INTERNATIONAL JOURNAL OF SOCIAL Sciences and Information Technology
ISSN 2412-0294 www.ijssit.com
http:// www.ijssit.com

# EFFECT OF INVENTORY OUTSOURCING ON PERFORMANCE OF BANKS IN NAIROBI CITY COUNTY, KENYA

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**Abstract**

*Outsourcing cannot be ignored in many organizations in the current business world because thinking about organizational performance has become critical. The study sought to determine the effect of logistics outsourcing and performance of banks in Nairobi City County by looking at effect of inventory outsourcing. The theories aligned to the study include, game theory, constrains theory, the theory of resource-based view, and the theory of agency. The population of the study included 42 banks in Nairobi City County. The findings show that outsourcing inventory allows for minimization of inventory levels thus, the institution has been able to strengthen its inventory control. The study concluded that waste elimination and increase efficiency in operations has an impact of the performance of the banks as it were. Further, it secures that flexibility in work, advancement of new ideas with new highlights and valuation of client needs improves the performance of the institutions and recommended that, managers in banking institutions should capitalize on feasibility studies aimed at evaluating the effect of inventory management for outsourcing and this should help them to become competitively informed into making the right decisions and as a result it will help in ensuring proper operations integrations in the institutions.*

***Keywords***: *Information Flow, Inventory Management, Integrating Operations*

## 1. Introduction

Outsourcing cannot be ignored in many organizations in the current business world because thinking about organizational performance has become critical. Through outsourcing activities, companies have become tried to improving their performance in none core activities in the organizations such as cleaning services, logistical services as well as maintenance of premises among others (Kalinzi, 2015). While outsourcing is that the allocation to a provider outside the organization of services and functions that will or may not be performed within the organization, procurement outsourcing is that the transfer to a third party of the required procurement activities associated with sourcing and the management of supplier in order to cut down on costs and ensure specialization in core activities (Asare & Boatengg, 2017). Organizations outsource capabilities that are costly or susceptible to handling under normal circumstances (Siran, 2017). Different managers measure and control the performance of organizations as they understand that it results in better asset management, an increasing ability to provide customer value, improving organizational knowledge measures and measurement of organizational performance that has an impact on the reputation of organizations. The past management decisions that shaped investments, activities and financing are measured when assessing the performance of

ISSN 2412-0294
Vol VII Issue IX, September 2021

the organizations to understand whether all the resources were used effectively, whether the company's profitability met or maybe exceeded expectations, and whether the choice of financing was made prudently (Muringe & Chirchir, 2018). Each item sold in each facility dedicated to serving each customer could be stored by a company, but only a few business activities could afford such an upscale inventory deployment strategy because the risk and total cost is prohibitive (Bowersox, et al., 2010). They stated in their supply chain logistics management book that the objective of listing management was to achieve the desired customer service with the minimum inventory commitment. Excessive inventories would catch up with shortcomings in the basic design of a logistics system, but ultimately led to higher overall logistics costs than necessary. Within the developments, the banking industry has not been overlooked because it has decided to consider financing, risk management and credit decision-making as other specific core competences that will reap the benefits associated with economies of scale and specialization. Logistics outsourcing today has an impact not only on organizational structures and costs, but also on competition in the banking sector. This shows that if banks outsource they will indirectly stimulate competition within the banking system (Chirchir, 2014).

## 2. Statement of the Problem

Logistics outsourcing is among the fastest growing areas. The number of third-party service providers has increased, leading to fierce competition between players in the sector. The productivity of financial banks relies heavily on their performance. Commercial banks should have innovative techniques to enable quality improvement and price reduction in order to achieve or retain competitive advantage and prevent market elimination due to the problem of profitability and rigid competition within the industry (Nyaoga et al., 2012). The commercial banks in developed countries were the front runners of logistics outsourcing (Schniederjans & Cao, 2016). Despite this development, third party service providers face a myriad of challenges in providing contracting companies with logistics services (Aldo & Mitja, 2012). A study conducted by Kogoh (2015) conducted a research to explore the extent of the logistics function being outsourced within the logistics sector. The research included a study of the effect of order management, warehousing, packaging and transportation logistics outsourcing on the efficiency of logistics in Kenya. Study results led to the fact that market leaders outsourced order management, warehousing, manufacturing and transport logistics. A study by (Njagi & Okonga, 2017) showed that receiving accurate and timely stock replenishment was the alternative to holding safety stock. While such time-based programs reduce customer inventory to absolute minimums, as a result of the time-sensitive logistics process, the savings must be balanced against other supply chain costs. Eventually, during a competitive vacuum, inventory strategies could not be developed. Typically , a company was more desirable to try to trade with rivals if it could promise and deliver rapid and consistent delivery. In order to realize competitive advantage, it was therefore necessary to position inventory during a specific warehouse, although such commitment increased overall costs (Bowersox, et al., 2010). The researchers identified from the knowledge gathered that the effect of outsourcing logistics services to 3PL providers on the overall performance of all manufacturing firms was not fully pursued. However, the need for further research to develop a good logistics outsourcing framework in procurement to improve the performance of different organizations is demonstrated by numerous gaps. It is against this background this study embarked to fill the prevailing gaps by seeking to determine the effect of logistics outsourcing and performance of banks in Nairobi City County.

## 3. Objective of the Study

The general objective of this study was to determine the effect of logistics outsourcing and performance of banks with a specific objective to determine the effect of inventory outsourcing on performance of banks in Nairobi City County.

## 4. Literature Review

### *Inventory Outsourcing*

An inventory was defined as a stock or store of products by Stevenson (2009). It was also regarded as a stock of anything necessary to try to do business (Mangrulkar, et al., 2015). Either way, any business that sold goods probably had the materials needed to sell their products on hand as finished products as well (Laird, 2012). The inventory of the company was those materials and finished products kept on-hand. Each item sold in each facility dedicated to serving each customer could be stored by a company, but only a few business activities could afford such an upscale inventory deployment strategy because the risk and total cost is prohibitive (Bowersox, et al., 2010). They stated in their supply chain logistics management book that the objective of listing management was to achieve the desired customer service with the minimum inventory commitment. Excessive inventories would catch up with shortcomings in the basic design of a logistics system, but ultimately led to higher overall logistics costs than necessary.

According to (Arasa, 2016), logistical approaches are designed to achieve customer service objectives while preserving the rock bottom of possible inventory financial investment. The key to efficient logistical segmentation rested within the inventory priorities dedicated to supporting the core goal of the customer so that maximum inventory turns were realized. Therefore, a sound inventory management strategy was supported by a combination of 5 aspects of selective deployment: core segmentation of customers; product profitability; integration of transport; time-based performance; and competitive performance (Bowersox, et al., 2010).

## 5. Methodology

The study used a descriptive research design. The target population for this research comprised of 101 respondents. The targeted population considered employees from top, middle and lower level of management from the ten (10) Commercial Banks. The reason why the study intends to aim all level of management is due to the fact that all the levels are critical and play an important role in making the decisions within an organization. A formal questionnaire was used by the investigator as key data collection instrument. The organized questionnaire consists of open-ended and closed-ended questions that give respondents the freedom, respectively, to share their views and restricted views. Data analysis was based on a quantitative analysis of items such as frequencies, percentages, averages and standard deviation. Inferential statistics was also the focus of the study, where correlation analysis and multiple regression analysis were carried out.

## 6. Findings and Discussion

### *Correlation analysis of Study Variables*

Correlation is often used to explore the relationship among a group of variables (Pallant, 2010), in turn helping in testing for multicollinearity. When the correlation values are not close to 1 or -1, this is an indication that the factors are sufficiently different measures of separate variables (Kelliher, 2010). It is also an indication that the variables are not multicollinear. Absence of multicollinearity allows the study to utilize all the independent variables.

***Table 1: Correlation analysis of Study Variables***

| | | Performance of Banks | Transportation Outsourcing | Inventory Outsourcing | Operations Integration Outsourcing | Information Flow Outsourcing |
|---|---|---|---|---|---|---|
| Performance of Banks | Pearson Correlation | 1 | .549** | .577** | .490** | .394** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 |
| Inventory Outsourcing | Pearson Correlation | .577** | .625** | 1 | .524** | .359** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 |

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

A correlation of above 0.90 is a strong indication that the variables may be measuring the same thing (Tabachnick, 2013). The fact that all the correlations were less than 0.90 was an indication that the factors were sufficiently different measures of separate variables, and consequently, this study utilized all the variables. The highest correlation was between inventory outsourcing and performance of banks (r=0.577, p<0.01) as shown in Table 1.

The study showed that the lowest correlation was between information flow outsourcing and performance of banks (r=0.394, p<0.01). Also, the study indicated that there was a positive significant linear relationship between transportation outsourcing and performance of banks. This relationship had been illustrated by the correlation coefficient of 0.549 at 0.01, significance level as shown in Table 1. This implied that there was a strong relationship between transportation outsourcing and performance of banks. Likewise the study found that operations integration outsourcing had a positive significant linear relationship with performance of banks with Pearson correlation coefficient of 0.490 at 0.01, significance level as shown in Table 1. This implied that there was a positive correlation between operations integration outsourcing and performance of banks.

***Multiple Regression Analysis***

The study used multiple regression analysis to determine the linear statistical relationship between the independent variables and dependent variable (Performance of Banks) of this study.

***Table 2: Model Summary***

| | | | | | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .671[a] | .451 | .426 | .646 | .451 | 18.460 | 4 | 90 | .000 |

The findings, the regression analysis showed a strong relationship, $R^2$=0.451 which showed that 45.1% of change in performance of banks can be explained by a change of one unit of all the predictor variables jointly. This result indicated that predictor variables affect the performance of banks positively.

***Table 3: ANOVA***

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 30.805 | 4 | 7.701 | 18.460 | .000[b] |
| | Residual | 37.546 | 90 | .417 | | |
| | Total | 68.351 | 94 | | | |

The test on ANOVA showed that the significance of the F-statistic (18.460) is less than 0.05 since p value, p=0.000, as indicated in Table 3. This implied that there was a positive significant relationship between independent variables and performance of banks. Thus, the independent variables are important to the Performance of Banks.

***Table 4: Coefficients of Regression Model***

| | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| **Model** | | **B** | **Std. Error** | **Beta** | **t** | **Sig.** |
| 1 | (Constant) | .799 | .224 | | 3.559 | .001 |
| | Inventory Outsourcing | .245 | .105 | .254 | 2.332 | .022 |

From table 4 above, the table presents the level of significance also called the p value. This is the coefficient that is used to test hypothesis and the significance of the independent variables. The level of significance for this study is 0.05 and therefore if the p value is less than 0.05 we fail to accept the null hypothesis and accept if the p value is greater than 0.05. At the 0.05 level of significant, the findings as shown in Table 4 shows that the independent variables are statistically significant with p-values less than 0.05 (i.e. $p<0.05$).

These findings indicate that if all the independent variables are held constant at zero, the logistics outsourcing and performance of banks recorded would be 0.799 units. The results suggest that inventory outsourcing accounts for 0.245 units.

The results also suggest transportation outsourcing contributes 0.193 units, operations integration outsourcing generates 0.252 units and information flow outsourcing contributes to 0.137 units of logistics outsourcing and performance of banks each when the other factors are kept unchanged.

$Y=\beta_0+\beta_1 X_1+\varepsilon$

Where;

The coefficients $\beta_1 = 0.245$ is significantly different from 0, with p values 0.022, and is less than p=0.05 as summarized in Table 4.

Performance of banks = $0.799+ 0.245 X_1+\varepsilon$.

## 7. Conclusion, Recommendations and Suggestions for Further Studies

### *Conclusion*

The study showed that outsourcing inventory allows for minimization of inventory levels thus, the institution has been able to strengthen its inventory control. Inventory management providers offer discounts on their freight rates thus ensuring that the institution saves money in the process. The study has given a general assessment of the effect of logistics outsourcing and the performance of banks in Nairobi City County. The researcher reasoned that logistics outsourcing affect the performance of banks in Nairobi County to a great extent. The study concluded that the independent variables affect the performance of banks. The study concludes that waste elimination and increase efficiency in operations has an impact of the performance of the banks as it were. Further, it secures that flexibility in work, advancement of new ideas with new highlights and valuation of client needs improves the performance of the institutions.

### *Recommendations*

From the study, there is a need to strengthen the enlightenment of more bank managers on the significance of logistics outsourcing. They must be educated on the importance of outsourcing in their business matters. This can be done by making arrangement on having training from time to time as well as workshops on logistics outsourcing. The study recommends that, managers in banking institutions should capitalize on feasibility studies aimed at evaluating the effect of inventory management for outsourcing and this should help them to become competitively informed into making the right decisions and as a result it will help in ensuring proper operations integrations in the institutions. This will assist managers to articulate appropriate measures which will guarantee that objectives of growth and profitability plans are effectively implemented. The resources available should be allocated and utilized well. To realize significant growth, performers in the banking industry should only logistics outsourcing in order to increase efficiency and profitability as well as customer satisfaction.

### *Suggestions for Further Studies*

This research focused on the effect of logistics outsourcing on the performance of banks in Nairobi County. The study has investigated the logistics outsourcing and how they affect performance in banks. Therefore, a further study ought to be carried out in other sectors that are dealing with other different services such as the manufacturing sector while at the same time investigating the challenges of implementing the outsourcing in them.

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