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Influence of Inventory Returns Management on Performance of Food and Beverage Manufacturing Firms in Kenya

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Abstract: *The purpose of the study was to assess the influence of inventory returns management on performance of food and beverage manufacturing firms in Kenya. Descriptive research design was adopted because it allowed an in-depth study of the subject. The target population was heads of procurement in the food and beverage manufacturing firms in Kenya. A sample of 132 food and beverage manufacturing firms was arrived at out of a total of 197 food and beverage manufacturing firms. R square value of 0.6 means that 60% of the corresponding variation in food and beverage manufacturing firms in Kenya can be explained or predicted by (refurbishment management, materials re-use management, waste management and re-manufacturing management) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at (β = 0.6), p=0.000 <0.05). The findings of the study concluded that refurbishment management, materials re-use management, waste management and re-manufacturing management have a positive relationship with performance of food and beverage manufacturing firms in Kenya. The study recommended that food and beverage manufacturing firms should embrace inventory returns management aspects so as to improve performance and further researches should to be carried out in other firms to find out if the same results can be obtained.*

Keywords: *refurbishment management; materials re-use management; waste management; re-manufacturing management*

I. Introduction

Today's customer expects and demands to be able to return a defective or unwanted product smoothly and quickly, and receive a refund or correct order as fast and as inexpensive as possible. A firm that is able to meet these increasing customer requirements is going to gain customer loyalty and retain, and perhaps increase, their overall market share (Huscroft, 2017). This is a key factor as to why management within a firm needs to focus necessary resources on the inventory returns management process and properly monitor and measure their inventory returns management processes (Achieng, 2018). The possible penalties for not adequately addressing the inventory returns management needs of the firm could be increased transportation costs, increased inventory and warehousing costs, increased repair costs of returned products, and lost secondary value of defective products or materials due to processing delays in the inventory returns management process (Lysons, 2017). This is a main reason that inventory returns management processes and their management have increased in importance within the business community and academia (Rogers, 2017). Inventory returns management encompasses all of the activities that are mentioned in the council's definition the only difference being that inventory returns management operates in reverse (Moturi, 2019). From this inventory returns management is defined as: the process of planning, implementing, and controlling the efficient, cost-effective flow of raw materials, in-process

inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal.

1.1 Statement of the Problem

According to the World Bank (2016), traditionally, 90% of organizations have focused on improving their forward logistics activities; most have not treated the inventory returns management process with the same care and diligence afforded to traditional areas of logistics. KNBS (2017) indicated that 65% of manufacturing firms in Kenya often focus on forward logistics and as a result, they tend to overlook the importance of inventory returns management activities and its potential of improving the firm's and supply chain's performance. Recently inventory returns management has received increasing attention from both the academic world and industries because of competition and marketing motives, it saved various firms over Kshs.70 billion in the financial year (FY) 2016/2017, as well as strategic and managerial implications (Nyangweso, 2019). With legislative measures tightening up and a growing concern for the environment to use materials effectively and efficiently, organizations do not have any choice but to engage in inventory returns management practices.

According to KIPPRA (2019), inventory returns management has become a necessity in the manufacturing industry; due to legislations and environmental concerns. Many firms look for new possibilities to create and improve their return systems in order to gain a competitive advantage. Companies are now looking into inventory returns management in order to optimize their return flows (OECD, 2017). Manufacturing firms in Kenya operate at a technical efficiency of about 39% compared to their counterparts in Malaysia that average about 84% (Achuora, Guyo, Arasa & Odhiambo, 2020) raising doubts about the sector's capacity to meet its goal of contributing to GDP by 15% (PPRA, 2020).

Inventory returns management will come in handy to improve this performance. Several studies have been done internationally, Pollock (2017) did a study on inventory returns management, he concluded that inventory returns management accounts for 3% to 4% of a company's total logistics costs and argues that companies can save up to 10% from their annual logistics bill by implementing an efficient inventory returns management system. 20% of this amount is saved in labor costs and the remaining eighty percent is saved in lowered freight costs and reduced pipeline inventory. Locally, Studies have also been done on inventory returns management Moturi (2020) noted that, given the tightness of margins in many organizations, the improved management of returns can have a significant impact on the bottom-line performance, both business and logistical. 80% of manufacturing firms are yet to incorporate inventory returns management which can be done by appreciating environmental issues and inculcating the same to their employees and suppliers. All the above studies have been done in different contexts which are impacted on differently depending on the industry and the environment. It is against this back drop that this study seeks to examine the influence of inventory returns management on performance of food and beverage manufacturing firms in Kenya.

1.2 Objectives of the Study

1. To establish the influence of refurbishment management on performance of food and beverage manufacturing firms in Kenya.
2. To find out how materials re-use management influences performance of food and beverage manufacturing firms in Kenya.
3. To assess the influence of waste management on performance of food and beverage manufacturing firms in Kenya.

4. To determine the influence of re-manufacturing management on performance of food and beverage manufacturing firms in Kenya.

II. Review of Literatures

2.1 Theoretical Review

Sustainable Social Development Theory

Stein and Valters (2019) indicated that the theory of sustainable social development is a conglomeration of theories about how desirable changes in society are to be best achieved. Development needs to begin not with goals and policies to promote sustainable development, but with knowledge of the essential nature and characteristics of sustainable development itself, for development is not a set of policies or programs or results. It is a process, not a program. Many factors influence and determine the outcome of this process. There must be a motivating force that drives change, some essential preconditions for the change to occur, or barriers that obstruct the process, a variety of resources such as capital and technology, which contribute to the process, along with several types and levels of infrastructure that support the sustainable development. This study uses theory of sustainable social development as a theoretical base to explain the nature of inventory returns management and adoption that originated from the process of sustainable development (Stein & Valters, 2019). Firms today have increasingly accepted their responsibility for environmental and social issues as a precondition for doing business, especially in the implementation of corporate social responsibility and sustainable supply chain management. Infrastructures are needed to make the activity possible (Retolaza, 2018). For example, the development of sustainability is supported by various infrastructures such as the approaches of closed-loop economy, the different framework of legislation, the principles of extended producer responsibility, the awareness of society, and the investments of technologies and resources at different levels (Stein & Valters, 2019).

2.2 Inventory Returns Management

a. Refurbishment Management

Product upgrading and renovation of products is considered as a way of achieving sustainability in business achieving economic benefits. Lindahl (2012) considers products recovery as the process of reuse and recycling. Products recovery and reselling of products is aimed at retrieving the products value when a product ceases to fulfil the desired value. Gungor and Gupta (2016) define recall management as a combination of refurbishment management and product recovery. They further point out that materials recovery is done to recover the economic value in materials to respond to market requirement and to comply with government regulations. According to Thierry (2020), the main objective of recovery is to regain as much as possible the economic and ecological value of the products and materials. It enables the organization recover value that would otherwise be lost. A part from products and materials, wastes can also be recovered to enhance environmental responsiveness and performance.

b. Materials Re-use Management

Reuse is where the customers return unused product back to the seller, normally the retailer. When this happens, the products are reintroduced into the supply chain. Reuse also includes return of reusable repackaging materials. When products are returned to retailers, the products return to the organization through inventory returns management (Nyangweso, 2019). Normally, only products are not in their usable state or are beyond repair are remanufactured. Organizations with properly managed supply chain activities can use re-use to enhance their economic performance since they are able to create value in products that had

already lost value. It brings back life in a dead product (Mwangi, 2019). Recycle is the third component of inventory returns management and involves recovering all returned materials and products to reintroduce value into the products.

c. Waste Management

Waste is defined as any substance or article which constitutes a scrap material or an effluent or other surplus substances arising from application of any process (Environmental Protection Authority, 2017). Waste management is an overall approach to prevent waste and it combines a range of collection and treatment methods to handle all materials in the waste stream in an environmentally effective, economically affordable and socially acceptable way (McDougal, 2018). Preuss (2020) defined waste management as the processes introduced by an organization for reducing, eliminating and ideally, preventing negative environmental impacts arising from its undertaking to environment. It encompasses management of all processes and resources for proper handling of waste materials, from maintenance of waste transport trucks and dumping facilities to compliance with health codes and environmental regulations. Waste management practices include solid waste collection and decomposing, waste reduction, reuse and recycling and waste composting (Pollock, 2017).

d. Re-Manufacturing Management

Re-manufacturing occurs through redesigning and reutilization of materials. According to Hazen (2018) customers return products that are either completely unused or that are partly used. For partly used products to be re-manufactured, the products should be in a position to be used without any upgrade or modification. Products that are not in the usable state must be channeled back to the manufacturers through inventory returns management either for repair or re-development (Reitner & Wolfgang, 2019). Re-manufacturing strategy is one of strategies of waste management that is believed to be most environmentally friendly. Hazen (2018) defines re-manufacturing as the process of recovering any piece of returned product that may have some value. Re-manufacturing of materials occurs in cases where the customers return unused products to the point of purchase thereby returning the product back into the supply chain.

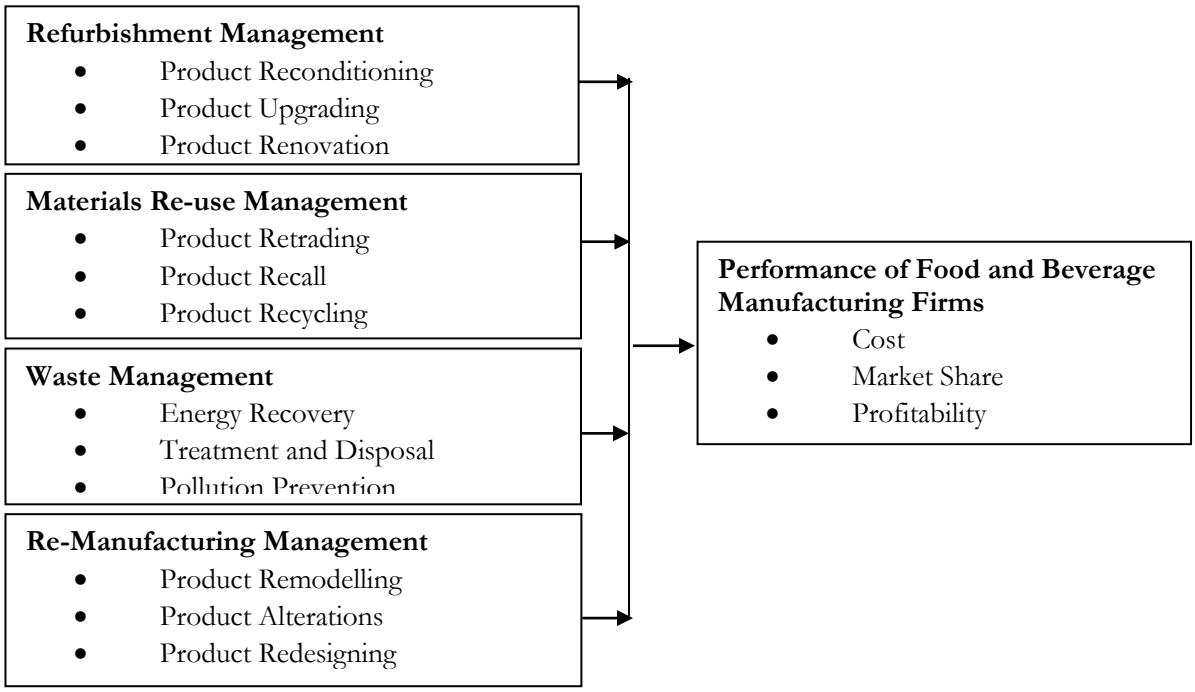

Figure 1. *Conceptual Framework*

III. Research Methods

The study reviewed both theoretical and empirical literature and then propose the research methodology that addressed the gaps identified in literature as well as to validate the research questions. Descriptive research design was adopted. The study preferred this method because it allowed an in-depth study of the subject. The target population was 197 food and beverages manufacturing companies in Kenya who are registered members of KAM according to 2021 directory. A sample of 132 food and beverage manufacturing firms is arrived at out of a total of 197 food and beverage manufacturing firms. Data was analyzed through descriptive statistical methods such as means, standard deviation, frequencies and percentage. Inferential analyses were used in relation to correlation analysis and regression analysis to test the relationship between the four explanatory variables and the explained variable.

IV. Discussion

4.1 Response Rate

A sample of respondents were interviewed using questionnaires that allowed the researcher to drop the questionnaire to the respondents and then collect them at a later date when they had filled the questionnaires. A total of 132 questionnares were distributed to heads of procurement. Out of the population covered, 119 were responsive respresenting a response rate of 90%. This was above the 50% which is considered adequate in descriptive statistics according to (Dunn, 2017).

Table 1. Response Rate of Respondents

Response	Frequency	Percentage
Actual Response	119	90
Non-Response	13	10
Total	**132**	**100%**

4.2 Descriptive Statistics

a. Refurbishment Management

The first objective of the study was to assess the influence of refurbishment management on performance of food and beverage manufacturing firms in Kenya. The respondents were asked to comment on statements regarding refurbishment management on performance of food and beverage manufacturing firms in Kenya. The responses were rated on a likert scale and the results presented in Table 2 below. The average mean of all the statements was 3.8 indicating that majority of the respondents agreed on refurbishment management having an influence on performance of food and beverage manufacturing firms. However, the variations in the responses were varied as shown by a standard deviation of 1.4. These findings imply that refurbishment management were at the heart of the organizations. The findings agree with Lembke (2019) that using refurbishment management as an inventory returns management tool is a smart move and can reduce expenses significantly.

Table 2. Refurbishment Management

Statements	N	Mean	Std. Deviation
Product reconditioning plays a significant role in cost reductions	119	4.2	1.0
Product upgrading plays a significant role in cost reductions	119	3.6	1.3
Product renovation plays a significant role in cost reductions	119	3.8	1.3
Product reconditioning plays a significant role in expanding the market share	119	3.3	1.4

Product upgrading plays a significant role in expanding the market share	119	4.2	0.9
Product renovation plays a significant role in expanding the market share	119	3.8	0.6
Product reconditioning plays a significant role in improving profitability	119	3.6	1.3
Product upgrading plays a significant role in improving profitability	119	4.1	3.9
Product renovation plays a significant role in improving profitability	119	3.9	1.1
Average	**119**	**3.8**	**1.4**

b. Materials Re-use Management

The second objective of the study was to establish the influence of materials re-use management on performance of food and beverage manufacturing firms in Kenya. The respondents were asked to comment on statements regarding materials re-use management on performance of food and beverage manufacturing firms in Kenya. The results are as summarized in Table 3. The average mean of all the statements was 3.6 indicating that majority of the respondents agreed on materials re-use management having an influence on performance of food and beverage manufacturing firms in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 1.1. These findings agree with Maghanga (2018) that through materials re-use management, companies can improve competitive positioning.

Table 3. Materials Re-use Management

Statements	N	Mean	Std. Deviation
Product retrading plays a significant role in cost reductions	119	3.8	1.2
Product recall plays a significant role in cost reductions	119	3.5	1.1
Product recycling plays a significant role in cost reductions	119	3.7	1.0
Product retrading plays a significant role in expanding the market share	119	3.5	1.1
Product recall plays a significant role in expanding the market share	119	3.6	1.2
Product recycling plays a significant role in expanding the market share	119	3.5	1.3
Product retrading plays a significant role in improving profitability	119	3.5	1.3
Product recall plays a significant role in improving profitability	119	3.4	1.4
Product recycling plays a significant role in improving profitability	119	3.6	0.5
Average	**119**	**3.6**	**1.1**

c. Waste Management

There was also need to establish influence of waste management on performance of food and beverage manufacturing firms in Kenya as the third objective. The respondents were asked to indicate their levels of agreement on statements regarding waste management. The results are as shown in Table 4. Average mean of all the statements was 3.6 indicating that

majority of the respondents agreed on waste management having an influence on performance of food and beverage manufacturing firms in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 1.1. The results are in tandem with Parkhe (2019) who opine that an organization benefits greatly when waste management are embraced in their inventory returns management.

Table 4. Waste Management

Statements	N	Mean	Std. Deviation
Energy recovery plays a significant role in cost reductions	119	4.0	1.1
Treatment and disposal play a significant role in cost reductions	119	3.4	1.3
Pollution prevention plays a significant role in cost reductions	119	4.1	0.8
Energy recovery plays a significant role in expanding the market share	119	4.1	1.0
Treatment and disposal play a significant role in expanding the market share	119	3.7	0.7
Pollution prevention plays a significant role in expanding the market share	119	2.8	1.3
Energy recovery plays a significant role in improving profitability	119	3.2	1.2
Treatment and disposal play a significant role in improving profitability	119	3.4	1.2
Pollution prevention plays a significant role in improving profitability	119	3.6	1.3
Average	**119**	**3.6**	**1.1**

d. Re-Manufacturing Management

There was also need to establish the influence of re-manufacturing management on performance of food and beverage manufacturing firms in Kenya. The respondents were asked to indicate their views on re-manufacturing management. The results are as shown in Table 5. Average mean of all the statements was 4.0 indicating that majority of the respondents agreed on re-manufacturing management having an influence on performance of food and beverage manufacturing firms in Kenya. However, the variations in the responses were varied as shown by a standard deviation of 0.9. The results agree with Gordon (2019) that an organization that embraces re-manufacturing management benefits greatly in its operations management.

Table 5. Re-Manufacturing Management

Statements	N	Mean	Std. Deviation
Product remodelling plays a significant role in cost reductions	119	2.8	1.4
Product alterations plays a significant role in cost reductions	119	3.3	1.1
Product redesigning plays a significant role in cost reductions	119	4.2	0.9
Product remodelling plays a significant role in expanding the market share	119	4.1	1.2
Product alterations plays a significant role in expanding the market share	119	4.2	0.9
Product redesigning plays a significant role in expanding	119	4.3	0.7

the market share			
Product remodelling plays a significant role in improving profitability	119	4.4	0.6
Product alterations plays a significant role in improving profitability	119	4.4	0.8
Product redesigning plays a significant role in improving profitability	119	4.4	0.6
Average	**119**	**4.0**	**0.9**

4.3 Regression Analysis

In this study multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. Regression analysis was conducted to find the proportion in the dependent variable (performance of food and beverage manufacturing firms in Kenya) which can be predicted from the independent variables (refurbishment management, materials re-use management, waste management and re-manufacturing management). Table 6 presents the regression coefficients.

The regression coefficients established that taking all factors into account (refurbishment management, materials re-use management, waste management and re-manufacturing management) constant at zero, performance of food and beverage manufacturing firms will be an index of 2.44. The findings presented also shows that taking all other independent variables at zero, a unit increase in refurbishment management will lead to a 0.215 increase in performance of food and beverage manufacturing firms. The P-value was 0.000 which is less 0.05 and thus the relationship was significant. The study also found that a unit increase in materials re-use management will lead to a 0.146 increase in performance of food and beverage manufacturing firms. The P-value was 0.00 and thus the relationship was significant. In addition, the study found that a unit increase in waste management will lead to a 0.11 increase in performance of food and beverage manufacturing firms. The P-value was 0.020 and thus the relationship was significant. Lastly, the study found that re-manufacturing management will lead to a 0.03 increase in performance of food and beverage manufacturing firms. The P-value was 0.030 and hence the relationship was significant since the p-value was lower than 0.05. The findings of the study show that, refurbishment management contributed most to performance of food and beverage manufacturing firms.

Table 6. Coefficients of Determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.44	0.198		12.32	0.000
	Refurbishment Management	0.215	0.035	0.455	6.142	0.000
	Materials Re-Use Management	0.146	0.045	0.214	3.244	0.000
	Waste Management	0.11	0.024	0.334	4.583	0.020
	Re-Manufacturing Management	0.03	0.033	0.062	0.909	0.030

a) Predictors: (Constant), Refurbishment Management, Materials Re-Use Management, Waste Management, Re-Manufacturing Management

b) Dependent Variable: Performance of Food and Beverage Manufacturing Firms

V. Conclusion

Based on the study findings, the study concludes that performance of food and beverage manufacturing firms can be improved by refurbishment management, materials re-use management, waste management and re-manufacturing management. Drawing on this research, lack of refurbishment management, materials re-use management, waste management and re-manufacturing management in food and beverage manufacturing firms is leading to poor performance. Though the food and beverage manufacturing firms are striving hard to improve their performance there are still issues of poor-quality products, long lead time and high cost of projects/products. It was articulated that the current phenomenon of poor performance in the food and beverage sector can be reversed if the government and other stakeholders ensure; refurbishment management, materials re-use management, waste management and re-manufacturing management are embraced in the procurement function.

Recommendations and Further Research

Finally, the study recommended that food and beverage manufacturing firms should embrace inventory returns management so as to improve performance and further researches should to be carried out in other firms to find out if the same results can be obtained.

References

Abdullah, N., & Yaakub, S. (2019). Inventory returns management: pressure for adoption and the impact on firm's performance. *International Journal of Business and Society*, 15(1), 151-170

Achieng, S.O. (2018). *Information Integration on reverse supply chain management in the food processing firms in Kenya*. Unpublished MBA Project, University of Nairobi

Ahire, L., & Dreyfus, P. (2017). The impact of design management and process management on quality: an empirical examination. *Journal of Operations Management* 8(1), 549–575.

Aino, V., (2017). *E-waste: impacts, challenges and the role of government, service providers and the consumer's workshop*. Communication Commission of Kenya. Nairobi, Kenya.

Al-Mashari M., & Zairi, M. (2016). *BPR implementation process: an analysis of key success and failure factors.* Business Process Management Journal 5(1), 87– 112.

Alavi, M., & Carlson, P. (2019). A review of MIS research and disciplinary development: *Journal of Management Information Systems*, 8(4), 45–62.

Analytica, R. (2019). "Corporate best crafted practices during performance declines in Japan", *Journal of Operational Economics*, 4(1),29-66

Andrew, M. (2019). Procurement Reforms in Kenya. *Journal of Economics*, 22(1), 23-50.

Awino, O. (2018). An empirical investigation of supply chain management on firms' performance. *International Journal of Business Administration and Management,* 3(1), 2-6.

Badenhorst, A., (2019). A framework for prioritizing practices to overcome cost-related problems in inventory returns management, *Journal of Transport and Supply Chain Management* 7(1), 102-140

Buysse, K., & Verbeke, A. (2019). Proactive environmental strategies: a stakeholder management perspective. *Strategic Management Journal*, 24(5), 453-470.

CCG (2020). *National Development Fund Report Instructional Structures and Reforms.* Nairobi: Centre for Corporate Governance. Retrieved April 2017

Cullen, J., Bernon, M. & Grost, J., (2017). *Tools to manage reverse logistic, Research executive summaries series* 6(3), 18-30

Dietrich, M. & Krafft, J. (2019). *Handbook on the Economics and Theory of the Firm*. Cheltenham (UK). Edward Elgar Publishing.

Donaldson, T., & Preston, L.E. (2020). '*The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications.*' Academy of Management Review, 20(1), 65–91.

Dunn, S. D. (2017). *Statistics and Data analysis for the Behavioural Science*: Mc Graw Hill

Eisenhardt, M., & Martin, J.A. (2017). Dynamic capabilities: what are they? *Strategic Management Journal,* 21(10), 1105-1121.

Ellram, L.M., & Ogden, J.A. (2020). *Supply chain management: From vision to implementation*. Pearson education Canada Ltd and Tsinghua University Press, Toronto, Canada

Elmas, G. & Erdogmus, F., (2018). The importance of inventory returns management. *International journal of business and management studies,* 3(1), 1309-8047.

Ferdows, K (2020). *Global Manufacturing Practices* – A World-wide Survey of Practice in Production Planning and Control, Elsevier, Amsterdam.

Freeman, R. E., & Phillips, R. A. (2019). *Stakeholder theory:* A libertarian defense. Business Ethics Quarterly, 24(5), 331-349.

Frooman, J. (2016). '*Stakeholder Influence Strategies.'* Academy of Management Review, 24(2), 191–205.

Goldsby, T.J., & Garcia-Dastugue, S.J. (2018). The manufacturing flow management process. *International Journal of Logistics Management,* 14(2), 33-52.

Gordon, M. (2019). *Negotiating and Managing Key Supplier Relationships.* New Age International Ltd, New Delhi, India.

Greeno, J., & Robinson, S. (2019). Rethinking corporate environmental management. *The Columbia Journal of World Business*, 3(1), 222-232.

Haakansson, H. & Ford, D. (2019). "How companies interact in business networks?", *Journal of Business Research,* 5(2), 133-139.

Harpe, M. (2019). Sustainable Supply Chain Management Practices and Operational Performance. *American Journal of Industrial and Business Management,* 5(3), 42-48.

Henriques, I., & Sadorsky, P. (2016). The relationship between environmental commitment and managerial perceptions of stakeholder importance. *Academy of Management Journal,* 42(1), 87-99.

Huscroft, K., (2017). The Inventory returns management Process in the Supply Chain and Managing Its Implementation. Auburn University. Auburn, Alabama.

Jayant, A., Gupta, P., & Garg, K. (2019). Perspectives in reverse supply chain management(R-SCM): A state of the art literature review, *Jordan Journal of Mechanical and Industrial Engineering* 6(1), 87–102.

KIPPRA (2017). *A comprehensive study and analysis of Inventory returns management among Kenyan Companies in Kenya.* Online Publication, Africa: Nairobi

KNBS (2020). *National Service Delivery Survey Report. Nairobi*: Kenya National Bureau of Statistics.

Kothari, C.R. (2019). *Research Methodology; Methods & Techniques* (2nd ed.). New Delhi; New Age International Press Limited.

Krajewski, L. & Ritzman, L. (2016). *Operations management strategy and analysis,* Addison Wesley, Reading, MA

Kurien, P. & Qureshi, N., (2018). Study of performance measurement practices in supply chain management. I*nternational Journal of Business, Management and Social Sciences,* 2(4), 19-34.

Lambert, D. (2018). *Supply chain management: processes, partnerships, performance* (3rd Ed.), the Hartley Press Inc., USA

Lembke, T. (2019). Life after death: Inventory returns management and product life cycle *International Journal of Physical Distribution and Logistics Management,* 32 (3) 223-224.

Lyson, K. (2020). *Purchasing and Chartered Institute of Purchasing and Supply, London:* Pitman Publishing.

Maghanga, F. (2018). *Logistics materials re-use management practices among tea processing firms in Kericho County, Kenya,* Unpublished MBA Project, department of management science, University of Nairobi, Nairobi

Mellewigt, T. & Nothnagel, K. (2018). *Empirical research within resource-based theory:* A Meta-Analysis of the Central Propositions.

Michalski, G. (2016). *Reverse Inventory management optimization as part of operational risk management.* Economic Computation and Economic Cybernetics Studies and Research, 5 (7), 213-222.

Moturi, A. (2019). Electronic Waste Management in Nakuru Municipality, Kenya: An Environmental Health Risk. *International Journal of Innovative Research and Studies*, 2 (10), 19-35

Mugenda & Mugenda (2020). *Research Methods*: 1st Edition, Published by ACTS, Nairobi, Kenya.

Mwangi, A. G. (2019). *Reverse Inventory management and supply chain performance of non-governmental organizations in the agricultural sector, Kenya* (doctoral dissertation, School of Business, University of Nairobi).

Neuman, W.L. (2017). *Social Research Methods: Qualitative and Quantitative Approaches* (Fourth Edition ed.). Boston.

Ngechu, M. (2016). Understanding the Research Process and Methods. *An Introduction to Research Methods.* Acts press, Nairobi

Nyangweso, W. (2019). *Reverse Supply chain management and organizational performance in the sugar industry in Kenya* (Doctoral dissertation, University of Nairobi).

OECD (2016). *"Actualizing Organizational Memory with Reverse Information Systems",* Information Systems Research, Pearson Education Limited, Essex

Pollock, W.K., (2017). *Driving return process directly to the bottom line, Inventory returns management Magazine,* 21th ed., 5(3), 8–12, viewed 29 June 2017,

Preuss, L. (2020). *Rhetoric and reality of corporate greening: a view from the supply chain management function*, Royal Holloway College University of London.

Raduan, C.R., Jegak, U., & Haslinda, A. (2016). Management, Strategic Management Theories and the Linkage with Organizational Competitive Advantage from the Resource-Based View. *European Journal of Social Sciences,* 11 (3), 402- 418

Reinhardt, F. (2016). Market failure and the environmental policies of firms: Economic rationales for "beyond compliance" behavior. *Journal of Industrial Ecology*, 3 (1), 9-21.

Rogers, S. (2017). Creating Value through Product Stewardship and Take-Back, Sustainability Accounting, *Management and Policy Journal,* 1 (2), 133-160.

Sekaran, U. (2016). *Research methods for business 4th edition.* Hoboken, NJ: John Wiley & Sons.

Seman, A., Zakua, N., & Shoki, M. (2016). Green Supply Chain Management: A Review and Research Direction. *International Journal of Managing Value and Supply Chains* (IJMVSC) 3(1) 35–52.

Shirima, D. L. (2016). Value for Money Through Reduced Procurement Transaction Costs and Improved Efficiency. *Tanzania Procurement Journal, 44-52. Tanzania Procurement Journal*, 4 -5.

Udin, Z. (2019). Impact of Inventory returns management Product Disposition towards Business Performance in Malaysian Companies. *Journal of Supply Chain and Customer Relationship Management.* IBIMA Publishing.

Wang, P., Zhou, G. & Ren, J., (2017). Research on structure of inventory returns management network, *International Conference of Logistics Engineering and Management Proceedings,* 1(5), 336–362, Chengdu, China

World Bank (2017). *"Inventory returns management, World Wide Pressure for Adoption and the Impact on Governments Performance Report"*, Switzerland.