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SUPPLY CHAIN AGILITY ON PERFORMANCE OF SUPPLY CHAIN MANAGEMENT IN SEED MANUFACTURING COMPANIES IN KENYA

[1] Wanje Victoria, [2]Dr. Lambaino Nelson

[1]Masters student, Jomo Kenyatta University of Agriculture and Technology, Kenya

[2]Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya

ABSTRACT

This study sought to examine the influence of supply chain agility on performance of supply chain management in seed manufacturing companies in Kenya. The study specifically sought to assess the influence of strategic supplier partnership on performance of supply chain management in seed manufacturing companies in Kenya and to establish the influence of customer relationship on performance of supply chain management in seed manufacturing companies in Kenya. This study was guided by resource dependence theory and the social exchange theory. The unit of analysis in this study was seed manufacturing companies in Kenya while the unit of observation was the procurement officers or their equivalents. Primary data was used and it was collected using questionnaires. SPSS version 25.0 was used to code the data collected. Correlation analysis was used in establishing how the variables under investigation relate with each other. A multiple regression analysis was used to examine the influence of supply chain agility on performance of supply chain management in seed manufacturing companies in Kenya. The study concludes that strategic supplier partnership has a positive and significant effect on performance of supply chain management in seed manufacturing companies in Kenya. In addition, the study concludes that customer relationship has a positive and significant effect on performance of supply chain management in seed manufacturing companies in Kenya. Based on the findings, this study recommends that seed manufacturing companies in Kenya should continue to invest in and strengthen their strategic supplier partnerships. Recognize and reward suppliers who consistently demonstrate reliability, quality, and a commitment to a long-term relationship.

Key Words: Supply chain agility, Strategic supplier partnership, Supply chain management, Customer relationship

INTRODUCTION

Sustained success in manufacturing industries is often predicated on the capability to innovate, engender new ideas, and introduce new products frequently. Global competition has created a competitive market environment where it is difficult to increase sales with existing products. Growth in sales and the market share is increasingly dependent on the capability of manufacturer to stimulate an existing market or penetrate a different one by offering new products and services. Consequently, new product introduction has become more rapid (Fisher & Ittner 2019), and for innovative products in particular, manufacturing systems have to be more flexible and agile (Fisher & Ittner 2019; Meyr 2018; Huetal. 2017).

Supply chain (SC) agility is a requisite capability mitigating the trade-off between product variety (e.g., frequent new product introduction) and SC performance in high-level customization environments (see Stavrulaki and Davis 2010). In addition, the connection between market winners/ qualifiers and lean/agile is generally accepted (Aitken and Towill 2002; Agarwal et al. 2006). At its simplest, the lean paradigm that typically employs a low level of customization is most suitable when the market-winning criterion is cost (i.e., cost leadership). However, when service and customer value enhancement (i.e., differentiation) are prime market-winning criteria with a high level of customization, then flexibility and agility become the critical acquisition (Mason et al. 2000). Stavrulaki and Davis (2010) emphasized the alignment between the key

Supply chain (SC) agility is a requisite capability mitigating the trade-off between product variety (e.g., frequent new product introduction) and SC performance in high-level customization environments (Stavrulaki & Davis 2020). In addition, the connection between market winners/ qualifiers and lean/agile is generally accepted (Aitken & Towill 2016; Agarwal et al. 2016). At its simplest, the lean paradigm that typically employs a low level of customization is most suit-able when the market-winning criterion is cost (i.e., cost leadership). However, when service and customer value enhancement (i.e., differentiation) are prime market-winning criteria with a high level of customization, then flexibility and aspects of a product and its SC processes depending on four SC strategic foci (e.g., from build-to-stock to design-to-order), and highlighted the links between SC processes (e.g., production and logistics) and the SC strategy (e.g., lean, leagile, and agile). Matching the organizational focus with an appropriate SC strategy result in business benefits agility become the critical acquisition (Mason et al. 2020).

Stavrulaki and Davis (2020) emphasized the alignment between the key aspects of a product and its SC processes depending on four SC strategic foci (e.g., from build-to-stock to design-to-order), and highlighted the links between SC processes (e.g., production and logistics) and the SC strategy (e.g., lean, leagile, and agile). Matching the organizational focus with an appropriate SC strategy result in business benefits. SC agility enables firms to improve their daily operations and customer service, which can result in differentiation and increasing profitability. Improving SC agility requires reducing the product development cycle and manufacturing and delivery lead time, increasing the level of product customization in manufacturing, and improving customer service, delivery reliability, and responsiveness to market needs (Sharifi & Zhang 2019; Van Hoek et al. 2017; Swafford et al. 2016; Swafford et al. 2018). SC agility is all about customer responsiveness and is essential in ensuring a firm's external competitiveness (Van Hoek et al. 2017) that enables effective and efficient responses to operational changes, including procurement, manufacturing, and delivery (Liu et al. 2017).

Therefore, SC agility focuses on customer responsiveness with speed influencing customer service and differentiation capabilities rather than cost leadership capabilities. Agility ensures responsiveness to customer requirements, services, resource efficiency and high business performance, and cost sensitivity to improve competitiveness, such as differentiation in volatile business environments (Hiroshi & David 2019; Agarwal et al. 2016). This study therefore seeks

to determine the influence of supply chain agility on performance of supply chain management in seed manufacturing companies in Kenya.

Statement of the Problem

Supply chain practices contribute 50% to the profitability and performance of any organization (Choy, 2016). Industries manufacturing products for agricultural practices are developing rapidly but complexities in supply chains of products often result in economically unviable cost structures. It seems that many companies in the agriculture related industries have started worrying about their current competitive positioning since profits of agricultural products are among the lowest (Xiao, Leung, Zhang& Lai 2019). Saturation of markets and changing consumer demands powerful application of information and communication technologies and the internationalization of the agri-industrial sector are the major driving forces affecting supply chain development and forcing the strategic realignment of traditional buyer/ seller relationships along the chain (Lancioni, Smith & Oliva, 2020).

Seeds account for 50% of yield gain in crops with the rest shared between crop protection and fertilizers (Duvick et al, 2019). More recent research has shown the seeds contribution to be about 70% (Noleppa, 2020). The seed industry in Kenya has grown at a high rate that has resulted in more companies entering the market and this has increased the level of competition. The number of registered seed companies in Kenya has grown from one (the Kenya Seed Company registered in 1956) to 116 since liberalization of the seed subsector in 2015 (TASAI, 2018). Consequently, the seed manufacturing companies need to upgrade their strategies in order to achieve set objectives in the market by selecting proper emergent supply chain strategies that will ensure that it covers a wide market. One distinctive characteristic of the seed industry is its R&D intensity. R&D spending varies widely between companies, from low single digit 0% of sales to around 30%. This variability shows how R&D is an important strategic differentiator between companies (TASAI, 2018). This in turn reflects the rapid rate of technological progress and availability of multiple new techniques such as CRISPR, MAB, RNAi. Therefore, adoption of agile supply chain strategies can help the companies deal with the stiff competition they are facing.

There are several studies that have been conducted on the relationship between agile supply chain (ASC) strategy and performance of the focal firm, on antecedents of agility, and on product characteristics of agile supply chains (Blome, Schoenherr, & Rexhausen 2017; Lee 2016; Goldsby, Griffis, & Roath 2016). Cecere (2016) showed that while 89% of the companies surveyed recognized the importance of the ASC strategy, few understood how it could lead to improved SC performance. None of the studies explained how supply chain agility can influence performance of seed manufacturing companies. This study thus sought to fill this research gap by examining the influence of supply chain agility on performance of supply chain management in seed manufacturing companies in Kenya.

Objectives of the Study

i. To assess the influence of strategic supplier partnership on performance of supply chain management in seed manufacturing companies in Kenya.
ii. To establish the influence of customer relationship on performance of supply chain management in seed manufacturing companies in Kenya.

LITERATURE REVIEW

Theoretical Review

Resource Dependence Theory

This theory originated in the 1970s with the publication of The External Control of Organizations: A Resource Dependence Perspective by Jeffrey Pfeffer and Gerald R. Salancik. Resource

dependence theory (RDT) is the study of how the external resources of organizations affect the behavior of the organization. Resource dependence theory states that organizations need resources in order to sustain their existence in the long term. It is also stated that they are only able to obtain these resources from their own environment and that there are also other organizations which want to have the same resources in this environment (Pfeffer & Salancik, 1978). At the same time, it is emphasized that the strategies of change determined by organizations in the direction of obtaining resources increases their level of dependence on the environment / other organizations (Fink et al., 2006), and as also stated by Emerson (1962), it will become necessary to manage the "relationships of dependence on power" correctly (Delke, 2015). When the literature concerning resource dependence theory is examined, it can be seen that social change theory (Emerson, 1962; Blau, 1964; Pfeffer, & Salancik, 1978) and theories related to power (Pfeffer, 2005; Werner, 2008) have been utilized.

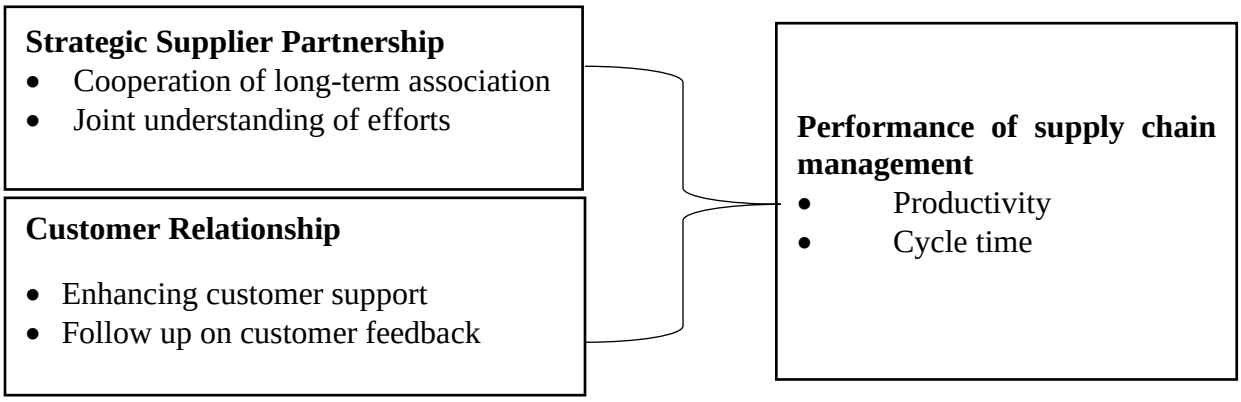
RDT has a high level of value in the supply chain context. The assumptions in this theory include; commitment to partnership for mutual benefits, creating conditions favorable to be depended on by your partners to create a position of strength, trust in the partnership deal. Thus, from the perspective of best value supply chains, dependencies should be used to create mutual forbearance and trust, not to drive aggressive exploitation of one chain member by another. The theory is therefore applicable in this study since it explains the influence of Information system capability for agility on performance of supply chain management in seed manufacturing companies in Kenya.

The Social Exchange Theory

Social exchange theory was developed by George Homans, a sociologist. It first appeared in his essay "Social Behavior as Exchange," in 1958. Social exchange theory is used to reproduce the results of procedural and distributive justice in supply chain relationships. This study will use Social Exchange Theory to determine the influence of customer relationship on performance of supply chain management in seed manufacturing companies in Kenya. Social exchange theory is based on the concept of individuals or groups interacting due to the expectation of rewards and the avoidance of penalties or punishment (Emerson,1987; Bandura, 1986). Increased competition has focused attention on the development of policies to build effective on-going relationships with customers and managing those alliances (Hult, 1998). A basic tenet of supply chain management is that on-going relationships among supply chain members and especially with customers increases efficiency and effectiveness (Choi and Hartley, 1996; Shin et al., 2000).

Hausman (2010), in his study argues that committed customer relationship and commitment to core concepts in various transactions between the company and its partners are considered to improve the supply chain performance of a firm. Social Exchange Theory can be well used for explaining supply chain management practices and especially formation of alliances with customers and the influence it has on the performance of an organization. Adopting a social exchange perspective, a consumer makes a contribution to its manufacturer through their partnerships and helps in reaping the benefits of quality and affordable products (Eriksson, 2017). Therefore, Social Exchange Theory was beneficial in explaining the influence of customer relationship management and performance of manufacturing firms.

Conceptual Framework



Independent Variables **Dependent Variable**

Strategic Supplier Partnership

Yoshino and Rangan (2015) pointed that strategic partnerships among organizations are to encourage the collaboration and shared the advantages of key strategic areas like products, markets and technology that will increase and enhance organizational performance. The work of the organizations will be more efficient through the strategic partnership with different suppliers that have been selected solely on the benefit of cost and also enable organization to work with them who are responsible and consenting to bear the liability toward the success or failure of the products. Besides, the benefit of early supplier participation enable an organization to have more cost effective design alternative, helping in selecting best component that will help in more appropriate design assessment (Monczka et al, 2018).

Strategically aligned organizations can work closely to eliminate wasteful time and effort (Balsmeier & Voisin, 2016). Hence, supplier partnership is considered as an important chapter in supply chain that will lead to better organizational performance (Noble, 2017). Mentzer's (2017) study mentioned that intimate supplier relationship is the key to manage effectively in the global environment. Therefore, strategic partnership with supplier is not only applicable to the local suppliers but also applicable to the international suppliers. Besides, strategic supplier partnership is not only about buying goods and services from suppliers but also impacting supplier systems and operational capabilities that will influence on the whole supply chain performance (Monczka et al, 2018).

Customer Relationship

Customer relationship is recognized as one of the important element in SCM practices whereby it involves customer relations practices of evaluating customer complaints, enhancing customer support, follow up on customer feedback, predicting key factors affecting customer relationships, customer expectations, interacting with customer to set standards and measuring customer satisfaction (Aggarwal, 2017; Claycomb, 2019 & Tan, 2018). Li (2016) defined customer relationship as the practices that used to build long-term relationship with customer, managing customer complaints and improving customer satisfaction.

Besides, Ulusoy in his study further suggest that customer relationships are included customer services, delivery performance and customer satisfaction which enable an organization to improve it product design to meet customer requirement as well as expectations that will overcome the customer satisfaction. Bommer (2017) in his study also recognized that customer relationship can be used as organization's marketing strategy to gain extra sales and profits. Good customer

relationship will allow an organization to make itself different from its rivals and consequently retain the customer loyalty (Magretta, 2018). As a result, close and good customer relationship will definitely help in improving performance of supply chain management.

Empirical Review

Strategic Supplier Partnership and Performance

Agus, Mohd and Hassan (2018) studied on the importance of strategic supplier partnership in supply chain management in enhancing product quality performance and business performance. This paper examines the importance of strategic supplier partnership (SSP) in supply chain management (SCM) in associations with product quality performance (PQP) and business performance (BPERF) in the manufacturing industry in Malaysia. The result of the structural equation modeling (SEM) suggests that SSP determinants namely 'Continuous improvement programs with suppliers' , 'Jointly problem solving with suppliers', 'Planning and goal setting with suppliers' and 'Emphasis on high quality suppliers' appear to be of primary importance and exhibit direct impact on product quality performance and ultimately business performance. Findings of the study provide a striking demonstration of the importance of strategic supplier partnership in SCM in manufacturing companies in Malaysia in enhancing its product quality performance and business performance.

Ryu, So, and Koo (2019) researched on the role of partnership in supply chain performance. The purpose of this paper is to examine the antecedents of buyer-supplier partnership and to explore its impact on the supply chain performance. The proposed research model was tested via structural equation modeling analysis with survey data collected in October 2007 from 141 buyer-supplier practitioners in South Korea. The results of this study imply that both strategic and operational variables are perceived as crucial factors affecting the buyer-supplier partnership; thus, this partnership relationship exerts an impact on supply chain performance.

Chairit, Chakrit, Somchawee and Narumon (2020) researched on the impact of the strategic supplier partnership, and strategic outsourcing on the supply chain performance: the mediating role of customer relationship. The main focus of the current study is to examine the impact of the strategic supplier partnership, and strategic outsourcing on the supply chain performance. Additionally, the study has mediating role of the customer relationship in the relationship between the strategic supplier partnership and the organizational performance and in the relationship between the strategic outsourcing and the organizational performance. The study is carried out on the manufacturing firms in the Indonesia. The final sample comprises of the 310 questionnaire. In order to examine effects within the construct and to carry out hypotheses testing, this study employed Partial Least Square (PLS) path modeling. The findings of the current study, view supply chain management as a strategic and operational tool to integrate business operations in building capabilities for customization which promises a sustainable customer satisfaction by effectively manages the total flow of inventory from ultimate supplier to the end user.

Miranti, Arik, and Muhammad (2019) researched on the effect of strategic supplier partnership on supply chain integration, supply chain performance and farmers performance. This research was conducted to examine the effect of strategic supplier partnerships on the the supply chain integration, supply chain performance and farmers performance. This research is an explanatory research with a quantitative approach. The data was collected using questionnaires. The sampling method was multistage proportional random sampling of 200 respondents. Data analysis in this study used path analysis method with help by SPSS. The results of this study indicate that strategic supplier partnerships have no significant effect on supply chain integration, supply chain performance and farmers performance. The supply chain integration has a significant positive

effect toward supply chain performance and farmers performance. While the supply chain performance has a significant positive effect toward farmers performance.

Customer Relationship and Performance

Özlen, and Hadžiahmetović, (2017) researched on customer relationship management and supply chain management. The purpose of this paper was to examine the level of implementation of supply chain management, customer relationship management, and information systems in Bosnian Small and Medium Enterprises (SMEs) by employing a developed survey questionnaire through the employers of Bosnian SMEs. The results showed fair levels of implementations of the subject items in general. Even though the results show the weak level of agreement, this study is expected to be beneficial for further related research in Bosnia and Herzegovina.

Rajab, Ngugi, and Kiarie (2021) researched on the influence of customer relationship management on performance of manufacturing firms in Kenya. The study employed descriptive research design. The targeted population of this study was comprised of 499 manufacturing companies which are all located in Nairobi and its environs. In order to come up with a representative sample, stratified random sampling method was used since the population is heterogeneous. The stratified technique ensured that each sector in the target population has an equal chance of being selected. There were 217 respondents sampled from the 499 manufacturing firms out of 217,180 respondents returned the questionnaires for analysis. The study adopted a descriptive survey design. Data was collected using self-administered questionnaires The study established that there exists a positive influence of customer relations management on performance management of manufacturing firms in Kenya at 5% level of significant ($\beta=0.595$, $P<0.05$). This indicates that as customer relationship management increases to certain level then performance of manufacturing firms in Kenya also increases significantly and vice-versa.

Mohammad and Nicolette, (2016) in their study on knowledge integration with customers in collaborative product development projects found that the customer's knowledge contribution is aligned with the specific requirements of each phase of the product development. Three specific customer roles are identified and connected to the customer's knowledge contribution. The capability of customers and the degree of initiative of the product development project are affecting the prerequisites for knowledge integration with customers.

Michael and Jürgen (2016) found that customer integration was important in-service provision process so as to enhance the operations of the firm and to meet the customer's needs adequately. They argued that customer integration should be included in the operations of a firm by first identifying the type of customer integration need and how much integration. The firm also has to identify the impact of integration and the mechanism that will be used to measure the integration.

Roya and Metin (2017) in their study on customer relationship management, discovered that managing customers can bring many benefits to the hotel business, though there are some associated challenges. Such challenges often bring a significant risk of failure, and these risks become more significant in budget hotels. The study considered the changes that have emerged in the last decade as regards customer expectations when staying in budget hotels. The study used qualitative approaches to investigate the overlaps between customer expectations and managers' perceptions of CRM applications. The findings revealed that regardless of all changes, value for money and core products continue to play a critical role in customers' overall satisfaction with budget hotels.

RESEARCH METHODOLOGY

Descriptive research design was adopted for this study. Descriptive research is applied in describing situations, behaviours, phenomenon and subjects. It's applied in answering who, what, when, where, and how questions, relating with the research problem. This research design tries to collect qualified information applied in statistically analysing targeted individuals or subjects in the population (Sekeran & Bougie, 2013). The study targeted population of 112 procurement officers. The unit of analysis in this study was seed manufacturing companies in Kenya while the unit of observation was the procurement officers or their equivalents. Primary data was used and it was collected using questionnaires. SPSS version 25.0 was used to code the data collected. Quantitative data collected was analysed using descriptive statistics (means, SD, frequencies and percentages) and displayed using graphs, bar charts and pie charts. Content analysis was used in analyzing qualitative data.

RESEARCH FINDINGS AND DISCUSSIONS

Response rate

The researcher sampled 112 respondents who were each administered with the questionnaires. From the 112 questionnaires 106 were completely filled and returned hence a response rate of 94.6%. The response rate was considered as suitable for making inferences from the data collected. Smith (2011) indicates that a response rate that is above fifty per-cent is considered adequate for data analysis and reporting while a response rate that is above 70% is classified as excellent. Hence, the response rate of this study was within the acceptable limits for drawing conclusions and making recommendations.

Descriptive Analysis of the Variables of the Study

Strategic Supplier Partnership and Performance of Supply Chain Management

Table 1 indicate the results on the statements regarding the influence of strategic supplier partnership on performance of supply chain management in seed manufacturing companies in Kenya.The respondents agreed that the company considers quality as number one criterion in selecting suppliers. This is supported by a mean of 3.943 (std. dv = 0.981). In addition, as shown by a mean of 3.926 (std. dv = 0.850), the respondents agreed that the company regularly solves problems jointly with their suppliers. Further, the respondents agreed that the company helps its suppliers to improve their product quality. This is shown by a mean of 3.911 (std. dv = 0.914). The respondents also agreed that there is a continuous improvement programs that includes company's key suppliers. This is shown by a mean of 3.896 (std. dv = 0.947). With a mean of 3.889 (std. dv = 0.856), the respondents agreed that the supermarket frequently interacts with customers to set reliability, responsiveness, and other standards for its operations. The respondents agreed that the company periodically evaluates the importance of its relationship with customers. This is supported by a mean of 3.876 (std. dv = 0.694). In addition, as shown by a mean of 3.764 (std. dv = 0.892), the respondents agreed that high level decisions regarding supply chain are made by Committee, without representatives from other functional departments

Table 1: Strategic Supplier Partnership

	Mean	Std. Deviation
The company considers quality as number one criterion in selecting suppliers	3.943	0.981
The company regularly solves problems jointly with our suppliers	3.926	0.850
The company helps its suppliers to improve their product quality	3.911	0.914
There is a continuous improvement programs that includes company's key suppliers	3.896	0.947
The supermarket frequently interacts with customers to set reliability, responsiveness, and other standards for its operations	3.889	0.856
The company periodically evaluates the importance of its relationship with customers.	3.876	0.694
High level decisions regarding supply chain are made by Committee, without representatives from other functional departments	3.764	0.892
Aggregate	**3.876**	**0.869**

Customer Relationship and Performance of Supply Chain Management

The statements concerning the the influence of customer relationship on performance of supply chain management in seed manufacturing companies in Kenya are presented in Table 2. The respondents agreed that there is evaluation of customer complaints. This is supported by a mean of 3.996 (std. dv = 0.865). In addition, as shown by a mean of 3.919 (std. dv = 0.945), the respondents agreed that there is enhancement of customer support. Further, the respondents agreed that the supermarket enhance follow up on customer feedback. This is shown by a mean of 3.898 (std. dv = 0.611). The respondents also agreed that the retail chain meets customer expectations. This is shown by a mean of 3.831 (std. dv = 0.908). With a mean of 3.761 (std. dv = 0.776), the respondents agreed that there is interaction with customer to set standards and measuring customer satisfaction. From the results, the respondents agreed that the supermarket aims at building long-term relationship with customer. This is supported by a mean of 3.743 (std. dv = 0.786). In addition, as shown by a mean of 3.687 (std. dv = 0.923), the respondents agreed that the supermarkets enhance managing customer complaints and improving customer satisfaction.

Table 2: **Customer Relationship and Performance of Supply Chain Management**

	Mean	Std. Deviation
There is evaluation of customer complaints	3.996	0.865
There is enhancement of customer support	3.919	0.945
The supermarket enhance follow up on customer feedback	3.898	0.611
The retail chain meets customer expectations	3.831	0.908
There is interaction with customer to set standards and measuring customer satisfaction	3.761	0.776
The supermarket aims at building long-term relationship with customer	3.743	0.786
The supermarkets enhance managing customer complaints and improving customer satisfaction	3.687	0.923
Aggregate	**3.833**	**0.841**

Correlation Analysis

The results in Table 3 show there was a very strong relationship between managerial attributes and growth of micro and small enterprises in Nairobi City County, Kenya (r = 0.836, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings are in line with the findings of Ncube and Chimucheka (2019) who indicated

that there is a very strong relationship between managerial attributes and SME growth. Moreover, the results revealed that there is a very strong relationship between network attributes and growth of micro and small enterprises in Nairobi City County, Kenya (r = 0.845, p value =0.001). The relationship was significant since the p value 0.001 was less than 0.05 (significant level). The findings conform to the findings of Tehseen and Hassan (2018) that there is a very strong relationship between network attributes and SME growth.

Table 3: Summary of Pearson's Correlations

		Performance of Supply Chain	Strategic Supplier Partnership	Customer Relationship
Performance of Supply Chain	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	106		
Strategic Supplier Partnership	Pearson Correlation	.836**	1	
	Sig. (2-tailed)	.002		
	N	106	106	
Customer Relationship	Pearson Correlation	.845**	.289	1
	Sig. (2-tailed)	.001	.061	
	N	106	106	106

Regression Analysis

Table 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.940	0.884	0.885	0.582

Table 5 Analysis of Variance

	Sum of Squares	d.f	Mean Square	F	Sig.
Regression	12.027	4	3.018	46.43	.000[b]
Residual	6.568	101	0.065		
Total	18.595	105			

Table 6 Regression of Beta Coefficient and Significance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.321	0.089		3.607	0.003
	strategic supplier partnership	0.387	0.091	0.388	3.593	0.003
	customer relationship	0.386	0.099	0.387	3.890	0.000

a Dependent Variable: performance of supply chain management

The r-squared for the relationship between the independent variables and the dependent variable was 0.884. This implied that 88.4% of the variation in the dependent variable could be explained by independent variables. F calculated was 46.43 while the F critical was 2.462. The p value was 0.000. Since the F-calculated was greater than the F-critical and the p value 0.000 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of strategic supplier partnership, customer relationship, postponement and

information system capability for agility on performance of supply chain management in seed manufacturing companies in Kenya.

According to the results, strategic supplier partnership has a significant effect on performance of supply chain management in seed manufacturing companies in Kenya β_1=0.387, p value= 0.003). The relationship was considered significant since the p value 0.003 was less than the significant level of 0.05. The findings are in line with the findings of Brown and Hyer (2016) who indicated that there is a very strong relationship between strategic supplier partnership and supply chain management.The results also revealed that customer relationship has significant effect on performance of supply chain management in seed manufacturing companies in Kenya, β1=0.386, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings conform to the findings of Aluonzi, Oluka, &Nduhura (2016) that there is a very strong relationship between customer relationship and supply chain management.

Conclusion

The study concludes that strategic supplier partnership has a positive and significant effect on performance of supply chain management in seed manufacturing companies in Kenya. Findings revealed that cooperation of long-term association and joint understanding of efforts influences performance of supply chain management in seed manufacturing companies in Kenya. In addition, the study concludes that customer relationship has a positive and significant effect on performance of supply chain management in seed manufacturing companies in Kenya. Findings revealed that enhancing customer support and follow up on customer feedback influences performance of supply chain management in seed manufacturing companies in Kenya.

Recommendations of the Study

Seed manufacturing companies in Kenya should continue to invest in and strengthen their strategic supplier partnerships. Recognize and reward suppliers who consistently demonstrate reliability, quality, and a commitment to a long-term relationship. The companies should establish clear performance metrics and key performance indicators (KPIs) for both suppliers and the company itself. These metrics should align with the goals of the supply chain and help track the impact of supplier partnerships on performance.

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