Journal of Procurement & Supply Chain



Effect of logistics Outsourcing on The Performance of Dairy
Processing Firms in Kenya

Beatrace Mbeyu Joto & Dr. Stephen O. Odock

ISSN: 2617-3581



Effect of logistics Outsourcing on the Performance of Dairy Processing Firms in Kenya

*1Beatrace Mbeyu Joto and 2Dr. Stephen O. Odock

¹Postgraduate Student, Master Of Business Administration, School of Business, University of Nairobi

²Lecturer, Department of Management Science University of Nairobi

*Email of the Corresponding author: beatricejoto@gmail.com

How to cite this article: Joto, B.M. & Odock, S.O (2019), Effect of logistics Outsourcing on the Performance of Dairy Processing Firms in Kenya. *Journal of Procurement & Supply Chain. Vol* 3(2) pp. 17-35.

Abstract

The concept of logistics outsourcing has become increasingly popular in the dairy industry in attempt to reduce operational cost amongst other benefits that accrue. The objective of the study was to determine the effect of logistics outsourcing on performance of dairy processors in Kenya. The population of study in this research was 28 dairy processors in Kenya as per KDB (2017) and the study was a census survey of all these firms. The study used primary data which was collected through a structured questionnaire from logistics and operations managers or their equivalents. The response rate was 89.3%. Data was analyzed using Statistical Package for Social Sciences (SPSS), descriptive statistics were generated with the main analysis tools being frequencies, mean and standard deviation to achieve the first objective. Regression analysis was done to achieve the second objective. The results established that the concept of logistics outsourcing has not been fully adopted. The firms opted to outsource services like warehouse management only during high seasons. However, the study established that firms outsource logistics operations to reduce costs such as cost of vehicle acquisitions and maintenance, fuel costs, risks cost amongst other. The study also established a high correlation between logistics outsourcing and firm's performance. Hence, the research concluded that logistics outsourcing can enhance firms' performance if fully adopted. The study recommended that dairy processing firms should fully adopt outsourcing strategy so as to cut cost on non- core activities in its logistics functions.

Keywords: Logistics outsourcing, transport management, inventory management, warehouse management, information management, distribution management and firm performance.

Stratford
Peer Reviewed Journal & book Publishing

1.1 Introduction

Globalization has stiffened the business environment through increased complexity, wide range of products and services and increased demands of consumers. Different firms have adopted various mechanisms such as reconfigurations of processes; value creation processes dispersion and reduced product life cycle so as to increase efficiency in business operations (Vagadia, 2012). National and international markets of goods and services have also expanded logistics services (Troacă & Bodislav, 2012). There has been a need for firms to increase operational efficiency to ensure timely delivery of their products gaining competitive advantage. One of the strategies firms have adopted is outsourcing. Outsourcing is the movement of organization's internal activities, decisions and responsibilities to outside provider(s) (Wachira, Brookes & Haines, 2016). Over time, there has been a remarkable growth in logistics outsourcing (Hirschheim, Heinzl & Dibbern, 2014).

There are various theories which anchors the relationship between logistics outsourcing and firm's performance. These include: transaction cost economics, resource based view and theory of competitive advantage. The transaction cost economics proposes the need to evaluate the cost effectiveness of operations when making make or buy decisions (Coase, 1937; Williamson, 1975). Resource based view states that though resources are valuable they are rare, imperfectly imitable and non-substitutable, firm have to efficiently exploit these resources to realize competitive advantage (Hart, 1995; Crook, Ketchen, Combs & Todd, 2008). The theory of competitive advantage focuses on why firms develop and adopt different business strategies (Porter, 1990). According to this theory, firms outsource anticipating cost reduction to enhance its competitiveness in the industry (Festus & Adenike, 2011).

In 2017, the global dairy industry was reportedly undergoing market turbulence. China's low demand, Russia's trade restrictions and EU milk quotas removal, resulting to high supply reduced prices (Delloite, 2017). The industry was still able to maintain its attractiveness, because of the population growth and changing diets. The dairy industry plays a very significant role in the lives of many people in the Eastern and Southern Africa region. A large portion of total household income comes from dairy. The industry provides up to one billion livelihoods. In 2014, milk production was estimated at 802.2 million tons. Since 2000, the dairy industry has been having a steady positive growth of 2.3% on average every year (Eastern and Southern Africa Dairy Association, 2017). The Kenyan Dairy industry is one of the largest in Africa. Kenya's per capita milk consumption is one of the highest in the low-income developing Country (Ngotho, 2016). In East Africa, the Kenya's dairy sector is the most advanced. This study is therefore motivated by the fact that due to the significance of the dairy industry, there is need to increase efficiency in the industry's operation at minimal cost. Past research findings indicated that logistic outsourcing enabled the manufacturing industry reduce cost and increase operation efficiency (Gilley & Rasheed, 2000).



The study will thus establish whether logistics outsourcing has the same impact in the performance of firms in the dairy industry.

1.1.1 Logistics Outsourcing

Logistics outsourcing is the act of subcontracting logistics activities to firms equipped to provide the services (Lynch, 2004). Wachira, Brookes and Haines (2016) defined outsourcing as movement of the organization's internal activities, decisions and responsibilities to external provider(s), thus logistics outsourcing involves the contracting of the logistics functions of the firm to other parties. These parties include first party logistics providers, second service party providers, third party service providers and fourth party service providers. According to Kubr (2002), logistics outsourcing is a contractual removal and transfer of the logistics function, whereby the organization decides not to perform it itself in future, to the outside firms.

Logistics outsourcing functions include information management, transportation management, warehouse management, material handling management, inventory management and information management (Forslund, 2012). The growth in outsourcing of logistics services has resulted more from an accident than by design due to its encouraging impact on the operational efficiency. Firms are under pressure to look for mechanisms that will enable them increase profitability and improve their competitiveness, these entails the efficiency and effectiveness on logistics activities execution (Kumar, Vrat & Shankar, 2006). Firms have opted for logistics outsourcing anticipating cost reduction and enhancement of value during distribution and transportation of goods. As a result, the concept of outsourcing the logistics function, either partially or wholly, to logistics service providers (LSPs) has increasingly been adopted across the industry (Selviaridis & Spring, 2007). Logistics service providers are constantly contracted to offer transportation and warehousing services.

Logistics outsourcing requires integration of firms' activities with service providers. This exposes the firm to great risk, that is, sharing of customer and suppliers data bases amongst other critical information, which if improperly used could play an important role in the competitive decline of firms (Barthelemy, 2003). Logistic outsourcing also results to dependent to the service provider hence quite inflexible. Such negative impact thus need to be evaluated before opting for logistics outsourcing. Failure to adequately scrutinize the outsourcing decision leads to reversing the outsourcing decision, back-sourcing, which is expensive and challenging (Brabham, 2008; Quélin & Duhamel, 2003).

Stratford
Peer Reviewed Journal & book Publishing

1.1.2 Firm Performance

Firm performance can be defined as how well a firm executes it activities or functions. It is based on its three major results area: financial performance, product market performance and shareholder return (Richard, Devinney, Yip & Johnson, 2009).

The decision on which performance indicator to use, to determine firms progress, is dependent on prevailing industry competition. However, the most commonly used measure is profitability. Profitability is the degree to which a firm generates profit from variables in production, such as labor and capital. Firm profitability shows how revenues and expenses relate and expected profits viz a viz the size of the business investment (Camisón & Villar-López, 2014).

The study used firms' sales and operating profit margin to measure performance. The operating profit margin is the returns to capital per dollar of gross firm revenue. A firm can increase its profits only by increasing the profit per unit produced or by raising the volume of production while maintaining the per unit profit. The operating profit margin shows the per unit produced component of earning profit (Pierre, Devinney, Yip & Johnson, 2009). Firms' net income is extracted from the income statement, it is determined by matching revenues with expenses incurred to create those revenues, add the gain or loss on the sale of firm capital assets. A firm's net income cannot be compared to another because net income is an absolute dollar amount and not a ratio, comparisons therefore can be impossible especially when firms are of different sizes (Saeidi & Sofian, 2015).

1.1.3 Logistics Outsourcing and Firm Performance

Effective logistics services are a critical issue for firms' performance. Due to scarcity of resources, most firms are unable to efficiently allocate resources in areas of competition. Therefore, they must focus on core areas to concentrate their resources for them to gain competitive advantage (Gilley, McGee & Rasheed, 2004)). The outsourcing of non-strategic services allows the organization to concentrate on their core competencies, that is, on operations which have a high strategic value. Outsourcing of non-strategic services improves both the quality and the service by enabling the firm to cut on costs and enhance its competitiveness (Gilley & Rasheed, 2000).

Logistics outsourcing as a firm performance indicator presents itself in cost reduction, reduced lead-time, reliability and quality in service deliveries, where Logistics Service Providers (LSP) play a key role (Parashkevova, 2007; Lee & Song, 2015). Logistics as a functional system is crucial for enhancement in efficiency, in the flow of goods and information more so to meet low-cost, quick, and reliable delivery of firms' objectives within and throughout a network of companies.

Stratford
Peer Reviewed Journal & book Publishing

Logistics operations contributes to firm's performance when carried out efficiently and effectively. The company's supply chain capabilities and competences are based upon logistics activities and processes (Panayides, 2007).

1.1.4 Dairy Processing Firms in Kenya

There are approximately 28 licensed dairy processors in Kenya (Appendix I). It is estimated that 5 billion liters of milk is produced in the country yearly. These provides livelihood to over 1.5million Kenyans, and contributes 4.5% of the country's gross domestic product (Kenya Dairy Board, 2018). In addition, the industry accounts for approximately 14% of agricultural GDP (USAID, 2010). Despite this, milk processors face a lot of challenges such as seasonality of production, poor and inefficient dairy practices, ageing farmers and high cost of inputs. Over 80% of the total milk and dairy products marketed through the formal market channel is contributed by processors, the rest is from informal traders. The presence of informal trade is brought about by formal system inefficiencies, consumer trends, and price differences between raw and processed milk (Muriuki, 2011). Due to stiff competition, the industry saw the merging of Spin Knit Dairy and Brookside in 2010 that triggered milk price war with the New KCC resulting to a drop in the price of milk (Sambu, 2010). Further, in 2017, Brookside acquired yet another brand, Delamere yoghurt brand, resulting to increased market share in the dairy sector.

Outsourcing has been used to economize on production cost resulting to cost restructuring. Thus, the concept of logistic outsourcing will help dairy processors curb high cost of input, increase quality by concentrating resourcing on improving quality and obtaining skilled manpower (Abraham & Taylor, 1996). Further, logistics outsourcing will cut on the overall value chain cost, thus, resources are focused on developing the core business. Firms will increase their profits margins by reducing overall additional logistics costs such as vehicle purchasing, fuel cost and labor costs which enhances agility (Walker, 2007).

1.2 Objectives of the Study

- i. Determine the extent to which logistics outsourcing is practiced by dairy processing firms in Kenya.
- ii. Establish the effect of logistics outsourcing on the performance of dairy processing firms in Kenya.



2.1 Empirical Review

Several studies have been carried out on the effect of logistics outsourcing on performance. Solakivi, Töyli, Engblom and Ojala (2011) conducted a study on logistics outsourcing and performance of SMEs in Finland. The study aimed at establishing the logistic outsourcing practices adopted, and their effect on performance of SMEs. The study used 223 manufacturing and trading SMEs from the Finnish logistics survey. Data was analyzed using Descriptive statistics with the main analysis tools being ANOVA and factor analysis. The study found out that firms are comfortable outsourcing transport operations only. The study realized outsourcing did not affect performance in any way, however, it made firm become more aggressive in monitoring and establishing internal and external collaborations to improve processes. The study concluded that firms need not to speculate immediate gains from logistics outsourcing, but should examine the firms' capabilities in making buy-make decisions. The study's major limitation was that it was based on SMEs hence the need for more research to establish if the same relationship applied to large firms.

Joong-Kun, Ozment and Sink (2008) conducted a study on the impact of logistics capability and logistics outsourcing on firm performance in an e-commerce market environment. In this study logistics outsourcing was a dichotomous variable. The study used survey research design. Descriptive statistics was adopted to analyze this data .The study findings showed that logistics capability positively correlates with firm performance. However, logistics outsourcing did not positively relate with firm performance. In addition, the findings showed that there was no link between logistics capability and outsourcing. The study's limitation was that it was constrained to the computer and consumer electronics retailing industry. Thus the significance of outsourcing logistics operations was not established.

Akili (2011) conducted a study on the impact of the design of logistics outsourcing strategy on the firm's performance in Portland cement manufacturing firms in East Africa Countries. Simple random sampling was adopted in sampling; Kenya, Tanzania and Uganda were used as sample data since they were English speaking countries as compared to the others. The study found that the concept of outsourcing had not been well organized in East Africa like other regions. Nevertheless, firms in the cement industry outsourced most of their logistics operations. The study also revealed, outsourcing firms had already felt the positive impact of outsourcing. Four rationales were established for outsourcing logistics services, that is: cost cutting, operational flexibility, time management and spreading logistics risks. The study's major limitation was that the study was conducted in developing countries, where the concept of outsourcing is not well developed.



Kyusa (2015) investigated the effect of logistics outsourcing on the operational performance of shipping industry in Kenya. The study used a population of 42 shipping companies' operating in Kenya as per the KSAA, 2015 and the study was a census survey. The data was analyzed using descriptive statistics with the main analysis tools being frequencies, mean and standard deviation and multivariate linear regression. The studies major limitation was that it had limited external validity. The findings showed that firms chose to outsource their services because it enabled firms focus on their core competencies. Further, the findings showed that logistics outsourcing practices adopted by the shipping firms enabled the long run focusing of the firms' survival. This was because outsourcing helped them in reducing operating costs, improved customer satisfaction and timely delivery of services to clients which in turn increased productivity and reduced lead time and improved profits.

Mulama (2012) studied logistics outsourcing practices and performance of large manufacturing firms in Nairobi, Kenya. The study used a population of all large scale manufacturing companies in Nairobi. It adopted stratified random sampling research methodology to determine the sample size. The study's major limitation was the heterogeneity of large manufacturing, thus the study could not use simple random sampling research method. The findings established that firms were outsourcing transportation management, warehouse management and material handling management. The firms chose to outsource since it enabled them concentrate on their core competencies. The study concentrated on manufacturing firms thus the need for further studies on service industry.

From the above studies, logistics outsourcing positively correlates with firm performance in the manufacturing, mobile and shipping's industries. However, the same relationship does not exists in the e-commerce market Further in the mobile industry, outsourcing of logistics function has major drawback such as hidden costs and exposure to various risks. Due to this mixed findings on the effect of logistics outsourcing on performance, this study seeks to establish how logistics outsourcing affects performance in the dairy industry.

2.2 Conceptual Framework

The conceptual framework is a diagrammatic presentation of the independent variables: transport management, warehouse management, inventory management and distribution management, and the dependent variable; firm performance. As illustrated in Figure 2.1



Independent Variable Logistics Outsourcing Practices Transport Management Warehouse Management Inventory Management Distribution Management Information Management Information Management

3.1 Research Design and Methodology

The study adopted a cross-sectional survey research design. A cross sectional study enables data to be collected across firms at the same point of time (Copper & Schindler, 2006). Data was thus collected across this processing firms at similar periods. The population of study was all dairy processing firms in Kenya. According to the Kenya dairy board, there are 28 processing firms in the dairy industry. A census of all the firms was undertaken since the population was small. The study used primary data. Data was collected using questionnaires. The questionnaires were semi-structured, comprising of open ended and close ended questions. This enabled collection of both quantitative and qualitative data. The questionnaires were self-administered by dropping them at the firms and picking them later after being completely filled. After data collection, the questionnaires were checked for completeness, consistency and accuracy. The data was then edited, coded and tabulated. To achieve objective one, descriptive statistics which consisted of means and standard deviations were generated. To achieve objective two, multiple regression analysis was performed to ascertain the association and the relationship of logistics outsourcing and performance of firms in dairy industry. The findings were then presented in tables and graphs.

A multiple linear regression model was used to link the independent variables to the dependent variable as follows;

Volume 3//Issue 2//Page 17-35//March//2019/ Email: info@stratfordjournals.org ISSN: 2617-3581



$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

Where:

Y = Firms Performance, X_1 = Transport Management, X_2 = Warehouse Management, X_3 = Inventory Management, X_4 = Distribution Management. In the model, β_0 = the constant term while the coefficient $\beta_i = 1....4$ was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables X_1 , X_2 , X_3 and X_4 . μ is the error term which captures the unexplained variations in the model (Olusola et. al, 2013). The analysed data was then presented using tables.

4.1 Results and Discussion

4.1.1 Extent of Logistics Outsourcing

The first objective of the study was to examine the extent to which firms outsource logistics functions. The respondents indicated that their firms outsourced logistics functions that is transportation management, warehouse management, distribution management, and inventory management and information management activities to a great extent. Since all their means averages were above 3 as shown in Table 1.

Table 1: Summary of Extent of Logistics Outsourcing

Logistics Function	Mean	Std. Deviation	Rank
Transport Management	3.98	0.56	1
Warehouse Management	3.60	0.78	4
Inventory Management	3.10	0.84	5
Distribution Management	3.72	0.47	2
Logistics Information	3.70	0.54	3
Management			
Average	3.62	0.64	

Source: Research Data (2018)

However, the firm outsourced transport management more since it had a mean of 3.98, followed by distribution management a mean of 3.72, logistics information management (3.70) and warehouse management (3.60). The least outsourced was inventory management with a mean of 3.10.

4.1.2 Logistics Outsourcing and Financial Performance

The second objective of the study was to establish the relationship between logistics outsourcing and firms' performance.



Regression Analysis.

Table 2: Model Summary

Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.805ª	.648	.555	.74778	1.211

Source: Research Data (2018)

a. Predictors: (Constant), Information Management, Inventory Management, Distribution

Management, Transport Management, Warehouse Management

b. Dependent Variable: Financial performance

From Table 2, the coefficient of correlation r = 0.805. This shows that there is a positive relationship between logistics outsourcing and performance. This coefficient of correlation was tested for significance as follows:

Step 1: Stating the hypotheses

 H_0 : r = 0 (the relationship between logistics outsourcing and performance is not significant.)

 H_1 : $r \neq 0$ (the relationship between logistics outsourcing and performance is significant)

Step 2: Level of significance

Significance $\alpha = 0.05$ and this is a two tailed test.

Step 3: Decision rule

Degrees of freedom = n - 2 = 25 - 2 = 23; Therefore, $t_{0.05, 23} = 2.069$

The decision rule will therefore be, reject the null hypothesis if the computed t does not fall in the region: $2.069 \le t \le 2.069$

Step 4: Test statistic

$$t = r\sqrt{\frac{n-2}{1-r^2}} = 0.805\sqrt{\frac{25-2}{1-0.648}} = 6.507$$

Step 5: Conclusion

Since the computed t (6.507) fall in the rejection region, the null hypothesis is rejected. This implies that the relationship between logistics outsourcing and performance is significant. ANOVA was done to test the overall significance of the model. The results are shown in Table 3.



Table 3: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.525	5	3.905	6.984	.001 ^b
Residual	10.624	19	.559		
Total	30.150	24			

Source: Research Data (2018)

- a. Dependent Variable: Financial performance
- b. Predictors: (Constant), Information Management, Inventory Management, Distribution Management, Transport Management, Warehouse Management

It can be observed that the p value (0.001) is less than the level of significance (0.05) this means that the overall model is significant.

Next, the significance of individual parameters was tested. The results are shown in Table 4

Table 4: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	.084	1.452		.058	.955		
Transport Management	.260	.357	.131	.729	.475	.577	1.733
Warehouse Management	.213	.266	.149	.801	.433	.537	1.861
Inventory Management	1.097	.216	.821	5.074	.000	.709	1.411
Distribution Management	.238	.415	.100	.574	.572	.615	1.625
Information Management	774	.412	373	-1.878	.076	.470	2.129

Source: Research Data (2018)



It can be seen that only one parameter (Inventory management) in the model was significant as indicated by its p-value of 0.000, which is less than 0.05. This implies that its' inclusion in the regression model is justified. The rest of the individual parameters p-values were; transport management 0.475, warehouse management 0.433, distribution management 0.572 and Information Management 0.076. These p-values are higher than 0.05 making the individual parameters inclusion not significant in the model.

Thus the regression model will be

$$Y = 0.084 + 0.260 X_1 + 0.213 X_2 + 1.097 X_3 + 0.238 X_4 - 0.774 X_5$$

Where Y represents performance, X_1 represents transport management, X_2 warehouse management, X_3 inventory management, X_4 distribution management and X_5 represents information management. The model further shows that transport management positively relates to firms' performance as indicated by its coefficient values of +0.260. So does warehouse management with a coefficient of +0.213, followed by inventory management 1.097 and lastly distribution management having a coefficient of +0.238. This implies that if you increase transport management, warehouse management, inventory management and distribution management, firms' performance will also increase. Whereas, information management negatively relates to firms' performance. This means that an increase in logistics information management outsourcing reduces firms' performance.

4.2 Summary of the Findings

The findings also revealed that the concept of logistics outsourcing has not been fully adopted in the milk processing industry. This means that firms could not fully accrue outsourcing benefits. Firms were moderately outsourcing their logistics functions. For instance, firms preferred to partly acquire vehicles to avoid complete reliance on service providers.

The results also indicated that there was indeed a positive correlation between logistics outsourcing and performance. The most outsourced logistics function was transport management (3.98), followed by distribution management (3.72), logistics information management (3.70), warehouse management (3.60) and lastly inventory management (3.10). Transport management, warehouse management, inventory management and distribution management positively correlated with firms' performance. However, information management negatively correlated with firms' performance. This could be because information management is critical to firms' survival, thus outsourcing of logistics information management posed a great risk to the firms.

Volume 3||Issue 2||Page 17-35||March||2019| Email: info@stratfordjournals.org ISSN: 2617-3581



5.1 Conclusions of the Study

Based on the findings, the study concluded that dairy processing firms in Kenya were practicing logistics outsourcing so as to minimize costs and this had an effect on firms' performance. There had been improved firms performance through cutting of cost on non-core activities. Further, the dairy industry has been in operation for more than ten years in Kenya and has thus broadened its operations to other parts of the world. The study also concluded that firms were outsourcing their logistics functions, that is, transport management, distribution management, logistics information management, warehouse management and inventory management so as to cut cost on non- core logistics functions. These findings are consistent with Mulama (2012), who established that manufacturing firms were outsourcing transportation management, warehouse management and material handling management to enable them concentrate on their core competencies.

The study also concluded that there is a significant relation between logistics outsourcing and firm performance. These findings collaborate with those of Kyusa (2015), who found out that logistics outsourcing enhanced performance by reducing operations cost in the shipping industry. The finding are also consistent with those of Mulama (2012) who also established that logistics outsourcing had a positive correlation with performance of firms in the manufacturing sector. However, the study findings were not consistent with those of Joong-Kun, Ozment and Sink (2008) who established that logistics outsourcing did not positively relate with firm performance. This could be because Kun, Ozment and Sink (2008) study was carried out in e-commerce market whereas this study was in dairy processing firms. Lastly, the study concluded that most firms did not have a comprehensive strategy on logistic outsourcing implementation. This showed that the general concept of outsourcing has not been understood by milk processors as such there is no clear guidance on who makes the outsourcing decision

5.2 Recommendations

Based on the findings of this study, it is recommended that dairy processing firms should adopt complete implementation of logistics outsourcing to enhance firms' performance. Dairy processing firm managers will have to undergo training to better understand what logistics outsourcing entails, the expectations, potential benefits and challenges .This will facilitate embracing and acceptance of logistics outsourcing as best practice at ensuring enhanced firms performance. Proper implementation of logistics outsourcing in operations of dairy processing firms is highly recommended. This should be done in a holistic manner rather than in an isolated way to enjoy total benefits of full implementation. They should create strategic partnership with service providers to establish reliable service provision amongst other benefits.



In addition, the study recommends that though outsourcing positively relates with performance, other functions of logistics such as logistics information management poses a great risk to the company if outsourced. As such, firms need not to outsource information management. In a scenario that they have to. It should be restricted and the service provider agrees to get confined with a confidentiality agreement. Lastly, the study recommends that logistics outsourcing policy makers should develop comprehensive strategy on logistic outsourcing adoption. This will facilitate clear logistics outsourcing implementation strategies and give clear policies and guidelines on the same.

5.3 Suggestions for Further Research

While this study successfully examined the effect of logistics outsourcing on performance of dairy processors in Kenya. It presents an untapped avenue for several other areas to be researched on. It thus recommends that further research needs to be done not only in the dairy industry but also in food processing industries and compare the findings from both. This could also be extended to other areas within the manufacturing industry. There is also need to carry studies continuously within the same setting to establish whether the results would change as years goes by. Again there is need to conduct studies on effect of logistics outsourcing on non-financial performance of the firms in milk processing firms such as improved customer satisfaction, efficiency, responsiveness and timely delivery of services amongst others.

References

- Akili, E. A. (2011). *Impact of the design of Logistics Outsourcing strategy on the firms' logistic performance* (Master's thesis, University of Agder).
- Andae, G. (2018). Kenya ponders duty waiver on imported powder milk. Business Daily.
- Ayers, J. B. (2009). Supply chain project management. CRC press.
- Baker, T. L. (1988). Doing social research. McGraw-Hill College.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barthelemy, J. (2003). The seven deadly sins of outsourcing. *Academy of Management Perspectives*, 17(2), 87-98.
- Bourlakis, M., & Melewar, T. C. (2011). Marketing perspectives of logistics service providers: present and future research directions. *European Journal of Marketing*, 45(3), 300-310.



- Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, 67(1), 2891-2902.
- Carbone, L., & Soifer, D. (2009). Third-party logistics: Keeping America's economy moving. *Lexington Institute*.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386-405.
- Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business Research Methods* (Vol. 9). New York: McGraw-Hill Irwin.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Crook, T. R., Ketchen Jr, D. J., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: a meta-analysis. *Strategic management journal*, *29*(11), 1141-1154.
- Delloite (2017) *Global Dairy Sector Trends and opportunities*
- Ellram, L. M. (1991). Supply-chain management: the industrial organisation perspective. *International Journal of Physical Distribution & Logistics Management*, 21(1), 13-22.
- Festus, A. F., & Adenike, A. A. (2011). The Competitive Advantage of Outsourcing the Products and Services of the Nigerian Industry. *Interdisciplinary Journal of Contemporary Research in Business*, 3(2), 77-88.
- Forslund, H. (2012). Performance management in supply chains: Logistics service providers' perspective. *International Journal of Physical Distribution & Logistics Management*, 42(3), 296-311.
- Geunes, J., & Pardalos, P. M. (Eds.). (2006). *Supply chain optimization* (Vol. 98). Springer Science & Business Media.
- Gilley, K. M., & Rasheed, A. (2000). Making more by doing less: an analysis of outsourcing and its effects on firm performance. *Journal of management*, 26(4), 763-790.
- Gilley, K. M., McGee, J. E., & Rasheed, A. A. (2004). Perceived environmental dynamism and managerial risk aversion as antecedents of manufacturing outsourcing: the moderating effects of firm maturity. *Journal of Small Business Management*, 42(2), 117-133.
- Grant, R. M. (1996). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7(4), 375-387.



- Haas, M. R., & Hansen, M. T. (2005). When using knowledge can hurt performance: The value of organizational capabilities in a management consulting company. *Strategic Management Journal*, 26(1), 1-24.
- Harland, C., Knight, L., Lamming, R., & Walker, H. (2005). Outsourcing: assessing the risks and benefits for organizations, sectors and nations. *International Journal of Operations & Production Management*, 25(9), 831-850.
- Harrison, J. S., Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. (2001). Resource complementarity in business combinations: Extending the logic to organizational alliances. *Journal of Management*, 27(6), 679-690.
- Hart, O., & Moore, J. (1990). Property Rights and the Nature of the Firm. *Journal of Political Economy*, 98(6), 1119-1158.
- Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*, 20(4), 986-1014.
- Hirschheim, R., Heinzl, A., & Dibbern, J. (Eds.). (2014). *Information Systems Outsourcing: Towards Sustainable Business Value*. Springer.
- Joong-Kun Cho, J., Ozment, J., & Sink, H. (2008). Logistics capability, logistics outsourcing and firm performance in an e-commerce market. *International Journal of Physical Distribution & Logistics Management*, 38(5), 336-359.
- Karia, N., & Wong, C. Y. (2013). The impact of logistics resources on the performance of Malaysian logistics service providers. *Production Planning & Control*, 24(7), 589-606.
- Kenya, B. I., & Mulinge, K. J. (2014). *Logistics outsourcing and performance of commercial*. (Dissertation from university of Nairobi).
- Kenya, U. S. A. I. D. (2010). Consumer milk quality perception/preferences and an assessment of willingness to pay for quality. USAID Kenya Dairy Sector Competitiveness Program.
- Kremic, T., Icmeli Tukel, O., & Rom, W. O. (2006). Outsourcing decision support: a survey of benefits, risks, and decision factors. *Supply Chain Management: an International Journal*, 11(6), 467-482.
- Kubr, M. (Ed.). (2002). *Management Consulting: A guide to the profession*. International Labor Organization.
- Kumar, M., Vrat, P., & Shankar, R. (2006). A multi-objective 3PL allocation problem for fish distribution. *International Journal of Physical Distribution & Logistics Management*, 36(9), 702-715.



- Kyusa, J. M. (2015). Effect of logistics outsourcing on the operational performance of shipping industry in Kenya. *University of Nairobi*.
- Lacity, M., & Willcocks, L. (2008). *Information systems and outsourcing: studies in theory and practice*. Springer.
- Lahmar, M. (2007). Warehouse Management Systems and Product Flow. In *Facility Logistics* (pp. 30-51). Auerbach Publications.
- Lee, E. S., & Song, D. W. (2015). The effect of shipping knowledge and absorptive capacity on organizational innovation and logistics value. *The International Journal of Logistics Management*, 26(2), 218-237.
- Lynch, C. F. (2004). Logistics outsourcing: a Management Guide.
- Mahnke, V., Overby, M. L., & Vang, J. (2005). Strategic outsourcing of IT services: theoretical stocktaking and empirical challenges. *Industry & Innovation*, 12(2), 205-253.
- Maku, J. K., & Iravo, M. A. (2013). Effects of outsourcing on organizational performance at Delmonte Kenya Limited. *International Journal of Social Sciences and Entrepreneurship*, 1(5), 104-117.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research Methods: Quantitative and Qualitative Approaches, *African Centre of Technology Studies, Nairobi, Kenya*.
- Mulama, O. A. (2012). Logistics outsourcing practices and performance of large manufacturing firms in Nairobi, Kenya. *School of Business University of Nairobi*.
- Muriuki, H. G. (2011). Dairy development in Kenya. Food and Agricultural Organization,
- Ngotho, A. (2016). Kenya's dairy sector tops in East Africa. Star newspaper.
- Panayides, P. M. (2007). The impact of organizational learning on relationship orientation, logistics service effectiveness and performance. *Industrial Marketing Management*, 36(1), 68-80.
- Parashkevova, L. (2007). Logistics outsourcing—A means of assuring the competitive advantage for an organization. *Vadyba/Management*, 2(15), 29-38.
- Porter M.E. (1990) *The competitive advantage of the nations*, Ed. The Free Press, a Division of MacMillan Press Ltd., New York.
- Porter, M. E. (1995). The competitive advantage of the inner city. *Harvard Business Review*, 73(3), 55-71.
- Porter, M. E. (2011). Competitive advantage of nations: creating and sustaining superior performance (Vol. 2). Simon and Schuster.



- Porter, M. E., & Advantage, C. (1985). Creating and sustaining superior performance. *Competitive advantage*, 167.
- Quélin, B., & Duhamel, F. (2003). Bringing together strategic outsourcing and corporate strategy: Outsourcing motives and risks. *European Management Journal*, 21(5), 647-661.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, *35*(3), 718-804.
- Rushton, A., Croucher, P., & Baker, P. (2014). *The handbook of logistics and distribution management: Understanding the supply chain.* Kogan Page Publishers.
- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saaeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.
- Sambu, Z. (2010). Brookside and Spin Knit complete merger. Business Daily.
- Selviaridis, K., & Spring, M. (2007). Third party logistics: a literature review and research agenda. *The International Journal of Logistics Management*, 18(1), 125-150.
- Simatupang, T. M., Wright, A. C., & Sridharan, R. (2002). The knowledge of coordination for supply chain integration. *Business Process Management Journal*, 8(3), 289-308.
- Simchi-Levi, D., Kaminsky, P., Simchi-Levi, E., & Shankar, R. (2008). *Designing and managing the supply chain: concepts, strategies and case studies*. Tata McGraw-Hill Education.
- Skjoett-Larsen, T. (2000). Third party logistics—from an interorganizational point of view. *International Journal of Physical Distribution & Logistics Management*, 30(2), 112-127.
- Solakivi, T., Töyli, J., Engblom, J., & Ojala, L. (2011). Logistics outsourcing and company performance of SMEs: Evidence from 223 firms operating in Finland. *Strategic Outsourcing: An International Journal*, 4(2), 131-151.
- Troacă, V. A., & Bodislav, D. A. (2012). Outsourcing. The Concept. *Theoretical and Applied Economics*, 6(6), 51.
- Vagadia, B. (2012). Strategic outsourcing: risks, rewards and relationships. In *Strategic Outsourcing* (pp. 81-91). Springer, Berlin, Heidelberg.

Stratford Peer Reviewed Journals and Book Publishing Journal of Procurement & Supply Chain Volume 3//Issue 2//Page 17-35//March//2019/ Email: info@stratfordjournals.org ISSN: 2617-3581



- Wachira, W., Brookes, M., & Haines, R. (2016). Contextualizing Outsourcing and Development from a Theoretical and Practical Perspective. *Int. J. of Multidisciplinary and Current research*, 4.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Williamson, O. E. (1975). Markets and hierarchies. New York, 2630.