Customer Relations Management in Fourth Party Logistics and its Influence on Performance of Food and Beverage Manufacturing Firms in Kenya

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Abstract

Purpose: The aim of this study was to establish role played by customer relations management as an aspect of fourth party logistics on performance of food and beverage manufacturing companies in Kenya. The study was anchored on the partnerships theory that upholds the need for bringing the customers closer in order to understand and meet their needs.

Methodology: This research study adopted a descriptive and cross-sectional research designs. The designs were preferred since they allowed both in-depth study of the subject and comparison of the relationship between variables. Data was collected using self-administered questionnaires. The data collected was analysed by use of descriptive and inferential statistics. A regression model was used to show the relationship between the dependent variable and the independent variable.

Findings: The findings from the study revealed that customer relations management as one of the core components of fourth party logistics play an integral role in enhancing the performance of food and beverage processing firms. The study concluded that fourth party logistics through customer relations management is critical in enhancing the performance of food and beverage processing firms in Kenya.

Unique contribution to theory, practice and policy: The study recommended that the management of food and beverage processing firms ought to embrace fourth party logistics services by bringing customers on board in order to gain performance.

Keywords: *Fourth Party Logistics, Customer Relations Management, Food and Beverage Manufacturing Firms*

INTRODUCTION

1.1 Background to the Study

Fourth party logistics are based on the development of third party logistics and it is an extension of third party logistics, it provides value added service such as planning, information technology integration, transport planning, order tracking and tracing, logistics consulting, application solution, and financial services (Rao & Young, 2015). From the logistic company to its consigners, as a third party logistics company its task is to transport the goods from consigner to consignee, and to be a fourth party logistics provider, third party logistics need to find ways to build strong relations between themselves and their customers, with the above-mentioned supporting function to reach the highest level of service efficiency that is fourth party logistics are integrated logistics management (Wang et al., 2021). These are the logistics services provided by a company that has no product of its own or any transport infrastructure but just acts as a facilitator for the movement of the product from the manufacturer to the final consumer (Lieb & Butner, 2013).

Organizations are obliged to create strong relationship with the customers, whether it is in service industry or in manufacturing industry. According to the service management literature, customer satisfaction is the result of a customer's perception of the service quality relative to the expectation (Mehmann & Teuteberg, 2016). Moreover, the authors define customer satisfaction as the customer's feeling regarding the gap between his or her expectations towards a company, product or service and the perceived performance of the company, product or service. Both the service management and marketing literature suggest that there is a strong relationship between customer satisfaction, customer behavioral intentions (for example, switching and word-of-mouth) and, in turn, profitability (Gautam et al., 2019).

The customer relationship management team is vital in determining the amount of flexibility required in order to satisfy the customer. By evaluating their input, management should be able to determine the desired degree of manufacturing flexibility that is desired. Communications with other members of the supply chain are coordinated through the customer relationship management and supplier relationship management processes (Schramm et al., 2019). Customer relationship management is a strategic management of the relationships between customers and business processes. It uses technology to management, automation and making business process simultaneously. The benefits of customer relationship management (Huang et al., 2019): To increase sales; to better understand customer demands; to understand that customers are profitable; customer satisfaction and reputation of the organization; and to reduce marketing costs (Dircksen & Magnin, 2017).

One concern of business is the customer satisfaction and contentment (Tien, Anh, & Thuc, 2019). Best customer service will be formed in an efficient and effective manner with

information such as order status, product availability, delivery scheduling and billings. Therefore, the importance of information in the field of customer service and their satisfaction and contentment is clear. Therefore the main purpose of the activities related to the supply chain is satisfying customer demand, so that they can deliver a product with a maximum quality and a minimum cost (Yang et al., 2019). When the kind of relationship between customer relationship management and supply chain management is defined precisely, then the actual performance of customer relationship management in the supply chain can be observed. Customer relationship management system is based on three fundamental variables such as engineering, economics and customer psychology (Schönsleben, 2018).

Tao et al. (2019) conceptualize Customer Relations Management (CRM) beyond a front office contact management system. For others, CRM goes further, to constitute operational, analytical and collaborative elements (Wisner, 2010). Holistic approaches to CRM help organizations co-ordinate and effectively maintain the growth of disparate customer contact points or channels of communication. However, problems of channel conflict have been identified whereby customer experiences differ depending on the sales channel performance. Many organizations in this field have few alternatives but to outsource a significant proportion of their CRM solution as they lack the resources to develop CRM software. In logistic companies outsourcing is quite common. According to Loots (2017) 60% of in-house CRM systems fail, thus showing the need to embrace fourth-party logistics providers top put such systems in place for better engagement with the customers.

Logistic firms' customer relationship management is a comprehensive approach that promises to maximize relationships with all customers, including Internet "e-customers", distribution channel members, and suppliers. Getting to "know" each customer through data mining techniques and a customer-centric business strategy helps the organization to proactively and consistently offer (and sell) more products and services with improved customer retention and loyalty over longer periods of time (Fu, 2017). Ahmed and Zhang (2021) refer to this as maximizing "lifetime customer share", resulting in customer retention and customer profitability. On the other hand, advanced customer data analysis also allows a company to identify the customers it does not want to serve. Beside the technological advances, CRM initiatives represent a fundamental shift in emphasis from managing product portfolios to managing portfolios of customers, necessitating changes to business processes and people. As companies start to re-engineer themselves around customers, individual employees must also come to terms with changing business processes, organizational culture and, thus, the ways they view their customers and how they treat them. All the citations mentioned above are very relevant for logistic companies, as their service is highly competitive in nature, and unless CRM is applied the customers may move from one organization to another to achieve satisfaction (Tseng, Yue & Taylor, 2011).

Liu, Shi, Xue and Wang (2019) define performance measurement as the process of quantifying action, where measurement is the process of quantification and action leads to performance. The importance of satisfying customer requirements with greater efficiency and effectiveness than the competitors is highly emphasized. Effectiveness refers to the extent to which customer requirements are met, largely with the essence that customer is always right and the efficiency referred to the measurement as to how economically the firm's resources are utilized (for example, total output against total input) to provide a specific level of customer satisfaction (Lu, Feng, Gao, Bi, & Wang, 2020).

According to KAM (2020), food and beverages is the largest sector in the manufacturing industry comprising of 197 companies contributing 21.92% of the total KAM's membership. According to Kenya Institute for Public Policy Research and Analysis (2019), the manufacturing sub-sector in Kenya constitutes 70% of the industrial sector's contribution to GDP. Chiappinelli (2020) stresses on application of problem-specific approaches on their research, the essential of processes and tasking flexibility measurement as an answer to address the market volatility and to fulfil the diverse customer needs. Manufacturing strategies consists of competitive priorities which mainly focus on effectiveness, cost, delivery, flexibility, innovation and responsiveness (Wang et al., 2022). Also competitive priorities have been widely used as part of the measurement for manufacturing strategy performance.

1.2 Statement of the Problem

Most food and beverage manufacturing firms in Kenya operate at a technical efficiency of about 59% compared to their counterparts in South Africa at 70% and Malaysia at about 74% (JDA, 2019). According to a report by Deloitte (2019) on food and beverage manufacturing firms in Kenya, fourth party logistics saved various firms over Kshs.82 Billion in the financial year (FY) 2018/2019. According to KAM (2020), on the life span of food and beverage manufacturing firms, the firms were winding up at notable percentage indices, fluctuating between 49% and 58%; poor logistics outsourcing was cited as the main reason. According to KAM (2019), the manufacturing sector has always accounted for over 35% of the country's Gross Domestic Product (GDP), provided employment to about 600,000 people in the formal sector and 2 million persons in the informal sectors of the economy. However, the firms have been experiencing problems in the performance of their production and operations management.

The existing literature has shown mixed results with regard to customer relations management in fourth party logistics and its influence on firm performance. Moreover, most of the available studies have focused on different contexts from this study with scant evidence available on how fourth party logistics affect performance of manufacturing firms in a Kenyan context. This study therefore sought to bridge this gap by assessing the relationship between fourth party logistics services and performance of food and beverage manufacturing firms in Kenya.

1.3 Study Objective

To examine the relationship between customer relations management and performance of food and beverage manufacturing firms in Kenya.

1.4 Research Hypothesis

H_O: Customer relations management has no significant relationship with performance of food and beverage manufacturing firms in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

The study was anchored on the partnership theory. The main reasons for partnership are the threat of a central authority, common objectives or self-interest. This threat may be a positive or negative factor. The 17th Century philosopher Hobbes (1651) argued that it was difficult to develop partnership without a strong central authority. In supply chain, the common model through which theorists study the relationship between supplier and buyer is known as the partnership theory. In its basic nature, the partnership model depicts the buyer and supplier as partners with a common interest which is customer satisfaction. A manufacturing company can have a partner handling customer relations in issues such as dealing with customer feedback channels and product returns and recalls management (Lee, Rho & Lee, 2013).

Partnership is a business relationship based on mutual trust openness, shared risks and rewards that enables an organization gain competitive advantage leading in the company achieving a performance that's far much greater than the firm would have achieved when operating as single entities. This model requires efficient information exchange between the buyer and supplier which is a critical element of any partnership, this entails issues such as; customer feedback channels and product returns and recalls management, when handling returns and recalls mutual trust and openness is a prerequisite so as to achieve the desired customers satisfaction levels (Kaynak, 2010).

The theory further states that any partnership is always based on value and present for each other. The solid and long term relationship simply implies continuous improvement of the organization performance. Suppliers must provide better services, that is; customer feedback channels, customization and value addition of products and product returns and recalls management, that is of high quality than his competition at a price reasonable and still achieve goals to remain in business. Partnership model according to Wang, Guo, and Zeng (2021), increases company efficiency through cooperation; both parties obtain cost reduction which leads to price reduction and therefore increasing the customer satisfaction and market share profit margin as well. This leads to a firm gaining a competitive edge and efficiency.
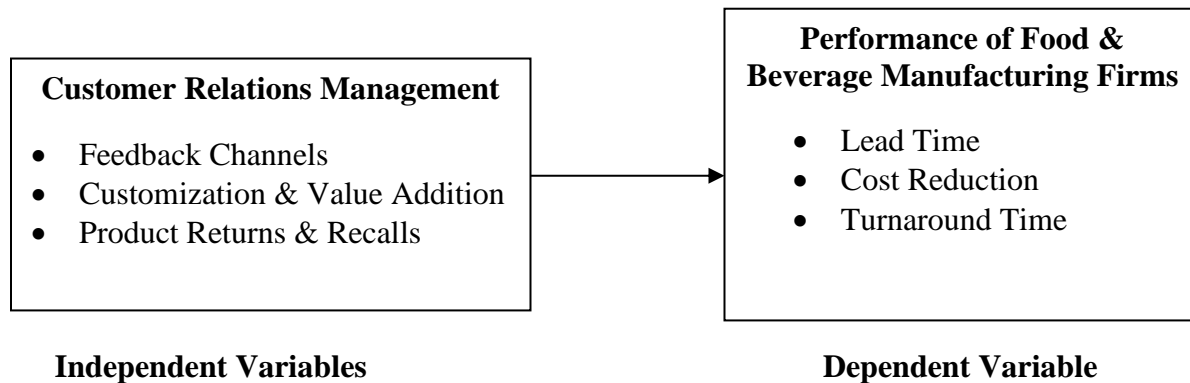
2.2 Conceptual Framework

Customer Relations Management	Performance of Food & Beverage Manufacturing Firms
• Feedback Channels • Customization & Value Addition • Product Returns & Recalls	• Lead Time • Cost Reduction • Turnaround Time
Independent Variables	**Dependent Variable**

Figure 1: Conceptual Framework

2.3 Review of Empirical Literature

Foltean, Trif, and Tuleu (2019) allude that the aim of CRM is to obtain a higher rate of customer retention and improve a company's market share and profits. Many scholars and service marketers have explored consumers' cognitive and affective responses to the perception of service attributes in order to benefit by providing what consumers need in an effective and efficient manner. Both researchers and practitioners give high importance of CRM, because, a high degree of customer satisfaction can lead to customer retention and increased market share (Bask, 2011).

Fabbe-Costes *et al.* (2014) attempted to link certain supply chain management practices with firm performance. In particular, they examined the effects of quality management, supply base management and customer relations practices on firm financial performance. They found that some aspects of quality management use of performance data in quality management, management commitment to quality, involvement of quality department, and social responsibility of management all were positively related to firm performance.

Fisher (2013) studied the effect of customer relationship management based on information technology on effective sales. The two companies have collected data and the results of positive impact on sales performance are reported. Tan *et al*. (2011) have researched on the integration of customer relationship management for the effective implementation of customer relationship management in small and medium organizations. Tukamuhabwa *et al.* (2021) have examined the effect of customer relationship management on the supply chain management. They concluded that if the customer relationship management is applied in the organization, everything will be written and recorded and everyone knows his/her job because they have common goals.

Study conducted by Wardaya (2013) regarding the relationships of Personality, satisfaction, image, ambience, and loyalty in the hotel industry found that Satisfaction has a significant impact on hotel image and guests' loyalty. Zanchett (2010) mentions satisfaction is not a core element of customer loyalty but it is difficult to entertain loyalty development without satisfaction especially after loyalty has been established. Dewnarain, Ramkissoon, and Mavondo (2019) agree that for satisfaction to affect loyalty, frequent or cumulative satisfaction is required so that individual satisfaction episodes become aggregated or blended. Moreover, it is clear, that he showed strong relationship between customer satisfaction and customer loyalty where, satisfaction is the basic element to determine customer loyalty.

2.4 Research Gaps

Most of the reviewed studies were skewed towards capabilities and not taking into account other factors in logistics which may influence firm like efficiency and effectiveness which are considered important in measuring firm performance. Furthermore, the relationship between logistics flexibility and firm performance dimensions also remains unaddressed. With this study, the researcher presents an exploratory characterization of logistics efficiency, effectiveness and flexibility and tested hypotheses that link aspects of logistics management with firm performance. Some of the studies did not consider other factors on firm performance measurements including growth, market share and customer satisfaction. By ignoring to put into account those variables could not provide the correct results on firm performance measurements. Other studies were done in more than a decade ago and many things in logistics must have changed then hence becoming very difficult to agree to these findings.

3.0 RESEARCH METHODOLOGY

This study adopted the descriptive-cross-sectional research design using both quantitative and qualitative approaches. The design incorporated both descriptive research design and cross-sectional research design.

The target population of this study was 197 registered food and beverages manufacturing companies in Kenya as per KAM (2015). Food sector constitutes about 33% of the manufacturing sector in Kenya and the sector adds value to agricultural produce and therefore growth of this sector can have a direct significant impact on the whole Kenya's economy.

The study used stratified random sampling technique where the subjects were selected in such a way that the existing subgroups in the population are more or less reproduced in the sample. Using a sampling formula, a sample size of 132 respondents was derived.

A structured questionnaire was developed to capture the various variables under study, and for the independent variables. The questionnaire contained both closed and open ended questions. The closed ended questions were aimed at giving precise information which minimized

information bias and facilitate data analysis, while the open ended questions gave respondents freedom to express themselves.

The data was analyzed using descriptive and inferential statistics. Descriptive statistics including frequencies, percentages, mean and standard deviations was used in data analysis. A regression analysis was used to test the research hypothesis.

4.0 FINDINGS

4.1 Response Rate

A response rate of 89% was obtained where 117 respondents gave back the questionnaires for analysis out of a total of 132 food and beverage manufacturing firms. This was perceived adequate for analysis.

4.2 Customer Relations Management

The study sought to establish the influence of customer relations management on the performance of food and beverage processing firms in Kenya. The key sub-constructs used in the study to assess customer relations management were: customer feedback channels, customization and value addition of products, product returns and recalls management. The respondents were asked to indicate their level of agreement or disagreement with specific statements on customer relations management drawn from these sub-constructs. The findings are as shown in Table 1.

The findings imply that most of food and beverage processing firms are committed towards ensuring customer relationship management is enhanced through addressing key concerns that dissatisfy customers and embracing the customer service strategies. The findings compare with those by Paul, Knemeyer, and Thomas (2013) who established that logistics outsourcing is done with the main aim of enhancing the satisfaction of customers and ensuring that the customers are able to access the required products and services more effectively. Zhao *et al.* (2010) also felt that focusing on customers ought to be the main agenda upheld by modern businesses especially in supply chain and logistics as a way of enhancing customer satisfaction and firm performance.

Table 1: Descriptive Results on Customer Relations Management

Statement	Mean	Std. Dev.
The company has an active platform for sharing information with the customers	4.10	1.20
The customers are given feedback to their queries timely	4.26	1.06

There are approaches where employees can share their views to any individual within the company	3.73	1.06
The products are designed and produced as per the customer specifications	3.17	1.16
The company upholds value adding the products and services to exceed the customer expectations	3.79	.967
The customers are involved in every stage of delivering their orders	3.70	1.05
The customers are always free to return any products that do not meet their specifications	3.76	1.42
The company has a policy for recalling any products that are delivered to the customers without meeting the expectations	3.23	1.00
The management of our company has been committed towards enhancing the relations of the customers and quality services/products	4.19	1.21

4.3 Performance of Food and Beverage Manufacturing Firms

The study sought to find out the performance of the food and beverage manufacturing firms in Kenya. The respondents were asked to rate customer satisfaction and the extent to which their respective companies were able to reduce the lead time. The findings as shown in Figure 2 revealed that majority of the organizations were able to reduce the lead time to a high extent while majority were unable to enhance customer satisfaction. The findings imply that most of the companies could be upholding logistic aspects that reduce lead time but not focusing on those that enhance the customer satisfaction and this could lead to poor performance.
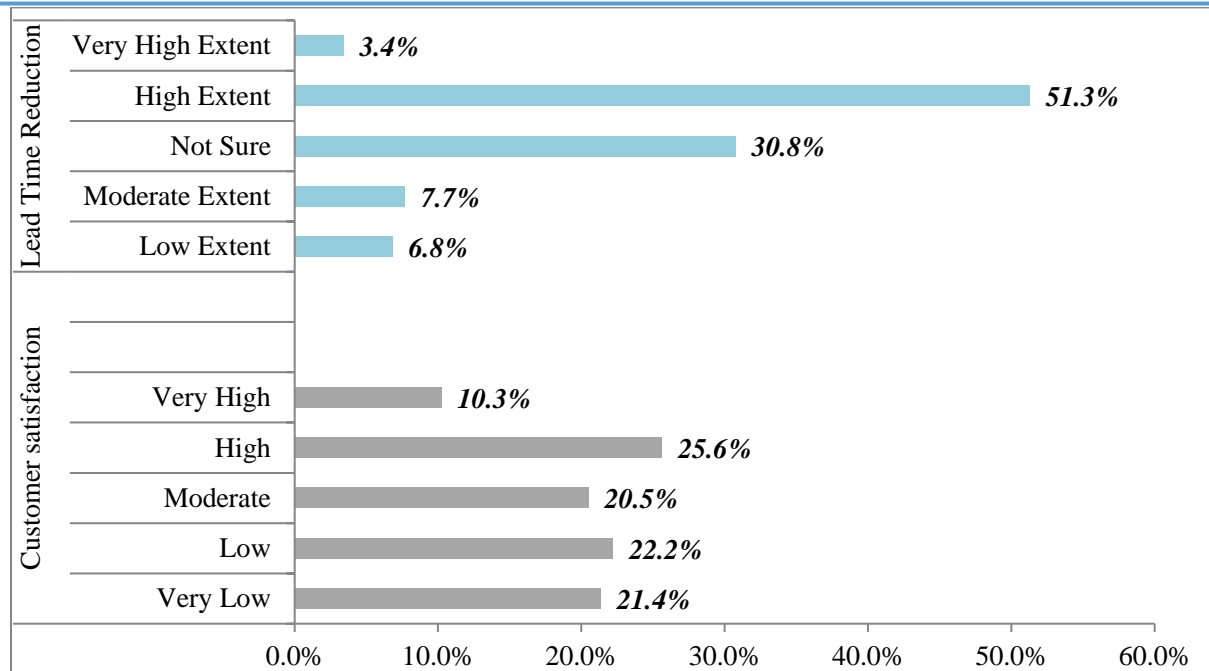
Figure 2: Firm Performance

4.4 Hypothesis Testing

The research used a regression model analysis to determine the linear statistical relationship between the independent and dependent variables of this study. According to Young (2014), regression analysis helps to explain the statistical relationship between variables thus enhancing the ability of the study to make substantive conclusions and recommendations. The statistical objective of regression analysis is to show high R^2 and significant t-values, thus rejecting the null hypothesis of no influence. Parameters with an absolute t-value greater than 1.96 indicate a significance level of 0.05 (i.e. $p<0.05$). The entire six null hypotheses as stated in chapter one of this study were tested using regression models.

The study sought to assess the influence of customer relationship management as one of the services by the fourth party logistics on the performance of food and beverage manufacturing companies in Kenya. Based on this objective, the study had a hypothesis that:

H_O: Customer relations management has no significant influence on performance of food and beverage manufacturing firms in Kenya.

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

The regression model was used to test for this hypothesis. The findings were presented in model summary, ANOVA test and regression coefficients. The findings are as shown in Table 2.

The findings from the model summary revealed that the R^2 for the third null hypothesis was 0.315. This indicates that the variation of performance of food and beverage processing firms as a result of customer relations management is 31.5%. This is an indication that customer relations management could be a significant factor influencing the performance of the food and beverage processing firms in Kenya.

The ANOVA results on the other hand revealed that at a F-statistic of 52.798, the P-value for the model is 0.000. This being lower than the standard p-value of 0.05, the study can deduce that the model can significantly predict the relationship between the customer relations management and the performance of food and beverage processing firms.

The regression coefficients were also used to depict the relationship between the two variables. The findings as shown revealed that the Beta (β) coefficient for the variable was 0.370. The model now becomes as herein shown:

$$Y = 1.650 + 0.370X_3 + e$$

The findings imply that a unit change in customer relations management would influence up to 37% of the performance of food and beverage processing firms in Kenya. The findings also show that the P-value for the variable is 0.000 which is less than the standard p-value of 0.05 implying that a customer relations management has a significant influence on the performance of food and beverage processing firms in Kenya. To this end, the third null hypothesis is thus rejected, and a conclusion drawn that customer relations management has a significant influence on the performance of food and beverage manufacturing companies in Kenya.

Table 2: Regression Results on Customer Relations Management

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561[a]	.315	.309	.76483

a. Predictors: (Constant), Customer Relations Management

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.885	1	30.885	52.798	.000[b]
	Residual	67.271	115	.585		

Total	98.156	116	

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Customer Relations Management

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.650	.157		10.516	.000
1 Customer Relations Management	.370	.051	.561	7.266	.000

a. Dependent Variable: Firm Performance

4.5 Discussion

The study assessed the influence of customer relations management on performance of food and beverage manufacturing firms in Kenya. The findings of the study revealed that majority of the firms had posited customer relations management through, customer feedback channels, customization and value addition of products, majority had a strong product returns and recalls management. The findings of the study further revealed that customer feedback channels are positively and significantly related to lead time. The odds of observing a low lead time was higher for firms which spent on customer feedback channels compared to those who did not. This implies that spending on customer feedback channels results to a low lead time. The results also reveal that customization and value addition of products had a positive and significant relationship with lead time. In addition, the results also show that product returns and recalls management and lead time were positively and significantly related.

5.0 Conclusions and Recommendations

The study concluded that customer relations management have a significant influence on performance of food and beverage manufacturing firms in Kenya. The sub-constructs of customer relations management namely customer feedback channels, customization and value addition of products, product returns and recalls management influence performance positively.

The study recommended that manufacturing firms should invest in customer feedback channels, customization and value addition of products, product returns and recalls management since it affects performance positively. Customer relations management being the ability to integrate, build and reconfigure internal and external competencies to address rapidly- changing customer needs, can also take the form of various ways apart from the ones discussed in the current study and hence the future scholars can seek to explore other measures of this factor.

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