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LOGISTICS MANAGEMENT PRACTICES AND PERFORMANCE OF DISTRIBUTOR FIRMS IN KENYA

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ABSTRACT

The research study focused on logistics management practices and performance of distributor firms in Kenya. The study specifically looked at the inventory management practices, transport management practices, warehousing practices and transportation management practices. A descriptive research design was used. The target population of the study included all heads of procurement department who were able to answer all questions regarding their procurement department, inventory department, warehouse department and transport and logistics department within the distributor firms in Kenya. Primary data and secondary data were used in collecting data, it was collected using structured questionnaires and it was captured using a 5-point Likert scale. There were 265 distributor firms. These formed the target population of the study. The study adopted a Slovenes formula to calculate sample size of 159. Both descriptive and inferential results were used to achieve the study objectives. The results of the study were presented in form of tables and charts. SPSS version 21 was used to produce frequencies, descriptive and inferential statistics was used to come up with the conclusions and the summary concerning the population. Inferential analysis entailed the use of correlation and regression analysis. A multiple regression model was used. All statistical tests were conducted at 5% level of significance. The findings of correlation and regression analysis showed that there was a positive and significant association between order management practices, transportation management practices and performance of distributor firms. The study concluded that order management practices such as establishing effective order processing practices, efficient order picking system in the organization, use of order listing to manage orders and establishing an order shipping practice in the organization leads to a significant increase in performance. Finally, the study concluded that transportation management practices such as outsourcing of transport services when there is urgency, consolidation of shipment by the organization, management of outbound logistics in the organization, use of multi modal transportation increases performance. The study recommended that the organization should outsource transport services during urgency. The study further recommended that the distributor firms should establish effective order processing practices.

Key words: order management practices, transportation management practices, performance

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INTRODUCTION

Logistics management is regarded as a subsystem of the larger enterprise or a system of which purchasing, manufacturing, storage and transportation are subsystems. It is the way of thinking about planning and synchronizing related activities (Lysons & Farrington, 2016). Some of the logistical practices that firms regard in its related integration processes are warehousing, inventory management and the transportation flow. All of these logistical related practices must be managed effectively and efficiently in order for said logistics management practices to contribute to the performance (Wisner, Tan& Leong, 2015).

Across the world, logistics has advanced from the simple concepts of warehousing and transportation to become a strategic function in many companies. (Sople 2017) explains that logistics capabilities supplement the supply chain operation and that it plays an important role in both organizational strategy and organizational environment. It is further noted that the leading global retail giants Wal-Mart and Levi Strauss focus on their distinctive logistic capabilities to maintain their competitive advantage. According to (Harrison and Hoek, 2018), Logistics has been emerging from Peter Drucker's shadowy description as 'the economy's dark continent' for some years. From its largely military origins, logistics has accelerated into becoming one of the key business issues of the day, presenting formidable challenges for managers and occupying some of the best minds. They further explain that in the past, logistics has rightly drawn on contributions from marketing, finance, operations and corporate strategy. Logistics extends beyond the boundaries of the organization into the supply chain, it engages with the complexities of synchronizing the movement of the materials, and information between many business processes.

A number of today's firms have created global strategies to source raw materials, components and

labor from low-cost countries (Bowersox, 2015), which are often located far from the countries where they are used. This means that they can have more options for selecting supplies and negotiating lower piece prices. By that, they hope to secure supply sources (Waters, 2016). Common logistics practices influencing global operations are for example, aiming for economies of scale by management of manufacturing size or cross-border mergers spreading operations over a large number of countries (Waters, 2016).

In Ghana, distributor's service provision is wide spread as a result of the existence of both public and private hospitals and distribution centers. This is an indication that logistics management in the firm distributor system is very important as far as the achievement of the country's distribution goals are concerned (Manso, Annan &Anane, 2018). Logistics management is an important role, which coordinates and optimizes all logistics activities, and hence necessities such as drugs and other essential logistics need to be available in order to ensure delivery of quality distribution in Ghana.

The growing importance of logistics arose from companies that becoming globalized to gain access to new markets, realize greater production efficiencies and to tap technological competencies beyond their own geographical borders (Kilasi, Juma, &Mathooko, 2018). In today's highly competitive environment, every company aimed at gaining a share of the global market to take advantage of higher production and sourcing efficiencies. A key determinant of firm's performance then will be the role of the "logistics function" in ensuring the smooth flow of materials, products and information throughout a company's supply chains (Kilasi, at el., 2018). The success of logistics depends on speed and method of service delivery, time taken to complete the supply and hence give a competitive edge to the company.

Statement of the Problem

Distributor firms are sectors that contribute to the world trade and economy significantly. This is due to the fact that it is the only sector that can be used for the transport of large consignments by providing the best cost effective alternative. Many firms have had persistent problems in managing their logistics operations, majorly because of lack of enough qualified work force to perform the respective operational and strategic responsibilities of their logistics function. The scope of customer demands on logistics has increased and involves several factors such as shrinking time windows for deliveries, customized order bookings, increased number of packaging types, customized order bookings, variations in number of products per pallet per order, increased frequency of deliveries, JIT demands, increased product variations and less volume per order (Caridi and Ciligoni, 2014). This clearly implies that managing logistics in supply networks will create new demands on logistics management and therefore new approaches and methods are needed for managers to understand and deal with the logistics processes. However, logistics research has not developed its thinking and its methods accordingly. The overall interpretation by many authors is that the identification of logistics management as a high priority is still at its initial stages.

According to the theory of SCM, it emphasizes on collaborative advantage. The business world is composed of a network of interdependent relationships developed and fostered through strategic collaboration with a goal of delivering mutual benefits to all supply chain partners (Miles & Snow, 2017) the recognition of logistics as strategically important is rather low but significantly growing. The distributor firms in Kenya are also rapidly expanding and logistics management forms the backbone of their operations. (Jiang, Frazier and Prater, 2016) in a study aimed at empirically

investigating the effect of outsourcing on the firm level performance providing evidence about outsourcing influences on a firm's cost-efficiency, productivity and profitability. Given the low levels of appreciation of the logistics function in most organizations worldwide, there is scarcity of studies that have taken into consideration other practices such as order management, warehousing and transportation that are key and play a role in performance variability as argued by (Piroird and Dale, 2015). Furthermore, the study was motivated by knowledge gaps presented in previous studies on the same theme. Other previous studies present contextual gaps due to differences. Performance variability in firm distributors has significant outcome and it is important to focus on them. For comparison of findings across firms, there is a need to look at firm distributors other than what had been researched on and hence a need to focus on management practices performance of distributor firms in Kenya.

General Objective

The general objective of this study was to access logistics Management practices and performance of distributor firms in Kenya. The specific objectives were;

- To find out how order management practices influence performance of distributor firms in Kenya
- To establish the relationship of transportation management practices and performance of distributor firms in Kenya.

LITERATURE REVIEW

Supply Chain Management Theory

The Supply-Chain Council developed supply Chain Management Theory in 2004. (Lavassaniet *al.* 2016) explained supply chain management as a crossfunction approach including; managing the movement of raw materials into an organization, certain aspects of the internal processing of

materials into finished goods, and the movement of finished goods out of the organization and towards the end-customers. As organizations strive to focus on core competencies and becoming more flexible, they reduce their ownership of raw materials sources and distributors channels. These functions were outsourced to other entities that could perform the activities better or more cost effectively. The effect was to increase the number of organizations involved in satisfying customer demand, while reducing management control of daily logistics operations. Less control and more supply-chain partners leads to the creation of management concept. The purpose of supply chain management is to improve trust and collaboration among supply chain partners, thus improving inventory visibility and the velocity of inventory movement (Lavassani et al., 2009). This theory was relevant to the study as it explained the whole concept of supply chain that involved both the performance and logistics management. The theory argued that various logistics functions could be outsourced to other third parties to reduce distributors and improve performance.

Theory of Constraints

The theory of constraints (TOC) is an overall management philosophy introduced by Eliyahu M. Goldratt in his 1984 book titled "The Goal that is geared to help organizations continually achieve their goals" (Cox, Jeff; Goldratt & Eliyahu, 1986). Goldratt adopted the concept to project

management with his book Critical Chain, published in 1997. The theory of constraints (TOC) views any manageable system as being limited in achieving more of its goals by a very small number of constraints. There is always at least one constraint and TOC uses a focusing process to identify the constraint and restructure the rest of the organization around it. TOC adopts the common idiom "a chain is no stronger than its weakest link." This means that processes and organizations are vulnerable because the weakest person or part can always damage or break them or at least adversely affect the outcome (Goldratt, 2004).

The difficulties in the theory of constraints are; very long performances, large number of unfulfilled orders, large number of emergency orders and expedition levels, lack of customer's engagement, absence of control related to priority orders, which implies on schedule conflicts of the resources (Goldratt, 2004). The theory focused on managing these constraints (Cooper, 2006).

The theory was relevant to the study because it linked various constraints such as order management to performance. According to the theory, some of the constraints in business are large number of unfulfilled orders as well as large number of emergency orders, which are caused by poor order management practices, this further leads to high performance which is also a constraint. This theory therefore linked order management practices to performance.

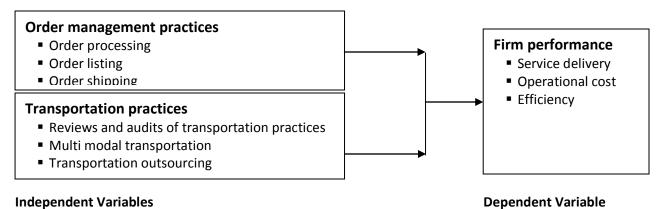


Figure 1: Conceptual Framework

Empirical review

Duran and Yavuz, (2015) carried a study on the impact of the supply chain strategies and the competitive strategies on the performance of distributor firms and if this changes according to the conditions of uncertainty. The study involved manufacturing companies listed in Borsa Istanbul in Turkey. After the pilot test, questionnaires given to 174 companies listed in Borsa Istanbul via email and telephone, 90 companies responded. The study revealed that that competitive strategies influenced supply chain strategies positively and significantly; cost leadership strategy, order management strategy and lean supply chain strategy had a significant impact on the firm performance under the conditions of high uncertainty; whereas, differentiation strategy and agile supply chain strategy had a significant impact on the firm performance under the low uncertainty. Another study by (Ralston, 2013) carried out an online survey on the structured performance perspective of how strategic supply chain amalgamation affects firm performance in Florida. In total, the research team attempted to contact 4,456 supply chain professionals from late 2010 through early 2011. The findings established that order consolidation, use of ERP systems in in purchase orders significantly speeds the transaction time between supplier and manufacturer exchange.

Ugur and Erman, (2013) conducted a study on the effects of business process re-engineering and enterprise resource planning on supply chain performance. The main purpose of this study was to measure the contribution level of each strategy to the overall performance of supply chain separately. The study was conducted in 132 companies in Turkey to test the effects of BPRs existence on SCM performance; independent samples t-test was used. Their findings indicated that using either BPR or ERP strategies has positive effects on SCMs overall performance where it has been found that

successful implementation of ERP has more improvement chance on performance. Furthermore, the results indicated that the use of ERP systems in purchasing orders significantly improved the transaction time.

Mae and Ohno, (2012) conducted a study in Sweden to find out how the changing performance is influencing production, purchasing and logistics performance and thereby overall efficiency of inbound logistics process. The study was done based upon the positivistic and deductive method. The analysis was done on qualitative data from personal and telephone interviews done at the case study company. The findings of the study indicated that the most influential factors related to the performance changes. For production, they were costs of ownership and flexibility; these factors were positively affected by the rule therefore further reduction of the performance requirement. For purchasing, it was most beneficial when goods were picked up from the suppliers' site. This was due to the product cost separated from the logistics costs. Purchasers are measured by their ability to continuously lower the cost of the products and what gets measured is done. From a more general perspective, the total cost of an acquisition, which is important for all the actors involved, is dependent upon the input from purchasing and logistics service providers work and cannot be directly related to the performance reduction setup (Mae&Ohno, 2012).

Similarly, another study by (Mubariket *al* 2012) focused on transportation outsourcing and supply chain performance in Pakistan's pharmaceutical industry. The study used a population of 400 manufacturing units within 30 pharmaceuticals companies operating in Pakistan. The results of the study revealed that transportation outsourcing has a significant effect on the effectiveness and efficiency of supply chain management of firms. Results confirmed that transportation outsourcing by outlined industry do not only improve SCM

performance but also provide a significant influence on supply chain effectiveness and efficiency for the Pharmaceutical sector of Pakistan. Moreover, a study by (Kihia, 2017) also sought determine how of strategic management practices effected the growth of small and medium enterprises in Nairobi County. The study adopted a descriptive research design. The population of interest was the business owners and Managers of SMEs in Nairobi from the Top 100 SMEs list. Simple random sampling technique was used to select the respondents. The findings of the study revealed that organizations needed to establish a sound, tightly controlled logistical process such as transportation to facilitate smooth flow of goods.

METHODOLOGY

The study adopted descriptive research design. A descriptive research design was suitable since it attempted to describe or define a subject by creating a profile of a group of problems, people or events through the collection of data and tabulation of the frequencies on research variables or their interaction as indicated (Serekan & Bougie, 2015). The study was conducted on distributor firms with focus on the head of procurement department of the firms in Kenya. According to the (Distributors and stock list Kenya, 2019), the list of distributor firms in Kenya were totaling to 265, these formed the target population. A total sample size of 265 respondents was taken with the aid of Slovin's formula: $n=N/(1+e^2)$. The study used stratified random sampling technique in choosing the sample size from the three levels of management staffs. Primary data was collected using structured questionnaires and it was captured using a 5-point Likert scale. Descriptive and inferential statistics were used to analyze the primary data. Descriptive statistics included mean, frequencies and standard deviation. Inferential statistics on the other hand included correlation and regression analysis.

FINDINGS

Order Management Practices and Performance

The study sought to find out the effect of order management practices on performance distributor firms in Kenya. The findings of the study revealed that respondents strongly agreed that effective order processing practices have been established as shown by mean of 3.87. Moreover, the respondents strongly agreed that there is an efficient order picking system in the organization as shown by mean value of 3.78. Further, the findings indicated that those who strongly agreed that Order listing is being practiced to manage orders (mean=3.96). In addition, those who strongly agreed that there is a well-established order shipping practice in the organization as shown by a mean value of 3.99.

Finally, majority of the respondents strongly agreed that there is an effective system to manage order packaging in the organization (Mean=4.33). The implication of the findings is that the majority of the respondents neither agreed nor disagreed with the statements on order management practices and its effect on performance of the distributors as indicated by a mean of 3.99. The responses given by the respondents varied as indicated by a standard deviation of 0.94.

The findings are consistent with a study by (Duran and Yavuz, 2015) who revealed that those competitive strategies influenced the supply chain strategies positively and significantly. Cost leadership strategy, order management strategy and lean supply chain strategy had a significant impact on the firm performance under the conditions of high uncertainty; whereas, differentiation strategy and agile supply chain strategy had a significant impact on the firm performance under the low uncertainty.

Table 1: Descriptive results of Order Management practices

Statements	Mean	Std Dev
Effective order processing practices have been established at by distribution firms	3.87	0.99
There is an efficient order picking system in the organization	3.78	0.91
Order listing is being practiced to manage orders	3.96	0.95
There is a well-established order shipping practice in the organization	3.99	0.89
There is an effective system to manage order packaging in the organization	4.33	0.98
Average	3.99	0.94

Transportation management Practices and firm performance

The study also sought to establish the effect of transportation practices on firm performance of distributors in Kenya. The findings of the study revealed that the respondents strongly agreed that the organization outsources transport services when there is urgency (Mean=3.85). Also the study findings indicated that those who strongly agreed that the organization practices consolidation of shipment (Mean=3.81)

Furthermore, the respondents strongly agreed that outbound logistics in the organization was well-managed (3.73). Moreover, the respondents strongly agreed that the organization practices

multi modal transportation to manage performance (Mean 3.82).

Lastly, majority of the respondents strongly agreed that Scheduling of pickups does not significantly affect arrangement of transport (Mean=3.85). The implication of the findings is that majority of the respondents neither agreed with the statements on transportation management practices as shown by a mean of 3.01. The responses given by the respondents varied as indicated by a standard deviation of 0.56. The findings are consistent with the findings of a study by (Mae and Ohno, 2012) which indicated that the most influential factors related to the performance. For production, they are costs of ownership and flexibility.

Table 2: Descriptive results of Transportation Management Practices

Statements	Mean	Std Dev
The organization outsources transport services when there is urgency	3.85	0.38
The organization practices consolidation of shipment	3.81	0.37
Outbound logistics in the organization is well managed	3.73	0.98
The organization practices multi modal transportation so as to manage	ge	
performance	3.82	0.39
Scheduling of pickups does not significantly affect arrangement of transport	3.85	0.41
Average	3.81	0.56

Correlations Analysis

The study used a Pearson correlation to establish the strength of the relationship between the variables. As the value approached positive one, the more the strength increases and vice versa.

Table 3: Correlation analysis

		Performance
Performance	Pearson Correlation	1
	Sig. (2-tailed)	
	N	124
Order Management practices	Pearson Correlation	.630**
	Sig. (2-tailed)	.003
	N	124
Transportation Management Practices	Pearson Correlation	.694**
	Sig. (2-tailed)	.000
	N	124

The results of the correlation analysis revealed that there was a positive and significant correlation between order management practices and performance as shown by a person correlation value of 0.630 and a significance of 0.003. The findings implied that an increase in order management practices such as establishing effective order processing practices, efficient order picking system, use of order listing to manage orders, establishing an order shipping practice in the organization and the use of an effective system to manage order packaging in the organization leads to a positive and significant effect on performance. The findings are consistent with the results of a study (Ralston, 2013) which established that order consolidation, use of ERP systems in in purchase orders significantly speeds the transaction time between supplier and manufacturer exchange.

Finally, the results also showed that there was a positive and significant correlation between transportation management practices and performance as shown by a person correlation

value of 0.694 and a significance of 0.000. The findings implied that an increase in transportation management practices such as outsourcing of transport services when there is urgency, consolidation of shipment by the organization, management of outbound logistics in the organization, use of multi modal transportation, and scheduling of pickups does not significantly affect arrangement of transport leads to a positive and significant effect on performance. The findings are consistent with the results of a study (Mubarik et al, 2012) which confirmed that transportation outsourcing by outlined industry do not only improve SCM performance but also provide a significant influence on supply chain effectiveness and efficiency for the distribution sector of Pakistan.

Multivariate Regression Analysis

The study used a multivariate regression model to determine logistics management practices and performance of distributors firms in Kenya.

Table 4: Model summary

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.895°	.801	.798	.462	
a. Predictors: (Constant), Order Management practices, Transportation Management Practices					

The regression results showed that R was 0.895, which showed that the correlation between the independent variables and the dependent variable is positive. It implied that an improvement in all logistics management practices leads to increase in performance. The study findings indicated that logistics management practices account for 0.801% of the variation in the in performance, this implied

that order management practices and transportation management practices jointly account for up to 80.1% of the variation in performance. This was shown by a by an R-square value of 0.801. The remaining 19.9% of the variation in performance accounted for other variables other than the four logistics management practices studied in this study.

Table 5: ANOVA

ANOVA ^a						
Mode	I	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.502	2	2.751	15.810	.000
	Residual	21.054	121	0.174		
	Total	26.556	123			
a. Dep	endent Variable: Pe	rformance	•	•		
b. Pre	dictors: (Constant),	Order Management pra	actices, Trans	portation Manageme	nt Practices	

The findings of the study revealed that the overall regression model linking the logistics management practices and their effects on firm performance of distributors was significant as indicated by a significant F (3.071) statistic as indicated by (0.000) significance level which was less than 0.05 at 5%

level of significance. F calculated is 15.81 while f critical is 3.071. F calculated is greater than the F critical (15.81 > 3.071); this showed that the overall model was statistically significant at 5% significance level.

Table 6: Coefficients

		Unstandardized Coefficients			
Model		В	Std. Error	t	Sig.
1	(Constant)	5.338	.254	21.01	.000
	Order Management practices	.201	.0054	3.741	.003
	Transportation Management Practices	.234	.059	3.996	.000
	a. Dependent Variable: Performance				

The findings of the study revealed that order management practices positively and significantly affect performance (Beta = 0.201, Sig = 0.003). This implied that an increase in order management practices such as establishing effective order processing practices, efficient order picking system, use of order listing to manage orders, establishing an order shipping practice in the organization and

the use of an effective system to manage order packaging in the organization leads to 0.201 increases the performance in the distribution sector. The findings of the study were consistent with the findings of a study by (Ugur and Erman, 2013) which indicated that using either BPR or ERP strategies has positive effects on SCMs overall performance where it has been found that

successful implementation of ERP has more improvement chance on performance. Furthermore, the results indicated that the use of ERP systems in purchasing orders significantly improved the transaction time.

Finally, the findings of the study showed that transportation management practices positively and significantly affected performance (Beta = 0.234, Sig = 0.000). This implied that an increase in transportation management practices such as outsourcing of transport services, consolidation of shipment, management of outbound logistics, use of multi modal transportation, and scheduling of pickups does not significantly affect arrangement of transport leading to 0.234 increases in the firm distributors. The results are consistent with the findings of a study by (Kihia, 2017) which revealed that organizations needed to establish a sound, tightly controlled logistical process such as transportation to facilitate smooth flow of goods.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that order management practices have a positive significant effect on performance. An increase in the adoption of order management practices such as establishing effective order processing practices, efficient order picking system in the organization, use of order listing to manage orders, establishing an order shipping practice in the organization and the use of an effective system to manage order packaging in the organization leads to an increase in performance.

The study concluded that Transportation management practices positively and significantly affect performance this implied that an increase in Transportation management practices leads to a

positive and significant influence on performance. Therefore, an increase in transportation management practices such as outsourcing of transport services when there is urgency, consolidation of shipment by the organization, management of outbound logistics in the organization, use of multi modal transportation leads to a significant reduction in performance.

The distributor firms to adopt the logistics management practices such as order management practices to increase performance. Some of the order management practices are establishing effective order processing practices distribution firms, efficient order picking system in the organization, use of order listing to manage orders, establishing an order shipping practice in the organization and the use of an effective system to manage order packaging in the organization.

The distributor firms to adopt the logistics management practices such as transportation management to increase performance. Some of the transportation management practices are outsourcing of transport services whenever there is an urgency, consolidation of shipment by the organization, management of outbound logistics in the organization, use of multi modal transportation.

Areas for Further Research

The study recommended future research studies to look at other factors of logistics management practices that affect performance in the distributor firms since order management practices and transportation management practices account for only 80.1% of the variation in performance. Further studies should also be conducted to examine other logistics management practices and performance of other distributor firms in Kenya other than what this study has covered.

REFERENCES

Annan, J. (2013). Assessment of Logistics Management in Ghana distribution. *International Journal of Business and Social Research*, 3(8), 75-87.

- Bowersox D. J., Closs D. J., Cooper M. B., 2010. Supply Chain Logistics Management. 3rd Ed. New York: McGraw-Hill
- Miller, M. (2014). Logistics & Supply Chain Management (Vol. 4). Harlow, Great Britain: Financial Times -Prentice Hal.
- Cooper, D.R., & Schindler, P.S. (2011). Business Research Methods (11thed.). New Delhi-India. McGraw-Hill Publishing, Co. Ltd.
- Cox, R, (2014), 25 Ways to Lower Inventory Costs, Supply Chain Management Review, Editorial, July 2011 Publication Wisner et al, 2011).
- Dai, Q. & Kauffman, R. (2001). An exploratory assessment, a paper presented at the thirty-fourth annual Hawaii international conference on systems sciences, Hawaii.
- Gold, S., Seuring, S., &Beske, P. (2010). Sustainable supply chain management and inter- organizational resources: a literature review. Corporate social responsibility and environmental management, 17(4), 230-245.
- Goldsby, T. J., et al., (2014), the Critical Role of Transportation in Business and the Economy, Financial Times Press, 1 Lake Street, Upper Saddle River, USA, NJ Jackson, 2009
- Kihia, G. N. (2017). Strategic Management Practices Effect on Growth of Small and Medium Enterprises in Nairobi (Doctoral dissertation, United States International University- Africa).
- Kilasi, L. B., Juma, D., & Mathooko, P. M. (2013). The impact of Outsourcing of Logistics on the Competitive Advantage strategy of East African Breweries Limited: International Journal of Social Sciences and entrepreneurship 1 (3), 521-529
- Lysons, K and Farrington, B (2016). Purchasing and Supply Chain Management, 7thed, Prentce Hall, Pearson Education.
- Mae, M., & Ohno, R. (2012). The impact of changing lead-time on inbound logistics performance in a global supply chain-a case study based on Volvo Powertrain Corporation. Chalmers University of Technology.
- Manso, J. F., Annan, J. & Anane, S. S. (2013). Assessment of logistics management in Ghana distribution service. International Journal of Business and Social Research (IJBSR), Volume -3, No. 8.
- Miller, R. (2010). *Inventors Control*: Theory and Practice. New Jersey: Prentice Hall.
- Mubarik, S., Warsi, A. Z., Nayaz, M., & Malik, T. (2012). Transportation Outsourcing and Supply Chain Performance: A study of Pakistan's Pharmaceutical Industry. South Asian Journal of Management Sciences (SAJMS), Igra University, 6(2), 35-41.
- Piroird, F., & Dale, B. G. (2010). The importance of performance control in the order fulfilment process. Production Planning & Control, 9(7), 640-649.
- Ralston, T. (2013). An online survey on the structure-conduct-performance perspective of how strategic supply chain integration affects firm performance in Florida. International Journal of Operations & Production

- Management, 6(17), 698-1140
- Serekan, U., & Bougie, R. (2010). Research methods for business :A skill building approach . New Jersey, USA: John Wiley & sons publishers.
- Waters D.2011. Supply Chain Risk Management: Vulnerability and Resilience in Logistics. London; Philadelphia: Kogan Page.
- Wisner, J. D., Tan, K. C., & Leong, G. K. (2015). Principles of supply chain management: A balanced approach. Cengage Learning