Contents lists available at ScienceDirect

Social Sciences & Humanities Open

journal homepage: www.elsevier.com/locate/ssaho

STRATEGIC VALUE CHAIN MANAGEMENT AND PERFORMANCE OF FLORICULTURE EXPORTING FIRMS IN NAKURU CITY COUNTY, KENYA

Onyiego Vincent Kebati[a], Dr. Osoro Anthony (PhD)[b]

[a] Masters Degree at Jomo Kenyatta University of Agriculture and Technology

[b,] Lecturers, Jomo Kenyatta University of Agriculture and Technology

ARTICLE INFO

Received 28 September 2022
Accepted 6 October 2022
Published 18 October 2022

Keywords:
Strategic value chain management
Strategic logistics management
Strategic operations management

Cite:
Onyiego, V. K. & Osoro. Y. (2022). Strategic Value Chain Management And Performance Of Floriculture Exporting Firms In Nakuru City County, Kenya. *Social Sciences & Humanities Open*, 3(2022), 69-78

ABSTRACT

This study endeavors to explore in the area of strategic value chain management and horticulture in Nakuru City County, Kenya. The specific objectives of this study was to examine the effect of; strategic logistics management, strategic operations management, on performance of floriculture exporting firms in. The study was anchored on the transaction cost theory, value chain theory, market orientation theory, and agency theory. The study employed descriptive research design. The target population was 150 respondents in the logistics, finance and sales and marketing departments of the floriculture-exporting firms in Nakuru City County Kenya. The study used purposive sampling to sample the entire target population. Questionnaires were used for data collection. A pilot study was conducted with 15 respondents representing. Construct and content validity was used. Reliability was tested using Cronbach's Alpha Coefficient. Data were analyzed quantitatively using Statistical Package of Social Science version 26 through descriptive (frequency, percentage, mean) and inferential statistics (correlation and regression). Findings were tabulated. Findings showed that; there is a strong significant relationship between strategic logistics management and firm performance (r=0.470, p=0.000), a strong significant relationship between strategic operations management and firm performance (r=0.528, p=0.000). The study recommended that; firms should invest in transport facilities to ensure that there is no product delay, firms should make more investments on marketing, and firms should endeavor to adopt electronic procurement in their procurement function as this make the procurement process more efficient and transparent.

https://doi.org/10.1016/j.ssaho.2020.100101
Received 28 September 2022; Received in revised form 4 October 2022; Accepted 6 October 2022

Social Sciences & Humanities Open 3 (2022) 100101

Background of the Study

A value chain is a set of activities carried out in an organization to create value for its customers. Value chain involves organizing the activities that every strategic organization department embarks on to design, produce, promote, market, deliver and support the product or service it sells. Porter (1985) classified value chain activities into primary and supporting activities. Primary activities are also the main activities of the organization including: Inbound logistics, operations, outbound logistics, marketing and sales. Support activities include procurement, technology development, human resources management and infrastructure including finance, accounting, and general management (Hill, 2013). This study will focus on three primary activities (logistics management, operations management, marketing and sales management)and one support activity (strategic procurement). Value chain activities allow firms to determine the strategic advantages of their activities and value-creating processes in the marketplace (Harmon, 2010).

Value chain management is the internal operations that a company engages in while converting raw materials into consumable products. A well-managed value chain aims to optimize interactions between firm in order to increase service delivery, resource utilization, and cost savings, particularly in the area of inventory holding (The Institute of Value Management, 2008).

Strategic value chain management involves making tactical supply chain decisions that are beneficial to the entire organization. Strategic value chain management could help an organization to improve the quality of products/ services, evaluate competitive positioning, reduce delivery time both from suppliers and to the customers, and minimize costs through reconfiguring the value chain (Murray, 2019).

Changes in agriculture and food standards have had a significant impact on the agricultural value chains in the last two decades due to rising competitiveness from international marketers, economic deviation and scope in production and distribution, (Gachukia, 2017). As a result of these changes, new management strategies have been established to fulfill new sources of demand, as well as the development of lean, efficient, and flexible production and processing methods (Zonin, Winck, Zonin, Leonardi, & Machado, 2014).

Value Management (VM) lays emphasis on the need to motivate employees, improving competencies, and fostering technical ability to improve overall company performance. Value management contributes to clear, firm decisions, better customer solutions, a better grasp of the organization's goals among its people, and improved internal communication (The Institute of Value Management, 2008). Value chain management, according to Hardacre and Collins (2008), is the integrated assessment of processes and uncertainties from the beginning to the end of the chain in order to maximize overall value. In today's shifting business climate, a greater focus is being placed on offering value to customers at the lowest feasible cost.

Organizations in Africa especially in the private sector do not have a culture of strategic value management. Business leaders have failed to recognize that the business organization is changing fast which calls for strategic management to achieve competitive advantage. The companies with strategic value chain management have management to sail through the turbulent business environment (Vitalis et al, 2019). In Nigeria, Oloitan, Hubbard and Bamford (2020) noted that the key challenges to horticulture product export from Nigeria as; regulatory framework, poor infrastructure and logistics, marketing, poor farming techniques, high transaction costs, and poor operations management at the horticulture exporting firms. Ezezue (2015) found that poor coordination and lack of focus in value management principles hindered success of value management in Nigeria. Proper orientation, training on the concept of value management resulted to improved performance.

Financial services, value chain suppliers, and supporting services all have an impact on Kenya's agriculture value chain. The type of contact in value chain, on the other hand, is determined by the value chain in question. Kenya's agricultural value chain is shaped by multinational corporations and government policy (Recha, 2018). Because many horticulture goods have a short shelf life, their value chain necessitates close collaboration among all stakeholders to guarantee that products arrive in good condition. As a result, logistics, shipping, and cold storage play vital roles in the value chain. Firms can increase their productivity by embracing new information, technology, and practices by investing in agribusiness value chain innovation. Given the essential requirement of sourcing domestic agricultural produce, links between foreign investors and local supply chains and labor markets are more common in agriculture than in many other value chains (Onyango, 2016).

Statement of the Problem

Value management helps companies to make sound decisions, provide superior solutions to their customers' needs, and increase their members' understanding of the organization's aims. Nonexistence of value management in an organization could result to fallacious decisions, low technology adoption, consumer discontentment, substandard products, and loss of market share as a result of firm’s failure to compete in the market (Muthoka & Ogutu, 2018). Although floriculture sector has achieved a significant

growth, it has stagnated in the past decade (The Agriculture and Food Authority, 2020).

Kenya is the lead exporter of rose cut flowers to the European Union (EU) with a market share of 38% (FAO, 2019). The volume of flower exports was 373.78 million kilograms in 2021 which was a 3.3% increase from 287.8 million kilograms in 2020. The earnings also increased from 99 billion in 2020 to Ksh.101 billion in 2021. The volume of the exports has been declining due to shortage of soluble fertilizer which is a critical input in flower farming. Previously, it cost $0.21 on average to produce one rose flower, but with the current tax it costs $0.36. This has forced Kenya exporters to sell a kilogramme of rose flowers at $0.3 compared with Ethiopia that sells at $0.28 per kg (KNBS, 2022).

Value chain management in agribusiness is important in determining the competitiveness of products on world markets. Some horticultural products in Kenya are less competitive in global markets due to a lack of ability to strategically manage the value chain. Floriculture businesses in Kenya have faced a variety of challenges, some of which have been brought on by European markets, while others have been brought on by competitors (European growers). The EU's conditionality, which imposes a bare minimum on carbon dioxide emissions during the manufacturing process, is one of the growing external pressures forcing floriculture companies to adopt measures to improve the quality of their flowers (Juma, 2020).

There exist several studies on value chain and performance in Kenya. Munyi and Deya (2019) study on effect of strategic value chain on performance of pharmaceutical companies in Kenya found that value chain activities have a significant relationship with firm performance. Susanken (2017) assessed effectiveness of value chain on online businesses and revealed that value chain practices were essential in value creation of services and products provided to consumers. Chege (2017) study on influence of internal value chain management revealed that internal business value chain was significantly related to performance of manufacturing companies. However, no study on effect of value chain management in horticultural export firms hence the need to study effect of strategic value chain management on performance of floriculture exporting firms in Kenya. Therefore this study was done in the Kenyan context so as to bridge the existing gap with the newly created knowledge out of this study findings.

Specific Objectives

The specific objective of this study were:

i To determine the relationship between strategic logistics management and performance of floriculture exporting firms in Nakuru City County, Kenya

ii To assess effect of strategic operations management on performance of floriculture exporting firms in Nakuru City County, Kenya.

LITERATURE REVIEW

Theoretical Review

Transaction Cost Theory

Coase created transaction cost theory in 1971. Williamson (1995, 1981) extended on the theory by emphasizing the significance of transaction costs in fostering organizational trust. The key hypothesis of the theory is that transactions will be handled in such a way that the costs of carrying them out are minimized (Rindfleisch & Heide, 1997). The total cost of ownership (TCO) includes the purchase price, transportation and logistics costs, transaction costs, capital lockup and depreciation costs, and risk costs. In terms of value chain management, risks are associated with the unpredictability of performance metrics. Among the causes of risks in the value chain is logistics management.

The risks can have a detrimental impact on sales, affecting distributors and retailers further down the supply chain (Koufteros, 1999). When switching from a local to an offshore provider, the delivery lead time may increase from one week to five weeks (sea freight). The five-week lead time is due to greater capital lockup costs due to higher safety stocks and increased value of goods-in-transit. This hypothesis applies to the current study since strategic logistics management would aid in cost reduction. As a result, organizations with lower transaction costs do better than those with greater transaction costs.

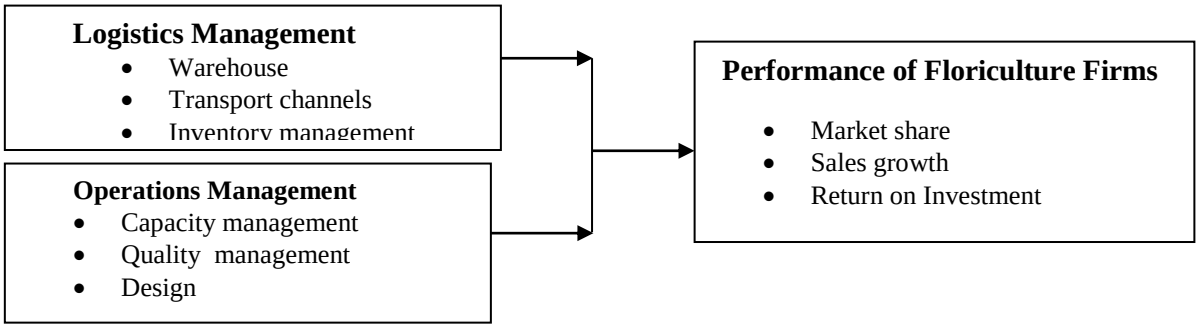
Value Chain Theory

This theory was propounded by Porter in 1985. Porter's value chain is made up of a series of operations that helps to develop, create, market, and transport a product. In the core value chain, Porter differentiates between fundamental and support activities. Main activities are logistics, processing, selling and marketing, and services that generate direct value. The supporting activities that help in value creation of products include sourcing, innovations, personnel management, and business facilities (Mathias, 2010). Company operations endeavors are linked to how it manages to record growth in a turbulent operating environment (Nweke , 2017).

Understanding the interactions that occur within a value chain helps in pointing out the factors determining the performance of the value chain. Every company participate in its products value creation

process although some firms play a greater role in the value chain than other players like the marketers and middlemen (Kothandaraman & Wilson, 2001). An effective value strategy method allows a business to identify the essential competences required to compete, generate and satisfy consumer value anticipations, and manage the value addition process (David, 2011). Horticultural businesses can use the value chain idea to examine and characterize their source of competitive advantage, which is based on product quality and design.

Conceptual Framework



Strategic Logistics Management

Logistics is how to arrange, and control systems for proficient and powerful transportation of products from production point to consumer aimed at satisfying customer's needs . It is the general management of collection, warehousing and transportation of products to consumers (Corbett, 2014). Logistics management, according to Hill et al. (2012), regulates the flow of raw resources along the value chain, from sourcing to manufacturing and distribution. The efficacy with which this operation is performed has the potential to greatly reduce/or lower costs, hence creating value.

The ability of firms to distribute products effectively has become one of the major challenges facing business organizations, especially when it comes to transporting products, from the production plant to their various customers. The need to transport goods to customers not only imposes direct costs on firms but also affects the on time delivery and sales growth of the firm. Logistics aids in the optimization of a company's existing production and transportation processes through effective management approaches, hence increasing business performance and competitiveness. Transportation and distribution system, according to Rui and Luis (2014), is the most important component of a logistics chain.

Strategic Operations Management

Strategic operations management is the daily control of production, such as scheduling, monitoring, and adjusting. Operations management is responsible for producing goods and/or services (Demir, 2019). The five operational performance objectives, according to Slack et al (2010), are price, value, speed, reliability, and flexibility. Pricing includes embracing a constructive cost-cutting approach and offering products at the lowest possible pricing. The capacity to create products in line with specifications and without error is referred to as quality. Speed is defined as the ability to respond quickly client's needs. This involves that the product ordered reaches the client within the shortest time possible. Reliable firms always fulfill deliver promises to their customers. Operations management, according to Pearson (2010), is a multidisciplinary field of specialty in a company. The operations unit oversees that an organization's raw materials and people resources are used in the most efficient manner possible, maximizing output.

Performance of Horticultural Exporting Firms

Organizational performance is comprises of: financial performance (profits, return on assets, and return on investment); product market performance (sell, market share); and shareholder return (total shareholder return, economic value added) (Porter, 2013). Enhanced productivity, cost minimization, waste reduction, a reputable firm image, improved customer contentment, improved market share, enhanced goodwill, and high profitability are some of the ways Fotopoulos, Kafetzopoulos, and Psomas (2011) suggest that organizations can improve their performance. Cut flowers, along with fruits and vegetables, make up Kenya's horticulture industry, which contributes over $1 billion to the country's economy each year (Floriculture in Kenya, 2016).

Small-scale farmers grow the majority of fruits and vegetables, as opposed to cut flowers and export veggies, which are controlled by large-scale growers because of capital intensive nature. The sector's significance to the economy, in terms of job creation, household income generation, foreign exchange profits, and input materials to agro processing industries, cannot be underestimated. Approximately 4.5 million people earn their living directly from the sector, while another 3.5 million rely on it indirectly across the country. The United Kingdom, Switzerland, Germany, Switzerland, Italy, Belgium, France, and the Netherlands are the main destinations for Kenyan horticultural output. Russia and Japan are two other small destinations for Kenya's horticultural imports (Floriculture in Kenya, 2016).

Isinya, Thika, Kiambu, and the Mt. Kenya region are the key production locations of flowers while other regions include Nairobi, Nakuru, Eldoret, Kericho, and Naivasha. Flower companies are made up of indoor and outdoor growers who have invested much in modern production and marketing tactics. The Kenya Flower Council (KFC) is the industry's regulator, with 96 members representing approximately 65 percent of the country's flower exports (KFC Producer Members, 2016). Since 2011, Kenya's cut flower industry has increased in number and value of flowers exported each year. Despite this expansion, the Kenya cut flower industry is encountering issues, and some companies have expanded their operations to neighboring countries where the cost of doing business is lower, allowing them to compete in the worldwide market. Due to their low production costs and high quality flowers, Kenya faces competition from Colombia, Ethiopia, Malaysia, and Ecuador. Product portfolio management, product excellence, effective supply chain management, and enhanced stakeholder involvement are among the tactics used by cut flower companies to increase their desirability in the international market.

Empirical Review

Khan (2020) examined effect of inbound logistics on performance of clothing factories in Bangladesh. Target was 123 export processing firms. Results showed that inbound logistics abilities are significantly related to tangible performance but insignificantly related to intangible firm performance. Panagiotis and Malindretos (2020) studied effect of green logistics management on firm performance in Greece. Sample size was 134 firm managers. Results showed that transport network management was the most significant factor related to business performance. However, green warehousing and logistics emission had no significant relationship with performance outcomes.

Ristovska, Kozuhharov and Petkovski (2017) examined effect of logistics management on firm performance in the Republic of Macedorva. The study employed a descriptive research design with 80 respondents. Findings revealed; adequate storage, warehouse, and transport reduce general operation costs. Efficient logistics management also increased business efficiency, customer satisfaction and competitiveness. Bagshaw (2019) sought to find out effectiveness of logistics management on timely delivery and sales growth in Nigeria. The target was 135 firms and 122 we sampled purposively. Data was collected using questionnaires. Results revealed that effective transportation and distribution influences timely delivery and sales growth respectively. Oladunni (2020) examined impact of logistics management on performance of manufacturing sector in Nigeria. The sample comprised of 96 senior management staff. Data was collected using questionnaires. Findings showed that logistics positively and significantly affected on performance of manufacturing sector.

Wakiariro (2020) assessed logistics management in horticulture exporting firms in Tanzania. Data was collected using questionnaires and document review. Findings showed that horticultural logistics plays a significant role in the horticultural export value chain. It was also revealed government support through extension services and farm inspections contributed to growth of horticultural exports in Tanzania. Chala (2021) analyzed how logistics management affected performance of sugar factory. The sample was 100 senior management staff. Results revealed that transport, inventory, and storage facilities management was significantly related to firm performance.

Akgul, Gozlu and Tatoglu, (2015) assessed relationship nexus between operations strategy and performance of firms of Turkey. Data was collection using questionnaires. Analysis revealed that operations strategy has a strong and positive influence on firm performance. Operations cost, production time, and new product development affected firm performance. Amarjit, Manjeet, Neil and Mand (2014) studied nexus between operational efficiency changes and performance of manufacturing firms in India. This research employed a correlational research design. The target included 500 firms listed in the stock exchange and 244 firms were sampled. Secondary data was collected from the stock exchange for five years. Results showed that operational efficiency significantly affected performance of manufacturing firms.

Mohammed, Yusheng and Mensah (2019) explored relationship between operations effectiveness and financial performance in Ghana. Secondary data was collected from firms' reports. Results revealed an insignificant nexus between operational efficiency and organization performance. Bengat (2015) investigated practices adopted in the operations of agricultural NGOs in Nairobi County. Exploratory design was adopted. Census was used in sampling 35 agricultural NGOs in Nairobi. Data was collected using questionnaires. Findings showed that operations management significantly affects performance in agricultural NGOs. Level of operations development was influenced by the organization's programs. Sigei, Ngeno, Kibe, Mwangi and Mutai (2014) sought to determine challenges hindering competitiveness of tomatoes in Kenya. Data was collected using published data from agricultural state agencies. Challenges facing tomato value chain were identified as production ineffectiveness, market unreachability, and low utilization of processing facilities.

RESEARCH METHODOLOGY

The research was conducted using a descriptive research design. The study target population was 50 floriculture firms in Kenya. The target population of this study was 150 respondents from the following departments; logistics, finance and sales and marketing departments (Mugenda & Mugenda,2008). Three senior most officers were picked from the each department. This was my unit of analysis. The staffs were targeted as they have adequate knowledge on the value chain management strategies and performance of the firm. The researcher conducted census survey to the entire population. Primary data was collected using open and close ended questionnaires and secondary data from firm annual reports. SPSS version 24 was used for data analysis to generate descriptive (frequency, percentage, mean) and inferential statistics (correlation and regression). A regression was conducted to get an in-depth understanding of how a change in one variable causes a change to the other using the t-value and p-value.

RESEARCH FINDINGS AND DISCUSSIONS

Strategic Logistics Management

The first objective aimed at determining effect of strategic logistics management on performance of floriculture exporting firms in Nakuru City County, Kenya. The staff were asked to indicate the extent to which they agreed on statements related to strategic logistics management. Findings are presented in Table

Table 1: Strategic Logistics Management

Statements	Strongly disagree		Disagree		Not Sure		Agree		Strongly Agree		mean
	F	%	F	%	F	%	F	%	F	%	
Effective warehousing methods help in reduction of the rate of product defects	11	12.2	18	20.0	11	12.2	32	35.6	18	20.0	3.31
Delivering products on –time as per client requests enhances customer loyalty	10	11.1	9	10.0	5	5.6	32	35.6	34	37.8	3.79
The firm has a fleet of vehicles for effective delivery	10	11.1	16	17.8	7	7.8	28	31.1	29	32.2	3.56
Store management helps to reduce risks arising from stock shortage	2	2.2	1	1.1	0	0	7	7.8	80	88.9	4.80
The perfect administration of inventory has enhanced productivity and reduced product fault	4	4.4	8	8.9	5	5.6	35	38.9	38	42.2	4.06
Effective movement of flowers from the warehouse to airport helps to reduce costs	5	5.6	11	12.2	13	14.4	33	36.7	8	31.1	3.76
Fleet management strategies help to minimize accidents	8	8.9	8	8.9	12	13.3	28	31.1	34	37.8	3.80

Findings show that the staff strongly agreed that the store management helps to reduce risks arising from stock shortage (m=4.80). The staff also agreed that the he perfect administration of inventory has enhanced productivity and reduced product fault (m=4.06), fleet management strategies help to minimize accidents (m=3.80), delivering products on –time as per client requests enhances customer loyalty (m=3.79), effective movement of flowers from the warehouse to airport helps to reduce costs (m=3.76), the firm has a fleet of vehicles for effective delivery (m=3.56), and effective warehousing methods help in reduction of the rate of product defects (m=3.31). Findings imply that logistics management is essential since it ensures that goods are delivered on time and in good condition. Tracking systems enables the customers and the firm to track goods on transit and they are able estimate delivery time. Findings concur with Ristovska, Kozuhharov and Petkovski (2017) that adequate storage, warehouse, and transport reduce general operation costs. Efficient logistics management also increases business efficiency, customer satisfaction and competitiveness. In addition, Bagshaw (2019) revealed that effective transportation and distribution influences timely delivery and sales growth respectively.

Strategic Operations Management

The second objective examined effect of strategic operations management on performance of floriculture exporting firms in Nakuru City County, Kenya. The staff were asked to indicate the extent to which they agreed on statements related to strategic operations management. Findings are presented in Table 2

Table 2: Strategic Operations Management

Statements	Strongly disagree		Disagree		Not Sure		Agree		Strongly Agree		mean
	F	%	F	%	F	%	F	%	F	%	
Design of products aims at complying with the legal requirements	3	3.3	1	1.1	7	7.8	27	30.0	52	57.8	4.38
The firm has a technical team to address machine breakdown and normal maintenance	19	21.1	45	50.0	5	5.6	12	13.3	9	10.0	2.54
Products and facilities are regularly inspected	1	1.1	2	2.2	4	4.4	23	25.6	60	66.7	4.54
There is continuous staff capacity building on quality in the floriculture industry	28	31.1	49	54.4	7	7.8	1	1.1	5	5.6	2.32
The firm hires more workers when demand increases	36	40.0	42	46.7	4	4.4	5	5.6	3	3.3	2.19
Space available is properly used	15	16.7	15	16.7	4	4.4	26	28.9	30	33.3	3.46
The management adjusts operating hours depending on demand	5	5.6	9	10.0	3	3.3	26	28.9	47	52.2	4.12
Communicate channels enhances easier sharing of information among operations staff	7	7.8	6	6.7	11	12.2	39	43.3	27	30.0	3.81

Findings show that the staff strongly agreed that the products and facilities are regularly inspected (m=4.54), design of products aims at complying with the legal requirements (m=4.38). The staff further agreed that the management adjusts operating hours depending on demand (m=4.12), communicate channels enhances easier sharing of information among operations staff (m=3.81), and space available is properly used (m=3.46). The staff however disagreed that the firm has a technical team to address machine breakdown and normal maintenance (m=2.54), there is continuous staff capacity building on quality in the floriculture industry (m=2.32), and the firm hires more workers when demand increases (m=2.19). This is an indication that the firms' management makes efforts to ensure that they quality of the products meet the recommended quality for export flowers. This is achieved through constant inspection of the facilities and production process. However, the quality may be compromised due to staff fatigue when the demand is high. The staff may also lack necessary training needed to operate new plants as demanded by global technology changes. The production process may also be delayed by the machinery breakdown. Findings are in agreement with Sigei, Ngeno, Kibe, Mwangi and Mutai (2014) that the horticulture firms face challenges in production that are related to low utilization of processing facilities and disruptions in production. .

Performance of Floriculture Exporting Firms

The study sought to find out the performance of floriculture exporting firms in Nakuru City County, Kenya. Respondents were asked to indicate the extent to which the firm has realized improved performance over the last 5 years, from 2017 to 2021. Findings are presented in Table 3

Table 4.8: Performance of Floriculture Exporting Firms

Statements	Not at all		Small Extent		Moderate Extent		Great Extent		Very great extent		mean
	F	%	F	%	F	%	F	%	F	%	
Market Share (2017-2021)	33	36.7	20	22.2	9	10.0	21	23.3	7	7.8	2.43
Sales growth	1	1.1	28	31.1	37	41.1	11	12.2	13	14.4	2.78
Profitability	43	47.8	21	23.3	6	6.7	10	1.1	10	11.1	2.14
Customer satisfaction	6	6.7	7	7.8	8	8.9	27	28.9	42	46.7	4.02
Customers compliment to the firm	3	3.3	0	0	4	4.4	41	45.6	42	46.7	4.32
Growth in value added productivity	46	51.1	21	23.3	10	11.1	6	6.7	7	7.8	1.97

Findings show that the respondents indicated that customers compliment to the firm has been realized to a very great extent (m=4.32), customer satisfaction to a great extent (m=4.02), market share to a small extent (m=2.43), sales growth to a small extent (m=2.78), profitability to a small n (m=2.14), and growth in value added productivity to a small extent (m=1.97). Findings show that although the firm ensures that their customers are satisfied, there is little value addition in the floriculture sector. The firms hence lack competitiveness that may enable them to have a bigger market share, increase sales volume, and profitability.

Inferential Statistics

Correlation

Correlation indicates the strength and significance of the relationship between the study variables. Correlation findings are presented in Table 4.

Table 4: Correlation Coefficients

Variables		Performance	Logistics8	Operations
Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	90		
Logistics	Pearson Correlation	.470**	1	
	Sig. (2-tailed)	.000		
	N	90		
Operations	Pearson Correlation	.528**	.547	1
	Sig. (2-tailed)	.000	.064	
	N	90	90	

Findings show that; there is a strong significant relationship between strategic logistics management and firm performance (r=0.470, r=0.000), a strong significant relationship between strategic operations management and firm performance (r=0.528, r=0.010). Findings concur with several previous studies; Chala (2021) that transport, inventory, and storage facilities management was significantly related to firm performance, Akgul, Gozlu and Tatoglu, (2015) that operations strategy has a strong and positive influence on firm performance, Mohammadi, Kashefi and Abolhasani (2019) that marketing strategies of differentiation and market development were significantly related to export performance of saffron companies, and Aladejebi and Adedeji (2015) that there was positive relationship between procurement planning and agricultural firms' performance.

Regression Analysis

A regression analysis aims at establishing how a change in the independent variable would predict changes in the independent variable. Regression analysis yields three output; Model summary, ANOVA, and regression coefficients.

Table 5: Model Summary

Model	R	R^2	Adjusted r^2	Std. Error of the Estimate
1	0.684	0.641	0.410	.828

Table 5 show R^2 value of 0.641 meaning 64.1% is now the contribution of this study findings and the remaining 35.9% are other factors which would have effect on performance of floriculture firms, but not captured in this study. This is now the variance. Independent variables were: strategic logistics management, strategic operations management, strategic marketing and sales management, and strategic procurement management and dependent variable was performance of floriculture.

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.184	1	7.546	11.018	.001[b]
	Residual	58.216	89	.685		
	Total	88.400	90			

Results show that regression model had an F value of 11.018 (p= 0.000). The probability value of 0.000 indicates that the regression relationship is highly significant in predicting how strategic value chain management practices would cause changes in firm performance. The F calculated is greater than 1 showing that the overall model is suitable for running a regression analysis.

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant/Y Intercept	1.833	.457		4.013	.000
Logistics	.146	.099	.173	1.478	.000
Operations	.309	.101	.341	3.061	.003

Based on the results in Table 7, the equation

Firm performance= 1.833 + 0.146(logistics) + 0.309 (strategic operations)

Findings show that holding all other factors at constant zero performance of floriculture exporting firms in Kenya would be 1.833. The equation also shows that a unit increase in strategic logistics management results in a 0.146 change in performance of floriculture exporting firms, a unit increase in strategic operations management results in a 0.309 change in performance of floriculture exporting firms. The t statistics show strategic operations management

had the greatest effect on performance of floriculture exporting firms (3.061). Findings concur with Susanken (2017) assessed that value chain practices were essential in value creation of services and products provided to consumers.

Conclusion

Strategic logistics management enhances firm performance. Logistics management ensures that the quality of the goods is not compromised whether in the warehouse or in transit. Effective logistics management enables the supplier and the customer to track the goods while on transit hence able to estimate delivery time. Logistics management also helps the firm to keep proper records on transport budget and ensures timely delivery of products. If a firm has a fleet of delivery trucks, time is not wasted in case of a mechanical problem of the delivery vehicles. The logistics manager can easily track other trucks on their fleet and direct the crew to pick up the products to their destination on time.

Strategic operations management ensures that the firm products meet the recommended quality. Majority of the floriculture firms do not have a standby production plants technician. This means that incase of a machine breakdown, quality time is wasted and demand is not met and would also result to increased customers' complaints. The production staff are not adequately trained on the operations. This means that the staff operates some plants that they are not well conversant with and quality may be compromised. The operations staff may be experienced fatigue and burnout as the findings have shown that the management does not increase workforce when there is high demand.

Recommendations

The firms should invest in transport facilities to ensure that there is no product delay. The firms can also invest in well-equipped warehouses located near the pick up station . In this case, since the firms export flowers mostly to overseas, they should endeavor to get cold rooms near the air ports. This will reduce time wastage particularly on the highways since the flowers are grown out of Nairobi County.

The firms should have a stand by technical team. This would ensure that any technical challenges are dealt with on time hence reducing time wastage and production delay. The production team should also be constantly trained on plant operation. This would ensure that they are adequately skilled to operate any machinery provided at the time. The human resources departments should also have contacts of casual laborers on be called upon incase there is high demand and workload that requires more human resources.

Areas for Further Study

A similar study on other horticulture firms in Kenya. A similar study in other horticultural firms in other counties in Kenya

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