aspects which must be considered, and one of this aspects are optimization methods based on automated processes for tasks dynamically changeable in time. The WMSs which drive logistic warehouses and distribution centers are core elements of the material and goods flow in logistic chain and they will be subjected to further investigation in following text related to optimization of technical and operational structure.

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important. The WMSs which drive logistic warehouses and distribution centres are core elements of the material and goods flow in logistic chain. According to the Lai and Cheng (2019) the activities of the warehousing optimization can be divided into three groups. First, the basic technical structure of warehouse; second, the operational and organizational framework, to which a special attention is paid in this work; and third, the coordinating and controlling systems for warehouse operations. The main contribution of this paper is to show the current state-of-the-art in optimization in mentioned three groups of interest, and to help researchers with orientation in logistic Warehouse consolidation problems to improve performance of their firm (Wayongah, 2019).

Many business organizations spend a lot of resources installing inventory management systems with the aim of minimizing their total operating costs, and enhance service delivery to customers. However, many audits done by other studies reveal that there is an increased level of discrepancies in the manner in which the warehouse management systems are harmonized in an organization. On a number of occasions, there are cases of misstatements and inaccurate and fraudulent records detected within the system. Many organizations have trouble resulting from operating losses and cash flow problems. Quite often, piles of obsolete stock are seen within the premises of these institutions, resulting in huge write offs eating into the bottom line of these institutions. Many a times, stock outs are also experienced resulting in high customer turnover and therefore low sales and poor service delivery to customers. warehouse management normally becomes reportable issues (condition) and is always raised in the management letters to many institutions where very little attention is given in the management of inventories as records are inadequate (Lizardo, 2019). The reason why companies should focus on Warehouse consolidation is simple – warehousing costs present significant share of companies' operational costs. They can account for around 22% off all costs for logistics (Richards, 2018). This thesis will focus on warehouse consolidation and performance of distribution firms.

Statement of the Problem

The performance of distribution logistics impacts tremendously on the performance of an entire organization (Paulraj & Chen, 2017); this is mainly because it links the organization to the customers and thereby has much influence on customer satisfaction which influences customer loyalty, arguably the single most important asset of an organization. Under logistical supply chains, speed is of the essence hence the time from picking to delivery of outputs to customer's point of collection is very critical when it comes to quality customer service and satisfaction (Miheso, 2019). Mitullah and Odek (2019) indicate that a significant number of firms in Kenya are still lagging behind in the use of information technology incorporation in logistics management.

According to Wathe, (2019) states that 75% of warehouses run at a capacity of less than 40% due to poor designs and layout out what this means that Distribution Firms paying at-least 40% of your cost for free to the warehouse due to underutilized assets. Labor costs are typically the largest expense in the Kenya warehouse and Distribution Firms' and in many operations, such as third-party logistics providers (3PLs), it can account for up to 50% of a warehouse's total operating costs. Warehouses running at 1% of operating cost to sale with warehouses running at 10% operating cost to sale, has an impact on customer service levels and on the pricing strategy of the products handled (Wathe, 2019). This leads to Difficulty in tracking inventory results in shipping and delivery delays caused by orders not being replenished on time or items being unavailable when they're needed. Picking problems also arise when pickers rely on inaccurate information, leading to inefficient processes (Baker, 2021) The transportation and delivery of goods can account for as much as 15% of the total price goods and in extreme cases even as much as 50%. Research indicates that warehouse consolidation influence organization performance.

Various studies have been conducted on warehouse consolidation and organization performance (Agboola, & Shaibu, (2019), Clough, & Sanderson, (2016), Eder, (2022) and Hompel & Schmidt, (2017). Nevertheless, none of these studies focused on warehouse consolidation and performance of distribution firms in Nairobi City County. It is against this background that this study purposes to establish the influence of Warehouse consolidation on performance of Distribution Firms in Nairobi City County, Kenya.

Objective of the Study

The general objective was to establish the relationship between warehouse consolidation and performance of distribution firms in Nairobi City County, Kenya. The specific objectives were:

i. To establish the effect of product placement on performance of distribution firms in Nairobi City County, Kenya
ii. To find out the effect of warehouse layout on performance of distribution firms in Nairobi City County, Kenya

LITERATURE REVIEW

Theoretical framework

Institutional Theory

Institutional Theory was proposed in the year 11181 by Powell and DiMaggio. The concern of this theory is the process in which structure, rules, routine and norms are developed as guidelines for behaviours that are acceptable. According to Oliveira and Martins (2011) institutional theory emphasizes that institutional environments are crucial in shaping organizational structure and actions on the Warehouse Layout Design and inventory process. The theory stipulates that organizational decisions are not driven purely by rational goals of efficiency, pallet rack system and developing the optimal warehouse layout design, Institutions are transported by cultures, structures, and routines and operate at multiple levels (Jennings & Zand bergen, 2005). Institutional Theory will be used to establish the effect of product placement on performance of distribution firms in Nairobi City County, Kenya.

Institutional theory examines the processes and mechanisms by which structures, schemas, rules, and routines become established as authoritative guidelines for social behaviour. It asks how such systems come into existence, how they diffuse, and what role they play in supplying stability and meaning to social behaviour. It also considers how such arrangements deteriorate and collapse, and how their remnants shape successor structures. One of the dominant theoretical perspectives at the end of the nineteenth century, institutional theory was eclipsed by other approaches during the first half of the twentieth century. In recent decades, however, institutional theory has experienced a remarkable recovery, entering the new century as one of the most vigorous and broad-based theoretical perspectives in the social sciences.

The theory is applicable to product placement and firm performance in that firm values which are engraved in institutions are transmitted through various mechanisms, including symbolic systems, relational systems, and routines. Institutions are structures based on more or less taken for granted, formal or informal, rules that guide strategy implementation by restricting social behaviour. These established institutions in the context of firm stability but are subject to change processes, both incremental and discontinuous. Institutional theorists assert that organizational internal environment is key to influencing development of organizational innovative structures. Institutional theory also recognizes that organizations are not passive actors and can respond to institutional demands in diverse ways from conformance to reshaping those pressures.

The Theory of Constraints

Theory of constraints is an approach to the management of operations, and it was developed by Goldratt (1984). It provides a management theory of how organizations should be run especially the when handling scarce financial resources. The concept was extended to theory of constraints (TOC) with a publication which views any manageable system as being limited in achieving more of its objectives by a very small number of constraints. The Theory of Constraints will be used to find out the effect of warehouse layout on performance of distribution firms in Nairobi City County, Kenya. The Theory of Constraints is a methodology for identifying the most important limiting factor that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting factor. In manufacturing, the constraint is often referred to as a bottleneck.

The theory of constraints assumes that the performance of a system is limited in achieving its goals by at least one constraint. Basically, a constraint can be anything that limits the performance of a system and prevents at it from attaining its goals. Constraint can take many shapes and be found in many places, but within the theory of constraints only the most limiting constraints are taken into consideration. Internal constraints are evident when the system is incapable of satisfying a given market. The removing of an internal constraint will allow for a greater throughput and thus attempt to satisfy the market. External constraints are evident when the demand from a given market is less than the capacity of the system. In this case, measures must be made in an attempt to increase the demand for its throughput. Another external constraint could be the lack of raw material or outsourced components.

The core concept of the Theory of Constraints is that every process has a single constraint, and that total process throughput can only be improved when the constraint is improved. A very important corollary to this is that spending time optimizing non-constraints will not provide significant benefits; only improvements to the constraint will further the goal. Thus, TOC seeks to provide precise and sustained focus on improving the current constraint until it no longer limits throughput, at which point the focus moves to the next constraint. The underlying power of TOC flows from its ability to generate a tremendously strong focus towards a single goal (profit) and to removing the principal impediment (the constraint) to achieving more of that goal. In fact, Goldratt considers focus to be the essence of TOC.

Conceptual Framework

A conceptual framework shows the connection between the independent and dependent variables. The independent variables are product placement, and warehouse layout while performance of distribution firms in Kenya is the dependent variable.
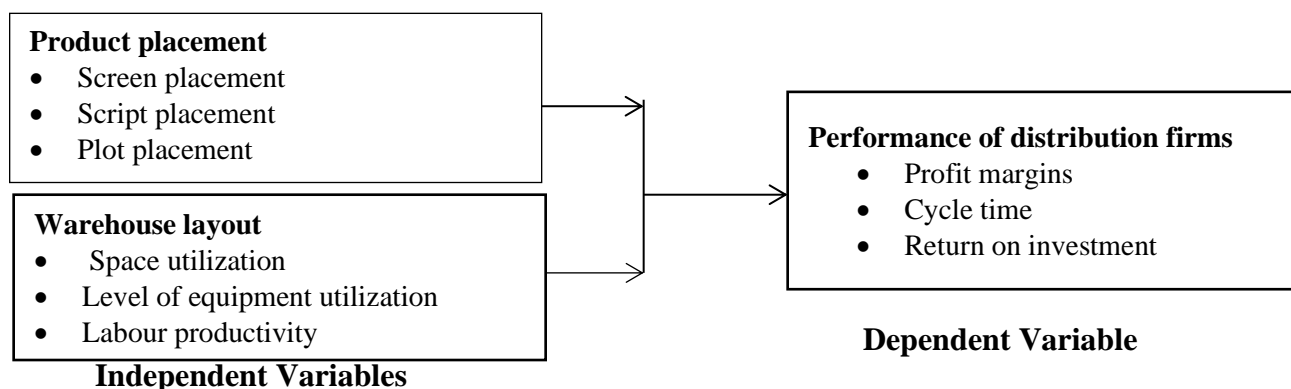

Product placement
- Screen placement
- Script placement
- Plot placement

Warehouse layout
- Space utilization
- Level of equipment utilization
- Labour productivity

Independent Variables

Performance of distribution firms
- Profit margins
- Cycle time
- Return on investment

Dependent Variable

Figure 1 Conceptual Framework

Product Placement

Meyer, Song and Ha (2016) aims to investigate the relationship between product placements and the evaluation of media programming by consumers. Empirical analyses were conducted on 134 movies released between 2000 and 2007 using a generalized method of moments instrumental variable approach. Findings The estimation results from product placement data on 134 movies released between 2000 and 2007 show that product placements have a significant positive effect on consumer ratings, but when used in excess, the effect becomes negative. In addition, a significant interaction exists between the nature of the film (mainstream vs independent) and the number of placements, such that consumers of independent films are much less likely to view product placements positively.

The study adopted a descriptive survey research design. The study found that the branch network, electronic banking and multiple distributions were used by the banks. Marketing strategies being employed by the banks were aggressive marketing, mass marketing and value marketing. The marketing features employed by the banks was close relationships with customers, product specialization, extensive market research, selective distribution, segmentation of market, high quality innovative products and controlled relationship with customers while increased relational norm with channel partners, intensive distribution to a mass market and low behavioral control on consumers were employed by the banks to a moderate extent. The study nonetheless focused on marketing distribution channel strategies while the current study is on product placement.

Ameyibor, Anabila and Saini (2022) aims to investigate the relationship between brand positioning and business performance, as well as the mediation effect of brand equity between them within the context of Ghana's alcoholic beverages industry. A sample of 196 staff across four alcoholic beverage firms in Accra, Ghana was selected using a judgemental sampling technique. All the hypotheses were confirmed in line with extant literature. Specifically, the study found a positive relationship between brand positioning and business performance. The study also found that brand equity partially mediates the relationship between brand positioning and business performance. The study however was done in Ghana hence its results cannot be generalized for the case of Kenya.

Warehouse layout

Asudi and Shale (2019) did a study on role of warehouse layout design on performance of Distribution Firms in Kenya, case of DHL supply chain. This study adopted a descriptive research design, a descriptive research design determines and reports the way things are and it is used whenever the data being collected is to describe persons, organizations, settings or phenomena. The study established that there are several basic principles that apply to warehouse layout design and running an effective distribution centre operation. Without the proper layout and design of your distribution centre, no matter the square footage, Distribution Firms will be facing capacity issues, decrease in productivity, and storage inadequacies. Maintain flexibility in the operation and layout. The study however used descriptive research design unlike the current study which makes use of cross-sectional research design.

Ongeri and Osoro (2021) determined the effect of warehouse consolidation on performance of distribution firms in Nairobi City County. The study was conducted amongst respondents who were targeted in this study from Nairobi City County It made use of the descriptive research design.; data were collected from 138 respondents via questionnaire. These responses were analyzed via spearman rank order correlation, within the confines of SPSS version 23. This study found out that economic order quantity was significantly related to these performance of distribution firms in Nairobi City County under this study. Despite the study focusing on warehouse consolidation, it informed the current study on the performance of distribution firms in Nairobi.

Performance of Retail Firms

The study however focused on evaluation of media programming unlike the current study which is on performance of firm distributions. Dzombo, Kilika and Maingi (2017) established the effect of marketing distribution channel strategies on a firm's performance among commercial banks in Kenya. Pearson's correlation results indicated that tracking of goods (r = .715, p < .01), physical storage facilities (r = .741, p < .01) and order processing (r = .829, p < .01) had a significant and high positive correlation with organizational performance. The results also indicate that receiving process of goods (r = .638, p < .01) had a significant and moderate positive correlation with organizational performance. Additionally, multiple regression results indicated that receiving process of orders (β = .519, p < .01), tracking of goods (β = .618, p < .01), physical storage facilities (β = .741, p < .01) and order processing (β = .820, p < .01) had significant and positive influence on organizational performance of logistical firms in Mombasa. The study however was done on logistical firms in Mombasa while the current study is a case of distribution firms in Nairobi.

Empirical Review

Product Placement

Berglund and Spets (2017) did a study to gain a better understanding of an alternative mean of communicating messages, namely product placement, and especially public relations firms' role in this process. The thesis describes issues influencing public relations firms' recommendation on product placement to clients and also the selection of media to place products in. A case study was conducted at Hedberg & Co, using a qualitative research method. The study shows that product placement is inexpensive compared to traditional means of advertising. Consumers also view product placement with acceptance, mostly because the benefit of product placement is that products or brands is shown in the right context. The world of advertising is becoming more and more competitive, and to get messages through to the intended target audience it is important to try different means of communication. The study however focused on public relations firms unlike the current study which is on distribution firm performance.

Warehouse Layout

Mohd Saifudin, Zainuddin and Nadarajan (2018) focuses on the warehouse efficiencies in relation with the warehouse layout among SMEs manufacturing firms and its mediating effect with Management Information System (MIS). Overall, 187 SMEs were involved in this study. Findings shows that the Warehouse Efficiency (AWE) correlates significantly with the Warehousing Layout variables above 0.7 while Warehousing MIS (AMIS) above 0.5. As for multiple regression test, variables AL and AMIS, the effects were significance with the R2= 0.758 or 75.8 percent to explained in model AWE. In this test, it is found that there are significance value of variables AL (0.623) and AMIS (0.03). This reflects of the significance role of AL and AMIS in maintaining the warehouse efficiency. The results indicate the important of warehouse efficiency in the manufacturing firms. The warehouses Layout and MIS are the main basic variables for process management improvement in making the warehouse to be efficient and firm performance achievable. It is through the Warehousing MIS mediation to the Warehousing Layout that mediates positively to its relationship over the Warehouse Efficiency. The study however was on SMEs unlike the current study which is on distribution firms.

RESEARCH METHODOLOGY

This study used a cross-sectional survey design. This is an observational design that enables the researcher to collect data to make inferences about a population of interest. The target population in this study was 255 managers working in procurement, operations, distribution/logistics, and warehouse and finance departments in the 51 distribution companies in Nairobi City County. Yamane (1969) sample size formula was used to select a sample size of the population. The study

used simple random sampling to select 155 from 255 target population. In this study, primary data was collected using a semi structured questionnaire because they are cost effective and convenient collected and summarised responses (Zikmond, 2013). This study used both closed-ended questions and open-ended questions to collect the data.

The researcher collected questionnaires, code them, and enter them into the Software Package for Social Sciences (SPSS version 26) for analysis. The descriptive statistical techniques of frequency, mean, and standard deviation was used to analyse the quantitative data acquired. The results were displayed using frequency distribution tables, which they kept tracking of how many times a score or response appears. Qualitative data collected was analysed using content analysis and presented in prose form. Inferential statistics including regression and correlation analysis was used in the study.

RESEARCH FINDINGS AND DISCUSSION

Out of 139 questionnaires that were sent to the respondents,118 of them were dully filled and retuned by the respondents: yielding a response of 84.9%. This was considered every reliable response rate for the generalization of study findings is in line with Kothari (2011), states that a response rate of 70% and above is believed to be a reliable response rate

Product Placement

Respondents were requested to give their responses in regard to product placement in a five-point Likert sale where SA=Strongly Agree, A=Agree, N= Neutral, D=Disagree, and SD= Strongly Disagree. Results obtained were presented in Table 1 below. Respondents were requested to give their opinion on the variable product placement. From table 1, the respondents unanimously agreement that product placement ensured performance of and periodic review in distribution firms In Kenya viable (M=3.742, SD=1.0602); Through real time basis assessment the In Kenya has been able to make rational decisions on priority and non-priority projects (M=3.833, SD=.9202); willingness to share information assessment has contribution to the quality and innovation of the planning team (M=3.903, SD=.9007); assessment of quick, frequent and accurate information transfer in product placement it is important to put in place and maintain procurement record/ register (M=4.061, SD=.8251); The management of distribution firms In Kenya implements performance of to prevent fraud in supplier evaluation (M=3.841, SD=1.3020); and product placement enhances performance of at Distribution firms In Kenya(M=3.566, SD=.8017). These findings concur with the findings of Nyile *et al.* (2022) who observed that clear description of product placement, an enhance effective performance of distribution firms.

Table 1: Product Placement

Statement	Mean	Std. Dev.
My In Kenya ensures conformance of supplier information Sharing through Real time basis	3.3742	1.0602
Through Willingness to share information my In Kenya has been able to make decisions on	3.833	.9202
Responsiveness of supplier has contribution to performance of distribution firms	3.903	.9007
By Quick, frequent & accurate information transfer It is important to put in place product placement	4.061	.8251
The management of my In Kenya implements supplier Information sharing	3.841	1.3020
Product placement enhances performance of distribution firms	3.566	.8017

Warehouse Layout

Respondents were asked to give their responses in regard to warehouse layout on performance of distribution firms, Kenya i.e. 5-point liker sale where SA=Strongly Agree, A=Agree, N= Neutral, D=Disagree, and SD= Strongly Disagree. Their responses are presented in table 2 below:

From table 2, respondents, respondents agreed that Innovative Activities ensure performance of Distribution firms, Kenya (M=4.039, SD=.7307); I Value adding activities on performance of Distribution firms, Kenya (M=4.004, SD=.8307); My In Kenya ensures Value for money on performance of Distribution firms, Kenya (M=4.207, SD=.8507); In cases of no partnership the embrace it towards better performance of Distribution firms, Kenya t (M=4.010, SD=.8073); Alternative value reaction process contributes to performance of Distribution firms, Kenya (M=3.926, SD=.8306); and to enhance dispute resolution results, our In Kenya has reacted a conducive supplier dispute resolution towards performance of Distribution firms, Kenya(M=4.108, .8055).

These findings are in agreement with the finding of Nyile *et al.* (2022) who observed that the characteristic of warehouse layout is the best value reaction to sort out non-performance of, after warehouse layout, for resolving return on investment. The problem areas giving rise to disputes are mainly related to distribution firm's matters.

Table 2: Warehouse layout

Statement	Mean	Std. Dev.
My In Kenya embrace Innovative Activities on performance of Distribution firms, Kenya.	4.038	.7307
My In Kenya embrace Value adding activities on performance of Distribution firms, Kenya.	4.004	.8307
My In Kenya embrace Value for money on performance of Distribution firms, Kenya	4.010	.7873
In cases of value for money disputes on performance of Distribution firms, Kenya	3.926	.8306
Alternative value for money process on performance of Distribution firms, Kenya	4.108	.8055
To enhance value for money on performance of Distribution firms, Kenya	4.084	.8108

Performance of Distribution Firms

Respondents gave their level of agreement on various statements relating with performance of distribution firms, Kenya. The results were as presented in Table 3 below:

From the findings, respondents were in agreement that performance of Distribution firms, Kenya is being affect by supplier relationship management, they gave 63.2%; when asked about Value for money and its effect on procurement performance of distribution firms, Kenya they gave 70.7 %; When the respondents were asked to show their level of agreement on how complaints affects performance of Distribution firms, Kenya they gave 9%; When also the respondents were asked to show their level of agreement on growth of the In Kenya government on performance of distribution firms, Kenya they gave 69.7%. The findings is in line with the findings of Mutai and Osoro (2021) they observed that some of the factors that contribute to inefficiency in public procurement as corruption, delayed payments, poor planning, statutory amendments, insufficient use supplier evaluation low public participation, and improper payment procedures negatively affects performance of Distribution firms In Kenya in Kenya..

Table 3: Performance of DISTRIBUTION FIRMS

Statements	Yes (%)	No (%)
customer Satisfaction an affects performance of Distribution firms, Kenya	62.2	37.8
Value for money an affects performance of Distribution firms, Kenya	70.6	26.4
IT training an affect performance of Distribution firms, Kenya	44.0	56.0
Return on investment an affects performance of Distribution firms, Kenya	69.7	31.3
Quality of supplies an affects performance of Distribution firms, Kenya	42.2	57.8
on performance of Distribution firms In Kenya , Kenya	74.1	25.9

Pearson correlation Analysis

The study further conducted inferential statistics entailing both Pearson and regression analysis with a view to determine both the nature and respective strengths of associations between the conceptualized predictors such as product placement and warehouse layout and performance of Distribution firms, Kenya.

Table 4: correlation coefficients

		Performance Of Distrbution Firms	Retrieval system
Performance Of distribution firms	Pearson correlation	1	
	Sig. (2-tailed)		
Product placement	Pearson correlation	.871[*]	
	N.	118*	
	Sig. (2-tailed)	.000	
W/house layout.	Pearson correlation	.801[*]	.253
	N	118*	118
	Sig. (2-tailed)	.000	.070

From the findings, a positive correlation is seen between each variable and performance. The strongest correlation was established between warehouse layout and performance of distribution firms (r = 0.183). This is tandem with the findings of Ongeri and Osoro (2021), who observed that all independent variables were found to have a statistically significant association with the dependent variable at over 0.05 level of confidence.

Regression Analysis

To establish the degree of the effect of supply chain for a regression analysis was conducted, with the assumption that: variables are normally distributed to avoid distortion of associations and significance tests, which was achieved as outliers were not identified; a linear relationship between the independent variables and dependent variable for accuracy of estimation, which was achieved as the standardized coefficients were used in interpretation. The multiple regression model was as follows:

Model Goodness of Fit

Regression analysis was used to establish the strengths of relationship between the performance of Distribution Firms In Kenya (dependent variable) and the predicting variables; product placement, and warehouse layout (Independent variables). The results showed a correlation value (R) of 0.763 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 (2018), who observed that analysis of variance statistics examines the differences between group means and their associated procedures.

Table 5: Model Goodness of Fit

R	R2	Adjusted R	Std. Error of the Estimate
0.763	0.781	0.731	0.064

a. Predictors: (constants); product placement,and   warehouse layout
b. Dependent Variable: performance of Distribution firms

With an R-squared of 0.781, the model shows that product placement, and   warehouse layout an contribute up to   78.1% on performance of Distribution firms, while 20.9% 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).

Analysis of Variance (ANOVA)

From the results in table 6, analysis of variance statistics was conducted to determine the differences in the means of the dependent and independent variables to show whether a relationship exists between the two. The P-value of 0.005 implies that organizational performance of distribution firms have a significant relationship with product placement, warehouse flow, which is significant at 5 % level of significance.

Table 6 ANOVA TEST

Model	Sum of Squares	Df	Mean Square		F	Sig.
Regression	4.155	1	1.059	0.441	0.001	
Residual	6.466	117	0.531			
Total	**10.611**	**118**				

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 7 reveal a positive relationship between the performance of distribution firms in Kenya,

From the result shown below, it's clear that when all the independent variables are regressed against the dependent variable the constant gives a negative result meaning there is a strong relationship and how each predator influences the dependent variable.

Table 7: Regression coefficient Results

	Unstandardized coefficients		Standardized Coefficients	T	Sig.
	B	**Std. Error**	**Beta**		
(constant)	-.134	.060	-1.144	.004	.002
Product placement V.	.431	.132	.858	5.472	.001
W/house layout	.262	.115	.321	2.657	.002
b. Dependent Variable: performance of distribution firms in Kenya					

A unit change in warehouse layout management would lead to .262 of sector also a unit product placement would have an effect of .431 change in on performance of distribution firms and finally a unit change in dispute resolution would have an effect of .431 of performance of distribution firms In Kenya. This finding is in line with the findings of Ongeri and Osoro (2021). This implies that among other factors, product placement, and warehouse layout are significant determinants of performance of distribution firms, Kenya.

Conclusion

The study concludes that there is a positive relationship between product placement and Performance of Speciation identification, periodic design assessment, continues improvement and proactive assessment are among the product placement factors that significantly influenced the performance of distribution firms, Kenya. The study further concludes that by implementing product placement has enhanced performance of distribution firms, Kenya, leading to operational increase in efficiency and effectiveness. Therefore, the study concludes Distribution firms In Kenya has significantly increased their suppliers' quality management in the In Kenya government in the supply chain practices.

The study concludes that there is a positive relationship between warehouse layout and performance of distribution firms. Partnership enforcement policy, collective bargaining, alternative dispute resolution processes, free expression of concerns by involved practices are among the coordination factors that significantly influenced the performance of distribution firms, Kenya. The study further concludes that by adopting alternative coordination and partnership mechanisms as it was observed at distribution firms, the level of performance of distribution firms has increased. Therefore, the study concludes that distribution firms In Kenya has been experiencing significant increase in service delivery through embracing proper coordination in the supply chain practices.

Recommendations

The study recommend that product placement formalizes relations between practices within a robust legal framework, but is much more; besides, it is an opportunity to define the arrangements that encompass every aspect of what outcomes the distribution firms In Kenya wants from the supplier and how it wants the relationship to work. This means that the In Kenya needs to take an active role in the development of the quality mechanism early on; it should not be left as a supplementary activity post negotiation. At preparation of every quality management can contribute to supplier evaluation on performance of distribution firms, Kenya. Proper product placement can result to high procurement in distribution firms.

This study recommends that warehouse layout had a strong relationship with performance of distribution firms in Kenya. When relationship is not properly managed, they may cause supplier delays, undermine team spirit, increase delay costs, and, above all, damage business relationships. With the increase in the number of participants in a supplier management, it is obvious that more business interactions and arguments end up with an increase in the number of supplier relationship disputes. Research in preventing and resolving relationship disputes supports the effort for better understanding and harmonization of the different cultures. Therefore, this study recommends to

the management of distribution firms In Kenya to enhance and upgrade on the implementation of all applicable alternative disputes resolution mechanisms so to protect relationship with its stakeholders in the supply chain practices.

Areas for Further Studies

This study focused on product placement, and warehouse layout and performance of distribution firms, Kenya. The study therefore recommends a further study to be conducted to other counties in Kenya. Then get their findings and compare with this and agree or disagree. The study also recommends replication of the study in other sectors such as manufacturing sector and public sector to allow comparison of research findings.

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