

**DISTRIBUTION STRATEGIES AND PERFORMANCE OF SUGAR MILLING  
COMPANIES IN KISUMU COUNTY, KENYA**

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of the Degree of Master of Logistic and Supply Chain Management of Jaramogi  
Oginga Odinga University of Science and Technology**

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## DECLARATION

This project report is my original work and has not been presented for any award in any university

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## **DEDICATION**

This research work is dedicated to my wife Sarah Fikirini Baya and my children, Joel Odek Ouko, Frank Marie Odek, and Victoria Nina Lumumba whose inspiration and social support enabled me to articulate this document.

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## ABSTRACT

Globally, Sugar industry have diversified products as cost reduction strategy and synergy building for sustainability. The sugar producing companies have exploited various distribution strategies in attempt to maximize profitability and achieving market dominance. However, studies show inconsistent supply chain network of sugar producing companies in Kisumu leading to reduced operational efficiency, excess inventory, reduced market share, elongated lead time and diminished profit. The study therefore sought to determine the influence of Distribution Strategies on Performance of Sugar Milling Companies in Kisumu County, Kenya. The study objectives include: to establish the influence of Direct Strategy on performance of Sugar Milling Companies in Kisumu County, Kenya; to examine the influence of indirect Strategy on performance of Sugar Milling Companies in Kisumu County, Kenya; to determine how exclusive Strategy influence performance of Sugar Milling Companies in Kisumu County, Kenya; to assess how Intensive Strategy influence performance of Sugar Milling Companies in Kisumu County, Kenya. The study was grounded on Economic Distribution Channel Theory and Goal Setting Theory. Descriptive survey design was used with questionnaires for data collection from a census of 186 respondents. A Validity and reliability coefficients of 0.78 and 0.79 was achieved respectively. Descriptive and inferential statistics of Correlation and Regression were conducted at a significance level of 0.05 were used in data analysis. The hypothesis results included:  $H_{01}$ : Direct strategy does not significantly influence performance of Sugar Milling Companies was rejected since  $P=0.000<0.05$ ;  $H_{02}$ : Indirect strategy does not significantly influence performance of Sugar Milling Companies was rejected since  $P=0.004<0.05$ ;  $H_{03}$ : Exclusive strategy does not significantly influence performance of Sugar Millers was rejected since  $P=0.000<0.05$  and;  $H_{04}$ : Intensive strategy does not significantly influence performance of Sugar Milling Companies was rejected since  $P=0.000<0.05$  was rejected since  $P=0.000<0.05$ . The coefficient of Direct Strategy ( $B = 0.498, p = 0.001$ ), coefficient of Exclusive Strategy ( $B = 0.394, p = 0.013$ ) and coefficient of Intensive Strategy ( $B = 0.258, p = 0.024$ ) were significant statistically hence inclusion in the model. Thus, the study concluded that all the distribution strategies have a significant influence on performance of Sugar Milling Companies. The study contributes valuable knowledge on the appropriate distribution

strategies for improvement of performance of Sugar Milling Companies with presupposition policies to enhance implementation of distribution strategy for quality supply control procedures, timeliness in product delivery, distribution cost reduction, efficiency in placing order and customer satisfaction. It is recommended that firms should apply different distribution strategies based on geographical proximity to the customers to enhance performance of sugar firms. Future studies should focus on other case studies apart from sugar firms.

## TABLE OF CONTENT

	<b>PAGE</b>
DECLARATION .....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENT .....	iv
ABSTRACT .....	v
TABLE OF CONTENT .....	vi
LIST OF TABLES .....	xi
LIST OF FIGURES .....	xii
LIST OF ABBREVIATIONS AND ACRONYMS .....	xiii
OPERATIONAL DEFINITION OF TERMS .....	xiv
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.1 Background of the study .....	1
1.2 Statement of the problem .....	5
1.3 Purpose of the study .....	6
1.4 Objectives of the study .....	6
1.5 Research Hypotheses .....	6
1.7 Justification of the Study .....	7
1.8 Significance of the Study .....	7
1.8 Basic Assumptions of the Study .....	8
1.9 Limitations of the study .....	8
1.10 Delimitation of the study .....	8
CHAPTER TWO .....	10
LITERATURE REVIEW .....	10
2.1 Introduction .....	10
2.2 Theoretical Review .....	10
2.2.1 Economic Distribution Channel Theory .....	10
2.2.2 Goal-Setting Theory .....	10
2.3 Conceptual Review .....	11
2.3.1 Concept of Performance .....	11
2.3.2 Concept of Distribution Strategy .....	12
2.4. Empirical Review .....	13
2.4.1 Direct Strategy and Performance of Sugar Milling Companies .....	13

2.4.2 Indirect Strategy and Performance of Sugar Milling Companies .....	14
2.4.3 Exclusive Strategy and Performance of Sugar Milling Companies.....	15
2.4.4 Intensive Strategy and Performance of Sugar Milling Companies.....	17
2.5 Summary of literature reviewed.....	18
2.6 Conceptual Framework.....	20
20	
2.13 Knowledge Gaps.....	21
CHAPTER THREE .....	24
RESEARCH METHODOLOGY.....	24
3.1 Introduction.....	24
3.2 Research Design.....	24
3.3 Research Paradigm.....	25
3.4 Area of Study .....	25
3.4 Target Population.....	26
3.5 Sampling Size and procedure of Sampling .....	27
3.6 Research Instruments .....	27
3.6.1 Pilot testing of the instruments .....	27
3.6.2 Validity of the Instruments .....	28
3.6.3 Reliability of the Instruments.....	28
3.7 Procedure of Data Collection.....	28
3.8 Techniques of Data Analysis .....	29
3.9 Ethical considerations .....	30
3.9 Operationalization of the variables .....	32
CHAPTER FOUR.....	33
DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION.....	33
4.1 Introduction.....	33
4.2 Response Return Rate .....	33
4.3 Demographic Information.....	33
4.3.2 Distribution of Respondents by Gender.....	33
4.3.3 Distribution of Respondents by Age.....	34
4.3.5 Distribution of Respondents by Level of Education.....	34
4.4 Performance of Sugar Milling Companies .....	35
4.5 Objective one: To investigate the influence of Direct Strategy on Performance of Sugar Milling Companies in Kisumu.....	37

4.5.1	Direct Strategy.....	37
4.5.2	Relationship between Direct Strategy and Performance of Sugar Milling Companies .....	39
4.5.3	Influence of Direct Strategy on Performance of Sugar Milling Companies .....	40
4.5.4	Test for Hypothesis One .....	40
4.6	Objective two: To investigate the influence of Indirect Strategy on Performance of Sugar Milling Companies in Kisumu.....	41
4.6.1	Indirect Strategy .....	41
4.6.2	Relationship between Indirect Strategy and Performance of Sugar Milling Companies .....	43
4.6.3	Influence of Indirect Strategy on Performance of Sugar Milling Companies.....	44
4.6.4	Test for Hypothesis Two.....	44
4.7	Objective three: To assess the influence of Exclusive Strategy on Performance of Sugar Millers in Kisumu .....	45
4.7.1	Exclusive Strategy .....	45
4.7.2	Relationship between Exclusive Strategy and Performance of Sugar Milling Companies .....	47
4.7.3	Influence of Exclusive Strategy on Performance of Sugar Milling Companies .....	48
4.7.4	Test for Hypothesis Three.....	48
4.8	Objective four: To assess the influence of Intensive Strategy on Performance of Sugar Milling Companies in Kisumu.....	49
4.8.1	Intensive Strategy.....	49
4.8.2	Relationship between Intensive Strategy and Performance of Sugar Milling Companies .....	51
4.8.3	Influence of Intensive Strategy on Performance of Sugar Milling Companies .....	52
4.8.4	Test for Hypothesis Four .....	52
	<b>4.9 Objective five: To investigate the combined influence of Distribution Strategies on Performance of Sugar Milling Companies .....</b>	<b>53</b>
	CHAPTER FIVE .....	55
	SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS .....	55
5.1	Introduction.....	55
5.2	Summary of Findings.....	55
5.2.1	Performance of Sugar Millers.....	55
5.2.2	Objective one: To assess the influence of direct strategy on performance of sugar	

milling companies.....	55
5.2.3 Objective two: To investigate the influence of indirect strategy on performance of sugar milling companies .....	56
5.2.4 Objective three: To assess the influence of exclusive strategy on performance of Sugar Milling Companies .....	56
5.2.5 Objective four: To investigate the influence of intensive strategy on Performance of Sugar Milling Companies .....	56
<b>5.2.6 Objective five: To investigate the combined influence of distribution strategies on Performance of Sugar Milling Companies .....</b>	<b>57</b>
5.3 Conclusion .....	57
5.3.1 Performance of Sugar Milling Companies .....	57
<b>5.3.2 Objective one: To assess the influence of Direct Strategy on Performance of Sugar Milling Companies.....</b>	<b>57</b>
5.3.3 Objective two: To investigate the influence of Indirect Strategy on Performance of Sugar Milling Companies .....	58
5.3.4 Objective three: To assess the influence of Exclusive Strategy on Performance of Sugar Milling Companies .....	58
5.3.5 Objective four: To investigate the influence of Intensive Strategy on Performance of Sugar Milling Companies .....	58
<b>5.3.6 Objective five: To investigate the combined influence of Distribution Strategies on Performance of Sugar Milling Companies .....</b>	<b>58</b>
5.4 Recommendations.....	59
<b>5.4.1 Objective one: To assess the influence of Direct Strategy on Performance of Sugar Milling Companies.....</b>	<b>59</b>
5.4.2 Objective two: To investigate the influence of Indirect Strategy on Performance of Sugar Milling Companies .....	59
5.4.3 Objective three: To assess the influence of Exclusive Strategy on Performance of Sugar Milling Companies .....	59
5.4.4 Objective four: To investigate the influence of Intensive Strategy on Performance of Sugar Milling Companies .....	59
<b>5.4.5 Objective five: To Investigate the combined influence of Distribution Strategies on Performance of Sugar Milling Companies .....</b>	<b>59</b>
5.5 Suggestions for Further Studies .....	59
5.6 New Knowledge.....	60
REFERENCES .....	61

APPENDICES .....	66
Appendix I: Letter of transmittal .....	66
Appendix II: Questionnaire for Respondents .....	67
Appendix III: Map of Kisumu County.....	69
Appendix IV: Sugar Milling Companies in Kisumu County.....	70
Sugar Factory .....	70
Sub-County .....	70
Kibos Sugar and Allied Industries Ltd.....	70
Kisumu East .....	70
Chemelil Sugar Company .....	70
Muhoroni.....	70
Muhoroni Sugar Company.....	70
Muhoroni.....	70
Appendix V: Research Approval .....	71
Appendix VI. NACOSTI .....	72

## LIST OF TABLES

<b>Table 2.1:</b> Knowledge Gaps.....	22
<b>Table 3.1:</b> Table of Target Population and Sample Size Distribution.....	
<b>Table 3.2:</b> Operationalization of the variables.....	31
<b>Table 4.1:</b> Questionnaire Response Rate.....	32
<b>Table 4.2:</b> Distribution of Respondents by Gender.....	32
<b>Table 4.3:</b> Distribution of Respondents by Age Group.....	33
<b>Table 4.4:</b> Distribution of Respondents by Education Level.....	33
<b>Table 4.5:</b> Performance of Sugar Millers.....	34
<b>Table 4.6:</b> Direct Strategy.....	36
<b>Table 4.7:</b> Relationship between Direct Strategy and Performance of Sugar Millers.....	38
<b>Table 4.8:</b> Influence of Direct Strategy on Performance of Sugar Millers.....	39
<b>Table 4.9:</b> Indirect Strategy.....	40
<b>Table 4.10:</b> Relationship between Indirect Strategy and Performance of Sugar Millers.....	42
<b>Table 4.11:</b> Influence of Indirect Strategy on Performance of Sugar Millers.....	43
<b>Table 4.12:</b> Exclusive Strategy.....	45
<b>Table 4.13:</b> Relationship between Exclusive Strategy and Performance of Sugar Millers...	47
<b>Table 4.14:</b> Influence of Exclusive Strategy on Performance of Sugar Millers.....	48
<b>Table 4.15:</b> Intensive Strategy.....	49
<b>Table 4.16:</b> Relationship between Intensive Strategy and Performance of Sugar Millers....	51
<b>Table 4.17:</b> Influence of Intensive Strategy on Performance of Sugar Millers.....	52

## LIST OF FIGURES

<b>Figure 1:</b> A Conceptual Framework of the relationship between Distribution Strategies and Performance of Sugar Millers.....	21
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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>ANOVA</b>	Analysis of Variance
<b>COMESA</b>	Common Market for East and Southern Africa
<b>KEBS</b>	Kenya Bureau of Standards
<b>KESGA</b>	Kenya Sugar Growers Association
<b>KESMA</b>	Kenya Association of Sugar Manufacturers
<b>KESREF</b>	Kenya Sugar Research Foundations
<b>KPGS</b>	Kenya Parliamentary Group on Sugar
<b>KSB</b>	Kenya Sugar Board
<b>KSPWU</b>	Kenya Sugar Plantation Workers Union
<b>NACOSTI</b>	National Commission for Science, Technology and Innovation
<b>SAT</b>	Sugar Arbitration Tribunal
<b>SMEs</b>	Small and Medium Enterprises
<b>SPSS</b>	Statistical Package for Social Sciences
<b>WTO</b>	World Trade Organization

## **OPERATIONAL DEFINITION OF TERMS**

Under listed terminologies explain various meanings of each strategy for purposes of this research:

**Distribution Strategy:** Techniques that are used by producers and other business people to ensure that their products move from production point to the ultimate consumers profitably and can take the form of direct, indirect, exclusive and intensive strategy.

**Direct Strategy:** A channel where the producer sells her merchandise to the consumer thus dictating the product quality, and the price at which the product is sold.

**Indirect Strategy:** This a channel where retailers and wholesalers act as intermediaries. They get goods from the manufacturer and convey to final customers thus establishing strong intermediary relationship, leverage on existing brand recognition and avail products from local partners.

**Exclusive strategy:** A channel where a producer sells directly to a dedicated retail outlet in a given geographical coverage with focus on relatively few customers, close customer relationship, products specialty of high price, infrequent purchase and planned purchase.

**Intensive strategy:** A channel where merchandise is availed in all feasible retail centres with focus on availability maximization, consumer convenience, increased customer satisfaction, high purchase frequency, impulsive purchase and low pricing.

**Performance of Sugar Millers:** The success in achievement of the company's objectives t on the matrix of quality products, timeliness in product delivery, cost reduction, efficiency in placing order, operational flexibility and customer satisfaction.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

Globally, Sugar industry have diversified products such as portable and rectified spirits, wet and dry yeast, manufacture of block boards and carbon dioxide plants, as cost reduction strategy and synergy building for sustainability (Kiongera, Ngacho and Otuya, 2021). The ideal distribution system involves exploration of exploring consumer wants, convenience, demand, and the costs of alternative distribution channels (Adefulu and Adeniran, 2019). Distribution strategies are techniques that are used by sugar producers to ensure that their products move from production points to consumption point profitably and can take the form of direct, indirect, exclusive, selective or intensive strategy. Each independent channel contributes to the overall organization high sales turnover, enhanced customer satisfaction, reduction of cost and loyalty improvement to the firm's produce (Adefulu and Adeniran, 2019).

Direct distribution channel involves a manufacturing firm sells their produce directly to the customers without the help of intermediaries either face-to-face or online (Odek and Okoth, 2019). Because no intermediaries are involved, the strategy generates higher profits and freedom of the manufacturer to execute her market planning, reduction of order lead time and assurance of minimum sales turnover by ensuring producers get feedbacks on their products for adjustments to gain competitive advantage unlike indirect distribution channels (Gichiri and Kiriri, 2020). In contrast, it is difficult in a direct distribution channel to access a wider geographical coverage. Moreover, additional resources are needed to maintain distribution (Adimo and Osodo, 2017).

Product delivery to the ultimate customer at the right time, quality and quantity are more significant in marketing. Notwithstanding, many firms are unable to determine the most viable distribution strategy. Change of consumer taste has forced many firms to reengineer their distribution channel (Zhu, 2020). A well thought distribution channel plan is inevitably significant to enable the firms produce reach the final consumer. Companies that employ right strategies enhances utility within timeline, correct amount coupled with appropriate supportive service thus guaranteeing a high sales turnover than their competitors.

Indirect distribution involves intermediaries like retailers and wholesalers that get products from a manufacturer and sell to the consumer (Shashi, Tavana, Shabani, and Singh, 2019). The strategy is appropriate for distribution of products to large scale retailers, relieves manufacturer

of distribution constraints, utilizes expert services of middlemen and enjoys a scattered demand (Mutua and Moronge, 2018). However, the producer loses control over distribution; producer-consumer relationship weakens and slows the distribution speed (Shashi, Tavana, Shabani, and Singh, 2019). For competitiveness, firms have to recognize the role of supply chain strategies as this will overall improve their performance and enhance their synergies (Omoto and Chirchir, 2014). To stay competitive, companies are motivated to achieve greater coordination and collaboration in supply chain strategy formulation and implementation.

Exclusive distribution involves selective choice of dealers who are mandated to sell certain merchandize within a given geographical boundary and is usually preferred for high end and luxury products (Rekha and Sowmya, 2019). The strategy ensures high level of partner profitability, dealer's loyalty, better sales trajectory, customer satisfaction and strong brand image control (Kuloba and Nyongesa, 2015). However, the strategy is prone to conflict of business interest due to micromanagement from the producer and lose of sales volume (Otieno and Awino, 2018). Further, the following challenges can be experienced escalated price and margin and low sales turnover are features of exclusive distribution. Product which is unique and hard to obtain, can enhance the image of the brand and hence making it more appealing to the customers (Adefulu and Adeniran, 2019).

Intensive distribution involves the manufacturer distributing their products to every visible outlet. This primarily covers the low end quality products to enhance accessibility, convenience, availability and competitiveness to consumers at all times and secures as many outlets as possible (Ifeanyi, Ezenyilimba and Aghara, 2018; Mbithi, Muturi and Rambo, 2015). The higher the brand distribution intensity, the lower the firms control on performance of retailers and wholesalers. This can disadvantage the visibility of the brand and competitiveness. Moreover, the goods are priced-low and the margin is small hence high turnover.

Inconsistent quantity in the supply chain network of sugar producing companies in Kisumu County has led to reduction in operational efficiency, excess inventory, reduced market share, elongated lead time and diminished profit (Nanyama and Ochieng, 2018). For example, the collapse of Miwani sugar factory and placing of Chemelil and Muhoroni factories on receivership since 2001 due to huge debts burden and perennial poor performance diminish the growth forecasts in Kenya's Vision 2030 with only Kibos Sugar Company posting positive profit, a challenge that prompted the choice of Kisumu County (Birgen and Bogonko, 2018).

Globally, 127 countries produce Sugar, 70% of which is local consumption while the rest is exported (Nanyama and Ochieng, 2018). Sugar as a strategic economic commodity enjoys immense trading protection treaties and preferential treatment by World Trade Organization (Muteshi and Awino, 2017). The 2015/16 financial report indicated a total production of 174 million tons visa a Vis a domestic consumption of 180.7 million tones. The deficit of 6.7 million tones has resulted into high prices on the global market (KSB, 2017). For competitiveness, manufacturers are enhancing production factors and exploring diversification opportunities (Mati and Thomas, 2019). Though extensive mechanization has been done in US sugar sector, it still enjoys domestic sugar protection from heavily subsidized cheap sugar producers like India and Brazil (Trejo-Pech, DeLong, Lambert and Siokos, 2020). Brazil remains the largest world exporter of sugar with an estimated worth of \$2.5 billion per year (Trejo-Pech *et al.*, 2020).

In Kenya, large scale sugarcane growing began in 1902 and 1940 which culminated to founding of Miwani Sugar firm in 1922, Muhoroni, in 1966; Chemelil in 1968; Mumias in 1973; Nzoia in 1978, and South Nyanza Sugar Company Limited in 1979 with current ones like Butalli, West Kenya, Kibos, Soin, Transmara and Sukari Sugar firms located in Western Kenya region (Birgen and Bogonko, 2018; KSB, 2015). The Ministry of Agriculture in its reviewed Strategic Plan 2013 - 2017, identified agriculture as the backbone to activate economic growth at a rate of 10% of the GDP per annum from 2008 to 2030 (Waswa, Mukras and Oima, 2018). Specifically, Sugar-cane contributes 4% towards the marketed agricultural production in Kenya, generates about Kshs 13 billion annually leading to a saving of above US\$ 250 million in foreign exchange annually, and creates over 600,000 employment opportunities directly and 6 million indirectly (Ongombe and Mungai, 2018).

Sugar industry in Kenya has continued to perform dismally despite government's interventions such as COMESA safe guard since 2000, for instance, the production of sugar per annum varies from 450,000 to 550,000 metric tons against the annual national demand of 760,000 tones leaving a deficit of 200,000 tones which is fulfilled through COMESA imports, contravening the National Development Plan for the period 1997-2001 of self-sufficiency (Owiye, Naibei and Momanyi, 2016). In spite of the increase in acreage through the years to 220,000ha since the establishment of Kenya Sugar Authority (KSA) in 1973 to oversee sugarcane development, the milling capacity has remained below designated production capacity. Meanwhile average yield per hectare has reduced from 66.4 tonne per hectare in 2015; to 55.1 tonne per hectare

(Kiongera, Ngacho, Otuya, 2021). Equally, the production cost has been increasing averaging more than US \$550/ton compared to the regional US\$415/ton, Malawi's US\$ 350/ton and Zambia's US\$ 400/ton which indirectly affects performance of sugar industry (Onyango, Wanjere, Egessa, and Masinde, 2020).

The problems range from high input cost, fierce competition, from producers who enjoy low cost labor, lack of political goodwill, and corruption (KSB, 2017). A lot of over-grown cane is going to waste un-harvested creating frequent stand-offs between sugar-cane farmers and management of sugar factories (Kiongera, Ngacho and Otuya, 2021). The condition is exacerbated by trade liberalization treaties which have contributed to import influx from international market and COMESA trading bloc members like Malawi, Zambia and Swaziland who operate free motion on sugar under zero tariff tax regimes (Odek and Okoth, 2019). The prohibitively high cost of producing sugar has rendered Kenyan firms less competitive compared with cheaper sugar imports from COMESA region and other leading sugar producers like India, Brazil, China, Mexico, Pakistan and South Africa (Birgen and Bogonko, 2018).

Kenyan sugar producing firms should embrace and implement diversification of production, adopt competitive distribution strategies and allow a good atmosphere for local and foreign developers. This resonates with the vision 2030 (Odek and Okoth, 2019). The colonial law from early 1900 up to 1963 permitted Asians to cultivate sugarcane but was amended through Legislation in Sessional Paper No. 10 of 1965 which enabled the local people to cultivate sugarcane (Birgen and Bogonko, 2018). Further, the Government has formulated National Policy on sugar manufacturing firm (2001), Agricultural Sector Development plan (2009-2020), Kenya Sugar Industry Firm long term Plan 2004-2009 and Kenya Sugar Board plan 2010-2014 which has made most of the sugar manufacturers to adopt and implement the plans and they have equally embraced performance contract (Birgen and Bogonko, 2018).

As the successor of the defunct Kenya Sugar Authority, KSB was founded in 2002 under Sugar Act 2001 Section 4 (1) and 4 (2) to control, capacity build and enhance the growth of sugar manufacturers; link different stakeholders; to entrench transparency and fairness for benefit of all stakeholders (Owiye, Naibei and Momanyi, 2016). Equally, the Ministry of Agriculture has established other relevant bodies within the sugar sector such as KESREF and SAT besides KEBS, and KSSCT (Mati and Thomas, 2019). The advocacy partners include KESGA, KESMA, SUPAC, SUCAM and KSPWU (Onyango, Wanjere, Egessa, and Masinde, 2020).

The elapse of COMESA safeguards in 2021 may jeopardize the future of sugar factories in Kenya (Kiongera, Ngacho and Otuya, 2021). Change of dynamics in market facets, technology development, and demand for immediate feedback and reduced stock levels. The forgoing has led to more effective and efficient sugar supply chain (Nanyama and Ochieng, 2018).

This research seeks to determine the impact of distribution strategy on Sugar Milling Companies Kisumu, Kenya.

## 1.2 Statement of the problem

In spite of Kenya government effort to fulfill Vision 2030 economic pillar of sustainable local sugar production, the factories have been performing poorly leading to high rate of company receivership. Kisumu County is most appropriate for the study because it is the most affected of all counties in Kenya. For instance Miwani sugar company LTD within Kisumu collapsed, while Chemelil Sugar Company LTD and Muhoroni Sugar Company LTD were put under receivership due to heavy indebtedness.

The choice of appropriate channel of distribution is pivotal in marketing and supply chain (Kegoro, Akoyo and Otieno, 2020). Most of the sugar companies in Kisumu County have exploited various distribution strategies, however, there is little improvement in their profit margin. Inconsistent quantity in the supply chain network of sugar products in Kisumu County has led to reduction in operational efficiency, increased storage consumables, inability to meet customer demands, limited market space, prolonged delivery time and reduced profit margin (Nanyama and Ochieng, 2018). The choice of distribution channel, its execution and monitoring can help to satisfy customer needs (Waswa, Mukras and Oima, 2018). It is based on this gap that the current study sought to investigate the influence of distribution strategies on performance of sugar milling companies.

The creation of a unique value focus that is not found with competitors will enhance competitive edge by availing the products conveniently to the customers. However, KISAL is insufficient in terms of regional nodes of distribution (Odek and Okoth, 2019). This therefore impedes their distribution network and poor response to customers query. In addition, poor focus on new markets and the need to resuscitate dormant market has not been achieved (Odek and Okoth, 2019; Birgen and Bogonko, 2018). This study therefore sought to establish influence of distribution strategies on performance of Sugar Milling Companies, Kisumu, Kenya.

Previous studies have pointed on how direct strategy influence Sugar Millers, none was domesticated to sugar millers in Kenya, a gap to be fulfilled by the current study. On the the same breath in-depth studies have been conducted connecting Indirect Strategy and performance of projects, none touched on Sugar Milling Companies in Kisumu County, Kenya. Previous studies have also linked Exclusive Strategy and performance of projects but none touched on Sugar Milling Companies in Kisumu County, Kenya. The outcome showed intensive distribution strategies have positive significance on turn over outcome. The strategy makes commodities reachable and available to the clients. There is the general lack of local precedence study on Intensive strategy, a gap which will be filled by the current study. It is based on this gap that the current study sought to investigate the influence of distribution strategies on performance of sugar milling companies.

### **1.3 Purpose of the study**

The research sought to determine the Influence of Distribution Strategies on Performance of Sugar Milling Companies in Kisumu, Kenya.

### **1.4 Objectives of the study**

The study was guided by the following objectives:

1. To assess the extent to which Direct Strategy Influence Performance of Sugar Milling Companies in Kisumu County, Kenya
2. To examine how Indirect Strategy Influence Performance of Sugar Milling Companies in Kisumu County, Kenya
3. To assess the extent to which Exclusive Strategy Influence Performance of Sugar Milling Companies in Kisumu County, Kenya
4. To examine the extent to which Intensive Strategy influence Performance of Sugar Milling Companies in Kisumu County, Kenya
5. To investigate the combined influence of distribution strategies on the performance of Sugar Milling Companies in Kisumu County, Kenya

### **1.5 Research Hypotheses**

In this study the following Null hypotheses were tested:

H<sub>0</sub>1: Direct Strategy does not significantly Influence Performance of Sugar Milling Companies in Kisumu County, Kenya

H<sub>0</sub>2: Indirect Strategy does not significantly Influence Performance of Sugar Milling Companies

in Kisumu County, Kenya

H<sub>03</sub>: Exclusive Strategy does not significantly Influence Performance of Sugar Milling Companies in Kisumu County, Kenya

H<sub>04</sub>: Intensive Strategy does not significantly Influence Performance of Sugar Milling Companies in Kisumu County, Kenya

H<sub>05</sub>: Combined Distribution Strategies do not significantly Influence Performance of Sugar Milling Companies in Kisumu County, Kenya.

### **1.7 Justification of the Study**

This study was prompted by the dismal performance, high level of indebtedness and receivership of the sugar milling companies in Kisumu County. This led to overall deterioration of profit margin. This happened in spite of enforcement of COMESA safeguards which protects the local sugar milling companies from imports of cheap sugar. The researcher took keen interest and observed the business patterns of the sugar milling companies in Kenya. There was notable parity in the distribution of various brands based on random observations made on supermarkets and outlets across the nation. Specifically Sugar milling companies in the Kisumu County had glaring cases that included dismal performance, indebtedness and even receivership, cases that are only characteristics of struggling companies. It is based on this observation that this study sought to investigate the influence of distribution strategies on the performance of Sugar Milling Companies in Kisumu County, Kenya, noting the relevance of distribution strategies to performance of an organizations and especially the producing companies

### **1.8 Significance of the Study**

This study provides rich scholarly reference to the academia adding to the body of knowledge in the field of logistics and Supply Chain Management, field of Business Management and marketing.

This work is also intended to inform policy makers and practitioners on the best policy amendments to be enacted and implemented for improvement of our industries. This is based on the well-researched and established information contained in the report. The study will also inform the most applicable strategy to be deployed in the sugar milling companies

The study target is to provide a reservoir of knowledge on identification and propagation of relevant distribution strategy to enhance Sugar Milling Companies performance by ensuring that the correct distribution strategy is availed and to propose right method for boosting execution on Distribution Strategies of direct, indirect, exclusive and intensive strategy, this will guarantee

acceptable product and reduction of conveyance cost on Sugar Milling Companies. This will avail pertinent material of Distribution Strategies which is favorable to the Sugar Milling Companies, those undertaking study, custodians of development policies and other stakeholders. When distribution strategies are mismanaged, Sugar Milling Companies do not achieve their ultimate intention of providing the commodity on time, within cost and quality to the satisfaction of customers. The research will support in creation of right guidelines to help on distribution for success of sugar milling companies. For the Sugar Milling Companies to understand their focus customers, different characteristics of product distribution management need to be studied. Sugar manufacturing companies are embracing efficient supply chain to maximize profit, enhance sales and market share and structure strong client connection. Firms who do not meet the above stated parameters lose opportunities on order placement, loss of income and declining strong customer relationship.

### **1.8 Basic Assumptions of the Study**

The study assumed that all respondents would be responsive 100%, however, the study achieved 72% return rate.

Assumption of the research is anchored on the premise that responder in Kibos Sugar and Allied Company, Muhoroni and Chemelil sugar companies delivered responses of integrity as pertains to distribution strategy on Performance of Sugar Milling Companies; Kisumu,, Kenya. Research assumed the outcome can be utilized generally on Sugar Milling Companies.

### **1.9 Limitations of the study**

Intuitive characteristics like feelings, opinions and inability of some responders to answer particular items in the questionnaire, could not be controlled by the investigator. This narrows the outcome thus the investigator triangulates the quantitative data from questionnaire with the previous findings to reduce gaps that might be in the instrument. Descriptive survey design was introduced mitigate the gaps by applying data collection tools like questionnaires that allowed respondents to respond at their own pace and during their best times. The design also enabled the study collect information from the respondents based on their independent observations without external influence.

### **1.10 Delimitation of the study**

The research covered all the procurement and logistic staff members of Kibos Sugar and Allied Company, Muhoroni and Chemelil sugar companies involved in Sugar Millers in Kisumu County, Kenya. The selection of Kibos Sugar and Allied Company, Muhoroni and Chemelil sugar companies (both private and public owned sugar milling companies) guarantees

inclusivity in diversity, geographical area and adequate coverage. This corroborates arguments by Kombo and Tromp (2006). Data was collected in March, 2022. The study respondents was restricted to Sugar Milling Companies; Kisumu, County, Kenya staffs only because they have access to appropriate information and they have relevant information on Distribution Strategies on Performance of Sugar Milling Companies in Kisumu County, Kenya. Descriptive design was used and quantitative data was corrected through use of a questionnaire. Finally, the study variables were restricted to Direct Strategy, Indirect Strategy, Exclusive Strategy and Intensive Strategy and their effect on Performance of Sugar Milling Companies, Kisumu County, Kenya.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents in-depth analytical approach of empirical and theoretical literature based on data under research including Performance of Sugar Milling Companies; Direct strategy and Performance of Sugar Milling Companies; Indirect strategy and Performance of Sugar Millers; Exclusive strategy and Performance of Sugar Milling Companies; and Intensive strategy and Performance of Sugar Milling Companies. The chapter has in-depth material on theoretical and conceptual structure, summary of reviewed literature and knowledge gaps study.

#### **2.2 Theoretical Review**

The research is grounded upon Economic Distribution Channel and Goal-Setting theory.

##### **2.2.1 Economic Distribution Channel Theory**

This Theory founded by Korpi (1974) has been used to explain distribution strategies as a variable. The theory postulates that the ideal distribution system must resonate consumer need with service provided by the distribution channels, the willingness of the customer to pay for different category of service, and the cost of other competing channels of distribution. (Stern et al., 2006). Based on the foregoing, it is posed that the distribution system which satisfy the need of the consumer in an optimum manner can be established. Clients view should be considered in the adoption of a distribution channel strategy, the commercial part should also be considered in diversified distribution channels. The customer is considered key because all his needs have to be incorporated. Thus an economic distribution channel puts premium on clients observation, they conduct analysis of the outcome commercially from different distribution nodes and resonates the analysis with benefits and cost of the customer from diversified service output levels. This study will therefore apply this theory to help explain the independent variable (distribution strategies) and how it relates with the dependent variable (performance of sugar Milling Companies) of the study.

##### **2.2.2 Goal-Setting Theory**

The study on clarification of espoused goal setting theory of motivation was founded by Locke in 1968 (Locke and Latham, 2006). Theory suggests that for effective performance of a firm, it requires a clearly set objectives and parameters of output, which ought to have clarity and are measurable. The involved stakeholders must show commitment to achieve the goals that have been set, clearly spell a monitoring system and feedback mechanism about the progress of the set objectives and goals. The stakeholders must comprehend the goals and be ready to

enlist the goals in order of their priority. There are goals which are easy to comprehend and there are goals which are complex, either way, there has to be deliberate innovative strategies and upheld role output. (Locke and Latham, 2002). For effective goal implementation, communication and knowledge management strategies must be enhanced. Effective communication will enable the implementers to give priority to different work units to enable them to be successful on the firm goals. This study applied goal setting theory to explain performance of Sugar Milling Companies. Research therefore describes performance in context of reduction of cost in production, real-time service discharge, continuous improvement and efficiency monitoring, flexibility in operation and characteristics and quality of goods. A firm who obtains all these is visualized as an effective performer.

## **2.3 Conceptual Review**

This section discusses the concept of performance and the concept of distribution strategies

### **2.3.1 Concept of Performance**

The following refers to characteristics of performing Organizations:-

They have ability to make high profit, delivery of quality products, they enjoy large market share and they post good results financially, and they survive during moment of challenges. (Trejo-Pech, DeLong, Lambert and Siokos, 2020). Organization performance can be rated against the percentage of share of the market, profit margin, inventory turnover rate, product quality, supply efficiency, Sensitivity to client needs and measures of overhead costs measures (Nanyama and Ochieng, 2018). Firm work towards reduction of cost of goods, reducing order-time circle, the length of time taken before delivery, growth in market share and continuous improvement of product quality, and customer satisfaction. (Ongombe and Mungai, 2018).

Study by Owiye, Naibei and Momanyi (2016) assessed the effect of trade liberalization on performance of sugar firms within Kenya using descriptive design and collection of data through a structured questions from 20 responders, the analysis involved descriptive statistics. Research outcome showed that Kenyan sugar firms experienced performance challenges due to high production costs, low production efficiency, less market share, delayed production schedules and high wastage rates.

Similarly, Kiongera, Ngacho and Otuya (2021) assessed the distribution performance structure for sugar factories in Kenya using descriptive design with data collection covering 396 participants from a target population of 1518 with use of questionnaires then subjected to descriptive and inferential statistics. The outcome indicated commodity diversified bored

important influence upon distribution performance in regard to quality production, production capacity enhancement, quality of products, improved production efficiency, increased customer base, and optimal inventory levels management.

Further, Kegoro, Akoyo and Otieno (2020) aimed to determine dynamics involved in management of change and output of sugar industries within Kenya using descriptive design and data collection covering 39 participants from a population of 43 with use of questionnaires then exposed to descriptive and inferential statistics. Outcome showed that there is existence of significant relationship between management of change and output of sugar producing factories within Kenya with reference to profitability, sales volume, internal and external client's satisfaction, efficient and effective service.

Finally, Nanyama and Ochieng (2018) investigated influence of Supplier development practices in regard to performance of Sugar firms in Kisumu, Kenya through descriptive design with data collection covering 82 participants from a population of 102 with use of questionnaires then subjected to descriptive and inferential statistics. The outcome indicated that there is profound positivity and significant connection between supplier building practices and performance of operation in regard to improvement of products quality, lead time in delivery of service, production cost reduction, enhanced status of efficiency and flexible operation.

There is concurrence in measuring past research work with clear link points on performance of sugar Milling Companies with regard to product quality improvement, lead time in service availability, reduced cost of production, efficiency improvement and operational tradeoffs (Kiongera, Ngacho and Otuya, 2021; Kegoro, Akoyo and Otieno, 2020; Nanyama and Ochieng, 2018; Owiye, Naibei and Momanyi, 2016), no study targeted Performance of Sugar Milling Companies and Distribution Strategies, a gap to be filled by the current study.

### **2.3.2 Concept of Distribution Strategy**

Distribution strategies are techniques that are used by sugar producers to ensure that their products move from production points to consumption point profitably and can take the form of direct, indirect, exclusive, selective or intensive strategy. Each independent distribution channel builds to the overall organization turnover, strong customer satisfaction, cost reduction and loyalty improvement on the firm's merchandise (Adefulu and Adeniran, 2019). As postulated in economic distribution channel theory, the unique avenues of distribution is

influenced by consumer wants, convenience, demand, and the costs of substitute marketing avenues (Adefulu and Adeniran, 2019). Inconsistent quantity in the supply chain network of sugar industries in Kisumu has resulted in reduction on performance, high stock, inability to meet the needs of clients, limited share of the market, delayed in deliveries and reduction of profits (Nanyama and Ochieng, 2018).

## **2.4. Empirical Review**

### **2.4.1 Direct Strategy and Performance of Sugar Milling Companies**

Direct distribution involves conveyance or sale of merchandise to the customers without the help of intermediaries (Odek and Okoth, 2019). Direct distribution can be characterized by face to face or online (Karanja, Muathe and Kuria, 2015). Because no intermediaries are involved, they tend to have more profit, enable manufacturers to have more grip on marketing functions, improvement of ordering cycle which leads to low level of sales and attention to product, and ensuring producers get feedbacks on their products for adjustments to gain competitive advantage unlike indirect distribution channels (Gichiri and Kiriri, 2020). In contrast, it is difficult in a direct distribution channel to cover a wider geographical area, moreover, it requires more investment to keep functional distribution system besides inability in geographical region to compete (Adimo and Osodo, 2017).

The kingpin in marketing function will encompass the following activities: delivering within timeline, correct quality and correct number. In spite of the foregoing, a number of firms have not been able to identify the most effective and optimum distribution strategy. With the change in customer taste, behavior, numerous firms have started to reengineer their supply chain structure (Zhu, 2020). A well thought distribution process is inevitably necessary to enable conveyance of a firms merchandise to the ultimate consumer. Companies must ensure that they embrace the five Rights of a distribution function which include right commodities, place, time and quantity which enables them to outcompete their competitors.

The study by Gichiri and Kiriri (2020) sought to investigate supply chain and marketing mix strategy among retail business in Nairobi, Kenya using descriptive design with questionnaires for collection of response from a sample size of 150 participants determined from a census of 239 retailer employees then subjected to descriptive and inferential statistics. Outcome indicated that direct supply chain avenues hastened product delivery to consumers while control on merchandise sales and marketing.

Equally, Obiero and Ondoro (2017) investigated direct distribution within SMEs in Kericho, Kenya using descriptive design with questionnaires used in data collection on 48 participants then subjected to descriptive statistics. The study revealed that direct distribution provides excellent service to the customer, optimize cost of distribution, and minimize final finished products within distribution chain and preparation of sales order. Process on direct channel network is inclusive of integration and coordination of myriad facets. This include the following; preparation of order, control of stock, storage, handling of commodity and conveyance to consumers.

Further, Mwanza and Ingari (2015) assessed the distribution role as a back born to enhance competition in goods that have high turnover in Kenya through descriptive design and information gathered through use questionnaires then subjecting to descriptive and inferential statistics. Outcome indicate that direct strategy ensures delivery of the merchandise to the targeted customers and giving profits directly to producers which has resulted into the company gaining competitive advantage. Though previous studies have pointed on how direct strategy influence Sugar Millers, none was domesticated to sugar millers in Kenya, a gap to be fulfilled by the current study.

#### **2.4.2 Indirect Strategy and Performance of Sugar Milling Companies**

This channel involves retailers and wholesalers who get merchandise from manufacturer and convey to customers. (Shashi, Tavana, Shabani, and Singh, 2019). This approach enables merchandise to be conveyed to bigger retailers, manufacturer of distribution constraints, utilizes expert services of middlemen and enjoys a scattered demand (Mutua and Moronge, 2018). However, the producer loses control over distribution; producer-consumer relationship weakens and slows the distribution speed (Shashi, Tavana, Shabani, and Singh, 2019). When organized distribution strategies enhances performance in an organization and gives synergy amongst partners who are involved. (Omoto and Chirchir, 2014). To stay competitive, companies are motivated to achieve greater coordination and collaboration in distribution strategy build up and execution.

The study by Kitainge and Jemaiyo (2020) conducted in Kenya assessed the influence of supply chain structure and performance of cement producing factories through descriptive design with data collection covering 216 participants from a population of 469 with use of questionnaires then subjected to descriptive and inferential statistics. Distributors, and leveraging existing

brand recognition. The outcome indicated profound positivity connection with indirect avenue of distribution and output of cement producing factories.

In Bulgaria, Serdaris, Antoniadis and Tomlekova (2014) assessed the distribution channels in supply chain management and found that globalization has created more attention towards supply chain management. Firms therefore put more premium to channel management in Multiplicity of levels. Which ensure enhanced flow of merchandise and information through upstream and downstream value chain. The ability of forecasting future demand helps in improvement of client service and reduction of expenses while building information technology and systems assists in planning and implementing supply chains. Good service to the clients helps to build healthy and stable business relationship and loyalty besides increased demand and competitive advantage. Successful distribution channel leverage the connection in upstream vendors and downstream clients hence greater client needs are met and boosted performance of the firm.

In Malaysia, Sundram, Chandran and Bhatti (2016) examined the interrelationship of the integration of supply chain and performance of supply of electronics sector using descriptive design with questionnaires for collecting information within sample of 600 responses then subjected to descriptive and inferential analysis. Outcome indicated that integration of supply chain plays a paramount role on influence of performance of supply chain. Supplier partnership plays a key role in embedding a long term engagement among players within the chain. This opportunities for combining synergies to enable them mitigate challenges within the supply chain. The success of this approach inevitably calls for sharing of information and building of trust. Although in-depth studies have been conducted connecting Indirect Strategy and performance of projects, none touched on Sugar Milling Companies in Kisumu County, Kenya. The current study intends to address the gap.

#### **2.4.3 Exclusive Strategy and Performance of Sugar Milling Companies**

Exclusive distribution involves a manufacturer selling their merchandise or services to particular dealers in an outlet operating in geographical boundary and usually preferred for high end and luxury products (Rekha and Sowmya, 2019). The strategy generates the following benefits; creation of high channel levels, profitability for all stakeholders, loyalty of partners, sales extrapolation, regulated stock levels, excellent service to the client and strong brand image control (Kuloba and Nyongesa, 2015). However, exclusiveness warranted to the producer can be a source of potential conflict with the distributors due to micro-

management from the producer and lose on sales volume besides demand for adequately equipped sales personnel to prevail upon members within to market the brand. (Otieno and Awino, 2018). Further, exclusive strategy are characterized with; higher prices and diminished sales volume. Brand image can be enhanced by creating a perception about specialty, unique characteristics of a product, thus it is made more preferable and desirable to the clients. (Adefulu and Adeniran, 2019).

A study by Kuloba and Nyongesa (2015) investigated influence of in-house distribution in manufacturing sectors through descriptive design with data collection covering 36 participants from a population of 119 employees with use of questionnaires then subjected to descriptive and inferential statistics. The study established that exclusive distribution strategy minimized production cost, maximizes profit, improved firm reputation, communication control, and ensure quality and timely distribution. The selection of a suitable supply channel is vital because it has impact on time and distribution cost which impact on sales turnover and affects price and promotion activities. Prudent business decisions will dictate profit of an enterprise and sustainability of profit over a long period of time.

In Lagos State, Nigeria, Adefulu and Adeniran (2019) investigated the way distribution channel strategy impacted on marketing performance on targeted consumer manufactured commodities using descriptive design with questionnaires used in data collection on 592 participants then subjected to descriptive statistics. The outcome indicated that exclusive distribution method had remarkable impact on marketing output of consumer commodities enterprises. Exclusive strategy ensures that a product has a market niche with high pricing for adequate control over brand image. In order to build loyal and beneficial clients base, Channel method is used to enhance greater effect and efficient marketing functions with focus on product distribution.

Locally, Otieno and Awino (2018) assessed how selective distribution approach influence, competitiveness of consumer commodities manufactures in Kisumu, Kenya using descriptive design with questionnaires used in data collection on 40 respondents then subjected to descriptive statistics. The study revealed that direct distribution provides excellent service to the customer, optimize cost of distribution, and minimize final finished products within distribution chain and preparation of sales order. The outcome indicated that exclusive distribution strategy influences competitiveness of companies. Adoption of exclusive distribution strategy is beneficial in meeting customers' needs, cost reduction, and faster

response to market changes. Globalization and technology innovation require firms to re-engineer supply chain approaches to achieve stable positioning, differentiation of focused market to enjoy competitiveness. Generally, the studies were comprehensive in linking Exclusive Strategy and performance of projects but none touched on Sugar Milling Companies in Kisumu County, Kenya.

#### **2.4.4 Intensive Strategy and Performance of Sugar Milling Companies**

The strategy ensures that manufacturer's merchandise are available to the clients in several places as feasible. The firm uses as many outlets as practicable to ensure flow of merchandise through the chain with minimal obstruction. The brands deemed to be of low quality are made available to the customers at the lower end of distribution chain thus making them easily available to the customers and secures as many outlets as possible which limits outside buyers to gain to gain entry a producers' list of clients. (Ifeanyi, Ezenyilimba and Aghara, 2018; Mbithi, Muturi and Rambo, 2015). The higher the brand distribution intensity, the diminishing the control of manufacturer's performance of the members of supply chain which jeopardize the image and product competitiveness. Moreover, the lower price of products lead to lower mark up, hence increased sales.

In south-eastern Nigeria, Ifeanyi, Ezenyilimba and Aghara (2018) investigated on how intensive distribution by small medium enterprises affects their sales volume through descriptive design with data collection covering 196 participants from a population of 397 using questionnaire then subjected to descriptive and inferential statistics. Intensive distribution significantly influence sales volume through increased availability and visibility of their bakery products. The tactic of intensively distributing helps to secure optimum conveyance of merchandise at retail and wholesale points. The final clients may not commit to procure a product, but will embrace substitute due to unavailability of the product. Best approach is to stock all promising retailing outlets with products.

In Ghana, Yeboah, Owusu, Boakye and Mensah (2013) assessed the effectiveness of distribution approach on performance of consumer commodities in meeting customer delivery expectations using descriptive design with questionnaires and interview guide for collecting information from a population of 105 responses, then subjected to data analysis and inferential statistics. Outcome indicate a strong connection between intensive strategic approach and client needs fulfilment, profitability, ready movement of merchandise, high turnover, and finally utilization of capacity.

Finally, Affran and Asare (2019) in their study on the emergence of New Marketing Distribution Strategies adopted descriptive design with data collection covering 415 participants using questionnaire then subjected to descriptive and inferential statistics. The outcome showed intensive distribution strategies have positive significance on turn over outcome. The strategy makes commodities reachable and available to the clients. There is the general lack of local precedence study on Intensive strategy, a gap which will be filled by the current study.

## **2.5 Summary of literature reviewed**

Empirical and theoretical literature has been reviewed premised on distribution strategies being independent variable unwrapped into four sub-variables: Direct, Indirect, Exclusive and Intensive strategies and their individual influence evaluated against performance of sugar millers. Intensified competitive market, international business influence, demand responsiveness and minimum stock thus necessitating effectiveness and efficiency in sugar supply chain network. (Kegoro, Akoyo and Otieno, 2020). Each independent supply avenue adds value to the overall organization turnover, enhanced customer needs fulfilment, reduction in overhead cost and brand loyalty for firm's goods. Inconsistent quantity in supply chain network of sugar manufacturing firms can lead to reduction in operational performance, high inventory, reduced fulfillment of client needs; long lead times and decreased.

Majority of supply chain channels are characterized with higher profitability, creates an enabling environment for more grip and oversight of activities in marketing, minimizes ordering cycle assurance for minimum sales turnover, attention to product, and ensuring producers get feedbacks on their products for adjustments to gain competitive advantage (Kitainge and Jemaiyo, 2020). In contrast, it is difficult in a direct distribution channel in getting larger geographical distribution area.

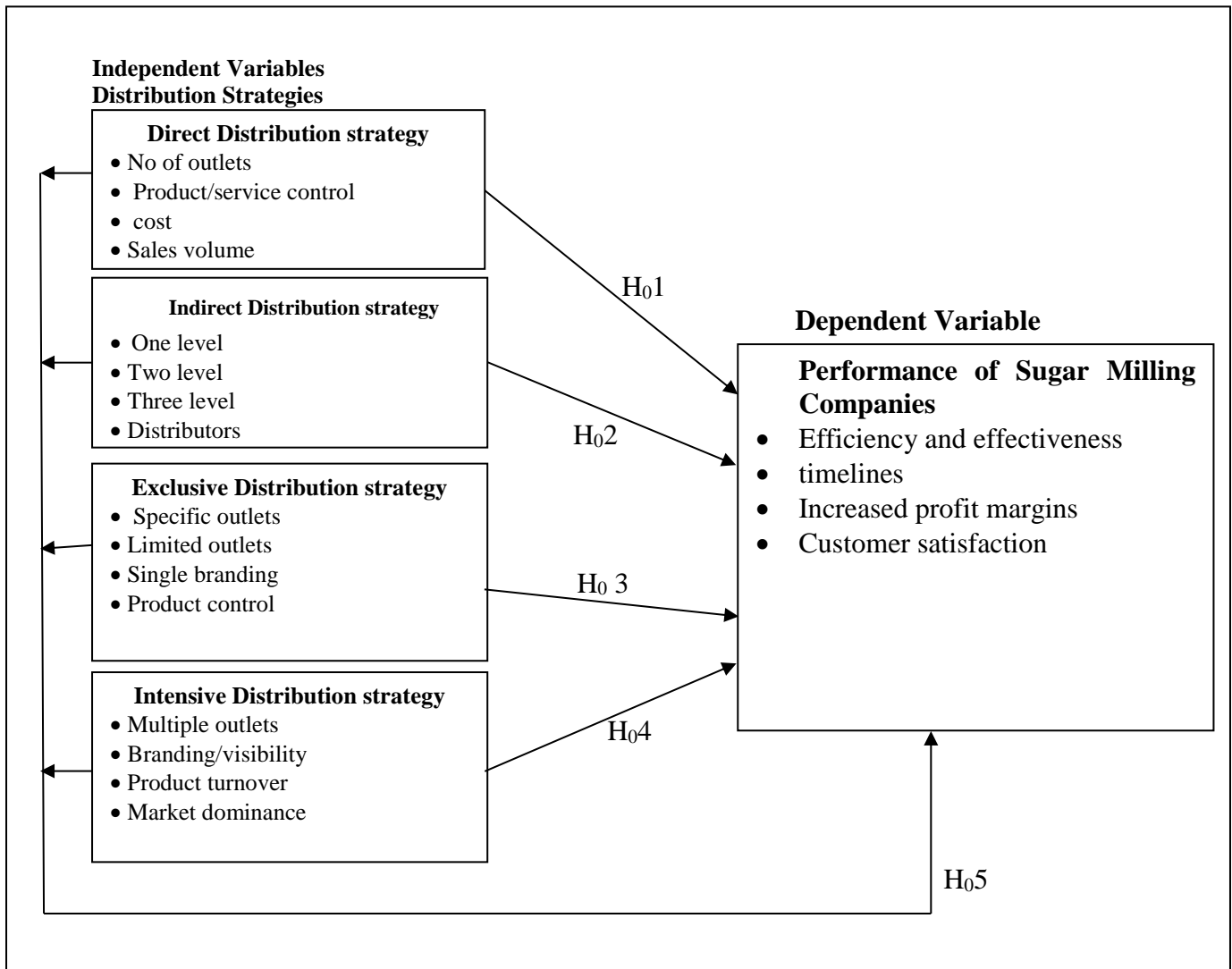
Indirect distribution is a favorable approach which enables commodities to be shared with big retail outlets (Otieno and Awino, 2018). However, the producer loses control over distribution; producer-consumer relationship weakens and slows the distribution speed. Higher profits is experienced when exclusive distribution is used, guarantees loyalty in sellers, good turnover trajectory, stock control, enhanced client service delivery and strong brand image control. However, this may give the producer more power of control thus antagonism between the producer and distributor. This leads to loss on sales volume.

This approach guarantees availability of commodities at the convenience of the clients, and secures as many outlets as possible which limits outside channel players from getting information to a manufacturer's client base. (Ifeanyi, Ezenyilimba and Aghara, 2018). This approach leads to high sales due to reduction of the prices of the commodity at the line end. With the change in taste of clients, many enterprises have started to reengineer their supply chain channels. A well-developed supply chain structure is significant in enabling the manufacturers' product to reach the ultimate client.

The study is premised on the following theories: Economic Distribution Channel and Goal-Setting. Although most of the research have indicated a connection between independent variables under study to performance of enterprises, neither has researched on how the variables impact performance on Sugar Milling Companies. This study adopts descriptive design to collect quantitative data and assess variables under the study. The study provides new opportunity in knowledge hence contribution to the distribution strategies in Sugar Milling Companies.

## 2.6 Conceptual Framework

Concept of framework presents relationship between independent and dependent variables; hence, framework integrates all conceptualized study variables.



**Fig. 1:** A conceptual Framework of Distribution Strategies and Performance of Sugar Milling Companies

The framework displays Independent variables like direct strategy, indirect strategy, Exclusive strategy and Intensive and interact with the dependent variable, Performance on Sugar Milling Companies and represented by hypotheses H<sub>01</sub>, H<sub>02</sub>, H<sub>03</sub>, H<sub>04</sub> and H<sub>05</sub>. The structure is reflective of the degree to which segregated to which individual independent or dependent variables are realized depended on the extent to which their corresponding indicators are obtained.

## 2.13 Knowledge Gaps

The following knowledge gaps guided the study

**Table 2.1 Literature Gaps**

Variable	Author	Title of the study	Findings	Knowledge Gaps
Direct strategy	Gichiri and Kiriri (2020)	Distribution channels and performance of retail business in shopping malls in Nairobi, Kenya	The study investigated distribution channels on marketing mix strategy through descriptive design with data collection from 150 participants from 239 employees using questionnaires then subjected to descriptive and inferential statistics. The outcome indicated that direct distribution ensures faster products delivery to consumers, control over goods marketing, enhanced business relationship and access of commodities in fixed locations.	The study did not categorically research on direct strategy and performance of sugar Milling Companies.
	Obiero and Ondoro (2017)	Direct distribution in SMEs in Kericho County, Kenya	The study investigated direct distribution among SMEs using descriptive design with data collection from a census of 48 participants using questionnaire and analysis involved descriptive statistics. The study revealed that direct distribution provides enhanced service to the customer, optimize cost of total distribution, minimized inventory in distribution channel and cycle of ordering process and competitive transport cost.	The research looked into SMEs in general but not sugar millers which the current study intends to address
	Mwanza and Ingari (2015)	Distribution strategy and competitiveness of fast moving consumer goods in Kenya	The study assessed the distribution strategy competitiveness in fast-moving consumer goods using descriptive design and questionnaires for collecting data then analyzed descriptively and inferentially. Results indicate that direct strategy ensures product availability to the intended customers and giving profits directly to producers which has resulted into the company gaining competitive advantage.	The study focused on fast-moving consumer goods while the current study will focus on sugar Milling Companies performance
Indirect strategy	Kitainge and Jemaiyo (2020)	Indirect distribution and effectiveness of cement factories in Kenya	The study investigated distribution channel and performance of cement firms using descriptive design with questionnaires for data collection from 216 respondents out of 469 then subjected to inferential and descriptive analysis. Results showed that indirect distribution significantly influence performance of cement factories in terms of stronger relationship in distribution chain for leveraged branding.	The study did not research on how the indirect strategy can be used to enhance sugar Milling Companies performance
	Serdaris, Antoniadi s and Tomlekova (2014)	Distribution channels in supply chain management in Bulgaria	The study assessed the distribution channels in supply chain management in Bulgaria and found that trade globalization prioritizes distribution chain for their success. Hierarchical distribution chain increases flow of goods and information in the value chain, facilitates stronger customer relationship, loyalty and increased competitiveness.	The study did not focus on indirect strategy and performance of sugar Milling Companies
	Sundram, Chandran and Bhatti (2016)	Supply chain performance in electronic industry in Malaysian	The study examined the relationship between supply distribution performances using descriptive design with data collection from 600 respondents through questionnaires then subjected to descriptive and inferential statistics. Results indicate that supply chain has significant influence on industry performance in terms of building stronger customer relationship, shared information, trust building and business virtue commitment.	The study did not focus on performance of sugar Milling Companies which the current study intends to address

Exclusive strategy	Kuloba and Nyongesa (2015)	Exclusive distribution in Kisii Bottlers Limited, Kenya	The study assessed exclusive distribution in soft drink company through descriptive design with questionnaires for data collection from 36 participants from 119 employees then subjected to descriptive statistic. The study established that exclusive distribution strategy minimized production cost, maximizes profit, improved firm reputation, communication control, and ensure quality and timely distribution.	The study never addressed how exclusive strategy influence performance of sugar Milling Companies
	Adefulu and Adeniran (2019)	Exclusive strategy and performance of firms in Lagos State, Nigeria	The study investigated exclusive strategy and performance of firms in Nigeria through descriptive design and data collected from 592 respondents through questionnaire then subjected to descriptive and inferential analysis. Results indicated that exclusive distribution strategy significantly influence firm performance. Exclusive strategy ensures that a product has a market niche with high pricing for adequate control over brand image.	The study never addressed how exclusive strategy influence performance of sugar Milling Companies which the current study intends to do
	Otieno and Awino (2018)	Exclusive distribution and firm performance in Kisumu county, Kenya	The study assessed how exclusive distribution influence performance of firms through descriptive design with questionnaires for data collection from 40 participants then subjected analysis to descriptive statistic. Results showed that exclusive distribution strategy influences competitiveness of companies. Adoption of exclusive distribution strategy is beneficial in meeting customers' needs and increased trust, service cost reduction, faster response to market changes.	Exclusive strategy has been used even among fast-moving consumer goods companies. This study will seek to establish its influence on performance of sugar Milling Companies.
Intensive strategy	Ifeanyi, Ezenyilimba and Aghara (2018)	Intensive distribution by SMEs in Nigeria	The study assessed intensive distribution in SMEs using descriptive design and questionnaires for data collection from a sample of 196 participants out of 397 then subjected to descriptive and inferential statistics. Results indicated that Intensive distribution significantly influence sales volume through increased availability and visibility of their bakery products.	The study never addressed how intensive strategy influence performance of sugar Milling Companies which the current study intends to do
	Yeboah, Owusu, Boakye and Mensah (2013)	Effectiveness of distribution strategy on firm performance in Ghana	The study investigated distribution strategy and performance of firms using descriptive design and questionnaires for data collection from sample of 105 participants then subjected to descriptive and inferential statistics. Findings indicated that intensive strategy significantly correlation to customer satisfaction, profitability, easy flow of products, quantities and capacity utilization.	The study never addressed how intensive strategy influence performance of sugar Milling Companies which the current study intends to do
	Affran and Asare (2019)	Emergence of New Marketing Distribution Strategies	The study assessed the emergence of New Marketing Distribution Strategies using descriptive design with questionnaires for data collection using questionnaire from 415 participants then subjected to descriptive and inferential statistics. Results indicated that intensive distribution significantly influence performance of sales. Intensive distribution strategy increases accessibility of products, availability and convenience to customers.	The study provides impetus on how intensive strategy influence performance of sugar Milling Companies which will be adopted by the current study

Performance of Sugar Milling Companies	Owiye, Naibei and Momanyi (2016)	Effect of trade globalization on performance of sugar industries in Kenya	The study assessed trade liberalization and firm performance using descriptive design and questionnaires for data collection from 20 participants then subjected to descriptive statistic. Results indicated that Kenyan sugar firms experienced performance challenges due to high production costs, low production efficiency, less market share, delayed production schedules and high wastage rates.	The study was precise in measuring performance and this will provide indicator for adoption in current study
	Kiongera, Ngacho and Otuya (2021)	Distribution strategy and performance of sugar industries in Kenya	The study assessed the distribution channel and performance sugar firms using descriptive design and questionnaires for data collection from 396 participants out of 1518 then subjected to descriptive and inferential statistics. Results indicated that product diversification and distribution chain performance are significantly related in terms of product quality, quality products, improved production efficiency, increased customer base, and optimal inventory levels management.	The research was done in Kenya and will provide an impetus to this study
	Kegoro, Akoyo and Otieno (2020)	Chain supply and performance sugar industries in Kenya	The study investigated chain and performance of sugar industries using descriptive design and questionnaire data collection from 39 participants out of 43 then subjected to descriptive and inferential statistics. Results indicated that change supply and performance of sugar industries are significantly related in terms of profitability, sales turnover, customer satisfaction and service efficiency.	The research was done in Kenya and will provide an impetus to this study
	Nanyama and Ochieng (2018)	Distribution strategy and performance of Sugar industries in Kisumu county, Kenya	The study investigated distribution strategy and performance of Sugar industries using descriptive design and questionnaire for data collection from 82 participants out of 102 then subjected to inferential statistics. Results indicate that distribution strategy and performance are significantly related in terms of product quality, efficient service delivery and production cost reduction.	The research was comprehensive enough and will provide impetus for replication

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The following design are covered in this chapter: research, target of population, techniques together with procedures used to analyze information, size of the sample, and selection of technique in a given study. The other important components are testing of data during pilot, acceptability and applicability of instruments, consistence of tools used, procedures of data collection, techniques of analyzing data, and integrity of study complete with application of variables.

#### **3.2 Research Design**

This study was modelled according to descriptive survey research design. The choice of the design was because it allowed the researcher to collect information without manipulating the environment (Casula et al., (2021). Blumberg, Cooper, & Schindler, (2014) argue that descriptive design is mainly concerned with establishing when, what and how of a phenomena at a particular point in time. Using this design, it allowed the researcher to either use part of or the entire population to conduct an investigation aimed at responding to the research questions. Cross-sectional studies allow researchers to collect from a large pool of participants large amounts of information quite quickly since data is mostly obtained cheaply using self -reported surveys. Research Design involves behavior description numerically, perceptions, virtues and characteristic of a population portion as shown by the subject under study. (Mugenda and Mugenda, 2003).

Cross-sectional studies are known to measure variations in organizational outcomes, describe population characteristics as well as describe organization's success determinants. The design was important in establishing preliminary evidence as a basis for future studies. With respect to data collection period, it was conducted across all the motor vehicle dealers in Kisumu City, Kenya, at a particular time period. This design had been succesfuuly been used in similar studies (Kassim, 2018; Kabure, 2021).

The research applied descriptive research design. Descriptive research studies involves defining the features of a targeted entity or individual. The research approach is characterized with prediction, fact narration and tenets pertaining to an entity circumstance and individual. Research study must give answers to a research question to eliminate any uncertainty and ambiguity (Yin, 1989).

The selection of descriptive research involve questions given to respondents in regard to distribution strategies and performance of Sugar Milling Companies with non-manipulation of environment when collecting data quantitatively. The research design must have adequate measures for data protection against biasness and must maximize consistency and reliability, with focus of having a cost effective research study. The approach is cost manageable at the same time it guarantees efficacy within a short period of collecting data, thus identifying different characteristics of a census population and a smaller sample which being a focus for summary of results.

### **3.3 Research Paradigm**

This study will be modeled according to pragmatist research paradigm. According to the pragmatists research should focus on finding solutions to human and global challenges facing man. It opens up the application and use of a number of methods, techniques and procedures in generating information to better understand situations, (Lincoln and Guba, 2000; Biesta and Burbules, 2003). Pragmatism paradigm therefore is a strong advocator for mixed methods research approach. The pragmatists' proposition that research is value laden and that for a better experience and attaining real truth we must value and acknowledge other people's experiences is quite relevant to this study that seeks to gather different people's views concerning distribution strategies and performance of sugar milling companies in Kisumu County. This paradigm will enable the researcher to apply a pluralistic approach to integrate distribution strategies and performance to derive knowledge on the problem thus arriving to what works best for the sugar milling industries. The paradigm also allows the researcher the freedom to use both inferential and descriptive statistics in data analysis and provide opportunities to integrate a variety of theoretical perspectives (Morgan, 2007).

### **3.4 Area of Study**

This study was conducted in Kisumu County among the sugar milling companies. The county hosts three sugar mills which include Kibos, Chemelil, miwani and Muhoroni sugar companies' three of which are not in operation (Miwani, Chemelil and Muhoroni).

Kisumu County is one of 47 counties in the Republic of Kenya. Kisumu County lies in a total 2085.9 km<sup>2</sup> land area with a population of 1,155,574 (KNBS, 2019). The County neighbours Siaya County to the West, Vihiga County to the North, Nandi County to the North East and Kericho County to the East, Nyamira County to the South and Homa Bay County is to the South West. The county has a shoreline on Lake Victoria, occupying northern, western

and a part of the southern shores of the Winam Gulf. The county has an annual relief rainfall that ranges between 1200 mm and 1300 mm in different sectors. The rain mainly falls in two seasons. Kisumu is warm throughout the year with a mean annual temperature of 23. 0C. The temperature ranges between 20 0C and 35 0C but seldom falls below 19 0C. The humidity is relatively high throughout the year, (Kisumu County Integrated Development Plan II, 2018-2022)

Key economic activities of Kisumu County include fishing, agricultural activities mainly irrigated rice farming in the Kano Plains, sugarcane farming in Kibos, Miwani and Chemelil and small scale production of maize, beans, sweet potatoes, poultry and fresh vegetables. The county also hosts industries such as 4 sugar factories; that is Chemelil, Muhoroni, Kibos and Miwani. However, only Kibos sugar mill is currently functional (Kisumu County Integrated Development Plan II, 2018-2022)

### 3.4 Target Population

Targeted population had 186 respondents who are employees within procurement and logistics department of Kibos, Chemelil and Muhoroni sugar companies to provide insight of Distribution Strategies and Performance of Sugar Milling Companies in Kisumu, Kenya as shown below in Table 3.1. The population was distributed as follows: Kibos 96, Muhoroni 56 and Chemelil 34 employees. The employees within procurement and logistics department in the sugar companies are selected purposively because of their major role for coordination of procurement and logistics in the company. Kombo, Tromp (2006), Oso and Onen (2006) concurred that major determinant factor for choice of census to be studied is diversity, representation, reachability, awareness of subject of research.

**Table 3.1:** Population Target and Sample Size Distribution

Company	Size of Population	Target Variable	Sampling strategy
Kibos Sugar	96	96	Census
Chemelil Sugar	56	56	Census
Muhoroni Sugar	34	34	Census
<b>Total</b>	<b>186</b>	<b>186</b>	<b>Census</b>

### **3.5 Sampling Size and procedure of Sampling**

The research used census of 186 respondents because the respondents were few. Cooper et al (2016) defines a census as a count of all elements in a population. This method is best since the population of interest is small and variable; a condition that would limit the representativeness of a sample as in this case; thus its justification for this study. The sample selection was purposive in nature since they contain the relevant and pertinent information required in the study. Sample is a representation of the entire population features (Kelinger, 1973) but the inclusion of the whole target population in the sample will give the actual connection between variables under study.

### **3.6 Research Instruments**

The Researcher structured questions which was used for collection of data. Opinions, perception and values on variables were obtained through use of a structured questionnaire. This approach took cognizant of limited time and wider geographical area as concurred by Oso, Onen (2005). The questions were structured as follows: Introduction and body parts structure with closed end questions which gave the **respondents** opportunity to respond appropriately. Introduction part captures summary of data about **respondents'** demographics. Body section is structured thematically into five areas: Section A contains information on direct strategy; Section B has information about Indirect Strategy; Section C has information on Exclusive strategy; Section D has information on Intensive strategy; and Section H contains information Performance of Sugar Milling Companies. Each thematic area contains a maximum of five items which investigates the objective variation in all indicators being studied. Items in the questionnaire are laid out using Likert Scale with closed ended five point. This allows Interviewee to show understanding and give independent opinion on each item hence better representation given the following alternatives; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral , 4 = Agree and 5 = Strongly Agree.

#### **3.6.1 Pilot testing of the instruments**

Questions were executed as a pre-test within 30 unselected respondents' which was drawn a sugar milling company in the neighboring County of Kakamega before start of actual data collection. The researcher considered similar characteristics with those of the actual study respondents for selection to participate in the pilot study. Sample size of 30 was considered appropriate to conduct pilot study because it represented more than 10% of the actual study of a sample of 186 Interviewees' as concurred by Kothari (2004). Questionnaire was subjected to review for clarity, determination of precision for responses prompted and aligning of

questionnaire items with objective of the research to precede ultimate execution the field. This approach enhances compliance between test sample and survey (Peil, 1995).

### **3.6.2 Validity of the Instruments**

This means precision and a measure of the extent to which a test or an instrument when subjected several times gives same result or phenomenon (Mugenda and Mugenda, 2003). There are three approaches used for validation which is focal to evaluators and researchers namely; Content, Construct and Criterion validities (Donald and Delno, 2006). Validation measure was conducted through study of content and construct of the tools which guarantee accuracy in analysis plus summary of statistics analysis. Content validation was determined by two professionals who are research supervisors in the field under study at Jaramogi Oginga Odinga University of Science and Technology. Supervisors examined relevancy and consistency to the objective and 0.78 was obtained as validity index.

### **3.6.3 Reliability of the Instruments**

Reliability involves determination of the extent to which a research tool stably yields same outcome with repeated trials (Kombo and Tromp, 2006), or an instrument is reliable due to its ability to measure with accuracy a given variable and record the same outcome over a given time or on individual and persons (Mugenda and Mugenda, 2003). The internal consistency method in reliability demands that the instruments or test to be run once only through the cronbach alpha method contrary to retest method. In this study cronbach alpha method was used on the pilot data in order to estimate degree to which the same result could be obtained in a repeated measure of accuracy. In determining the reliability, 61 questions from likert scaled questionnaire were analysed considering the responses of 30 respondents. Reliability of 0.79 was obtained which is considered sufficient indicating that the instruments were reliable for the study considering Cohen and Swerdlik (2010) recommend minimum reliable coefficient of 0.70.

### **3.7 Procedure of Data Collection**

Approval for study by the Investigator was obtained from JOOUST. The researcher obtained a permit from National Commission for Science, Technology and Innovation (NACOSTI) which was used during visit to project authority offices. This gave the Investigator a chance to do the following introduction of the subject matter, clearance for execution of questionnaires and finally to seek acceptance of respondents to partake in the study. Investigator together with the help of research assistants executed items in the questionnaires. The respondents were given opportunity to seek clarification on questions which were deemed to be difficult and to

identify areas of misinterpretation for review and adjustments. The Research Assistant dropped questionnaires to the respondents and collected them back within a period of a week from the date of admission. This was deemed sufficient time to appropriately give response to the items in the questionnaire.

### **3.8 Techniques of Data Analysis**

Statistics approaches used in this study were Descriptive and Inferential. Descriptive statistics summarizes information of a given data set which may represent the entire population or a sample of a given population. It is broken down into measures of central tendencies and measures of variabilities. Measure of central tendencies include: mean, median and mode, while measures of variabilities encompasses standard deviation variance, minimum and maximum variables. Quantitative data was collected through administration of questions on the four independent variables and dependent variables, which were the object of study. Quantitative data was captured through use of SPSS version 25 being software for data collection and analytical work.

Preliminary data analysis involved descriptive techniques for calculation of the percentages, mean, standard deviation for every questionnaire item. Secondly, analysis will involve the assessment of the relationship between the strength of each independent variable and dependent variable using a Pearson Correlation Coefficient. The purpose is to assess the relationship in terms of proportions of association. Quantitative data will then be subjected to inferential statistics of correlation and regression to enable generalization of sample results to the population from which it's drawn. Inferential analysis will be done at a significance level of 0.05.

Correlation study is statistical method which is used to measure the effectiveness of linear relationship between two variables through correlation coefficient  $r$ . Correlation study tested assumptions  $H_01$ ,  $H_02$ ,  $H_03$ , and  $H_04$  though use of Pearson Product Moment Correlation indicated by  $r$ . Analytical approach of Pearson correlation was carried out to study and determine any connection or difference between Performance of Sugar Milling Companies and direct, indirect, exclusive and intensive strategies through data characterized with continuity and intermittent in scale.

Model of Regression is utilized to describe connection from one or more independent variables which generates continuity of data and measured under intermittent scale. Simple model of regression encompasses single independent variable and a dependent variable. The test

outcome culminated to a model summary, ANOVA and Coefficient of Regression was used to determine level of significance of every independent variable on dependent variable.

Regression model takes the form:

$$Y = \beta_0 + \beta_1 X_1 + \dots + \beta_4 X_4 + \alpha$$

Where; Y: dependent variable (Performance of Sugar Milling Companies),

$\beta_0$ : constant,

$\beta_1$ , and  $\beta_4$ : Beta Coefficients,

$X_1, \dots, X_4$ : predictor variables

$\alpha$ : an error term assumed to be 0.

Simple regression was used on the single independent variables: Direct strategy, indirect strategy, exclusive strategy and intensive strategy against dependent variable.

For example;

H<sub>01</sub>: Direct Strategy does not significantly influence on Performance of Sugar Milling Companies in Kisumu, Kenya

Performance = f (Direct Strategy, random variable)

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

While H<sub>05</sub>: applied multiple regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \alpha$$

Where; Y: dependent variable (Performance of Sugar Milling Companies)

$\beta_0$ : constant,

$\beta_1 \dots \beta_4$ : Beta Coefficients,

$X_1, \dots, X_4$ : predictor variables (Direct Strategy, Indirect Strategy, Intensive Strategy and Exclusive Strategy respectively)

$\alpha$ : an error term.

### **3.9 Ethical considerations**

Research took cognizant of associated ethical issues in upholding integrity and protection of the respondents' interest. In a nutshell, the research was professionally conducted. The interviewees' consent were sought, their concerns were addressed and they were convinced that their involvement in the study was through free will and no manipulation was used to obtain their responses. The investigation was also conducted under utmost secrecy and only the researcher was privy to the information and its relevancy to the study. Interviewees' names were kept anonymous throughout entire report each using a unique number as identifier. Any

item which was considered sensitive to the psychological wellbeing of interviewees, 'demeaning or threatening' were not used during collection of data. The investigation was therefore executed beyond reproach with focus on integrity and observation of the rules which govern such studies.

### 3.9 Operationalization of the variables

Table 3.2: Operationalizing variables, their indicators, instruments for data collection, scale of measurement and analysis techniques

**Table 3.2: Operationalization of Variables**

Objectives	Variables	Indicators	Measurement scale	Research Approach	Analysis Techniques	Data analysis tools
To determine the influence of Direct Strategy on Performance of Sugar Milling Companies in Kisumu County, Kenya	Direct Strategy	<ul style="list-style-type: none"> <li>• Lead time</li> <li>• Level of product handling</li> <li>• Distribution cost</li> <li>• Product conveyance</li> </ul>	Ordinal Interval	Quantitative	Descriptive  Inferential	Mean and Standard deviation Correlation analysis Regression analysis
To examine how Indirect Strategy influence Performance of Sugar Milling Companies in Kisumu	Indirect Strategy	<ul style="list-style-type: none"> <li>• Level of distribution intermediaries</li> <li>• Intermediary relationship</li> <li>• Product branding procedures</li> <li>• Unit packaging procedures</li> </ul>	Ordinal Interval	Quantitative	Descriptive  Inferential	Mean & Std Correlation analysis Regression analysis
To assess the influence of Exclusive Strategy on Performance of Sugar Milling Companies in Kisumu	Exclusive Strategy	<ul style="list-style-type: none"> <li>• Franchisee Identification procedures</li> <li>• Product pricing control</li> <li>• Product consumption pattern</li> <li>• Nature of the product</li> </ul>	Ordinal Interval	Quantitative	Descriptive  Inferential	Mean & Std Correlation analysis Regression analysis
To determine the influence of Intensive Strategy on Performance of Sugar Milling Companies in Kisumu	Intensive Strategy	<ul style="list-style-type: none"> <li>• Distribution point segmentation</li> <li>• Feedback collection procedures</li> <li>• Product turnover</li> <li>• Market dominance</li> </ul>	Ordinal Interval	Quantitative	Descriptive  Inferential	Mean & Std Correlation analysis Regression analysis
	Performance of Sugar Milling Companies	<ul style="list-style-type: none"> <li>• Quality products</li> <li>• Timeliness in product delivery</li> <li>• Operational flexibility</li> <li>• Customer satisfaction</li> </ul>		Quantitative	Descriptive	

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

#### 4.1 Introduction

Study results in this chapter is anchored on objectives of research driven from research data. Respondent demographics is preceded by response return rate. The outcome on the objectives of study are presented using descriptive and inferential statistics of correlation and regression.

#### 4.2 Response Return Rate

From a sample 186 respondents, 134 gave back forms which were fully populated with completed questionnaires which represented 72% rate of return as depicted in Table 4.1.

**Table 4.1: Questionnaire Response Rate**

Size of Sample	Returned	Rate of Return (%)
186	134	72%

**Source:** Author (2022)

Return rate of at 72% was considered appropriate and representative of the census characteristics. Mugenda and Mugenda (2003) acknowledges and considers that a response rate of 50% suffices for research analysis in social science. High response was obtained because the researcher expedited questionnaires which were given to chosen interviewees, who were granted enough timeline to populate every item in questionnaires.

#### 4.3 Demographic Information

Demographic of interviewees earmarked for the study was captured for purposes of comprehending individual profiles connected to the objectives of the study. The investigator considered demographic characteristics of respondents: gender, age, level of education. Subsequent sections presents the findings.

##### 4.3.2 Distribution of Respondents by Gender

The study noted that the Performance of Sugar Milling Companies is influenced by gender factors, hence the study ensured gender representation and their observations in the outcome of the study. Interviewees were consequently guided to show their gender, and the outcome was determined and summed up as percentage depicted in Table 4.2.

**Table 4.2: Distribution of Respondents by Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Female	31	23
Male	103	77
<b>Total</b>	<b>134</b>	<b>100</b>

**Source:** Author (2022)

Table 4.2 depicted that more male (77%), than female (23%) were covered since the distribution chain of sugar products are always labor intensive thus in concurrence with big coverage in the research. This observation is upheld by Ndubi, Kagiri and Muchelule (2018). Therefore, observation of both male and female employees of the sugar Milling Companies of Kisumu County in regard to performance of Sugar Milling Companies, were well distributed

### **4.3.3 Distribution of Respondents by Age**

The study assumed experience come by age that also shapes views, attitudes and perceptions in regard to performance of Sugar Milling Companies and as such sought to investigate on the age bracket of interviewees and presented the result in Table 4.3.

**Table 4.3: Distribution of Respondents by Age Group**

<b>Age (Years)</b>	<b>Frequency</b>	<b>Percent</b>
29 and below	24	18
30-39	23	17
40-49	23	17
50 and above	64	48
<b>Total</b>	<b>134</b>	<b>100.0</b>

**Source:** Author (2022)

The outcome in Table 4.3, depicts that majority of interviewees (48%) were 50 years and above, 29 years and below is represented by 18%, 30-39 years was represented by 17% and 40-49 years had a representation of 17%. Overall, 65% of the respondents were in the age bracket of 40 years and above hence giving support to the fact that majority of respondents had better understanding and well experienced on the distribution strategies and their net effects on performance of sugar Milling Companies.

### **4.3.5 Distribution of Respondents by Level of Education**

Capacity of appreciation and comprehension of different facets on distribution strategies in the sugar sector is dedicated to level of education and acquired knowledge. This prompted the investigator to seek response in regard to level of education in order to gauge the respondents' ability to respond to the items in the questionnaire. The findings are shown in Table 4.4

**Table 4.1: Distribution of Respondents by Level of Education**

Highest Level of Academic Education	Frequency	(%)
Diploma	87	65.0
Bachelors	40	30.0
Masters	7	5.0
Total	134	100.0

**Source:** Author (2022)

Majority of the respondents (65%) had diploma with another 30% having bachelor’s degree and a minority (5%) with master’s education. This shows that all the respondents “100%” had adequate education to understand and give response on the items in the questionnaire hence providing required information by the study.

#### 4.4 Performance of Sugar Milling Companies

In the research, performance of Sugar Milling Companies in Kisumu, Kenya was the dependent variable. Performance of Sugar Milling Companies was determined using four indicators; increased profitability, prompt delivery, increased sales turnover and market preference. The indicators were developed into five items measured on a 5-point Likert scale; where 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A) and 5 = Strongly Agree (SA). The respondents gave their view according to their agreement per item. The outcome were analyzed using frequency, percentage, means and standard deviations as shown in Table 4.5.

**Table 4.1: Performance of Sugar Milling Companies**

Performance of Sugar Milling Companies	SD	D	N	A	SA	Mean	STDev
The firm has been experiencing an increasing profitability in the last 2 years	19 (14%)	25 (19%)	25 (19%)	42 (31%)	23 (17%)	3.38	1.31
There is prompt delivery of sugar into the market	2 (1%)	12 (9.2%)	15 (5.1%)	51 (37.8)	63 (46.9%)	4.30	0.97
The company experiences quarterly increase in sales turn-over rates	3 (2.1%)	22 (16.5%)	11 (8.2%)	40 (29.9%)	58 (43.3%)	3.96	1.17
The company’s sugar is the most preferred in the market	3 (2%)	8 (6.1%)	58 (43.4%)	35 (26.3%)	30 (22.2%)	3.71	0.97
<b>Composite Mean and STDev</b>						<b>3.89</b>	<b>1.01</b>

**Source:** Author (2022)

The outcome in Table 4.5 shows that Performance of Sugar Milling Companies was above average with composite Mean = 3.89 implying that the respondents concurred that sugar millers performed. Even though most respondents 42 (31%) agreed that the company has been experiencing an increasing profitability in the last 2 years, 25 (19%) disagreed; while 19 (14%)

strongly disagreed, 23 (17%) strongly agreed; while 25 (19%) were neutral indicating that the company has been experiencing an increasing profitability in the last 2 years. Thus cumulatively, 48.0% of the participants agreed that the Company has been experiencing an increasing profitability in the last 2 years which is slightly below average. This shows that there are instances when the company experienced decrease in profitability in the last 2 years with the net effect of negatively affecting the Milling Companies' performance.

Similarly, there was prompt delivery of sugar into the market (Mean = 4.30), as the respondents agreed with the performance of sugar millers; 63 (46.9%) respondents, strongly agreed that sugar delivery in the market is prompt, while 51 (37.8%) agreed, 15 (5.1%) of the respondents were neutral that there is prompt delivery of sugar into the market, 12 (9.2%) disagreed and 3 (1%) strongly disagreed. Thus, yielding cumulatively 84.7% of respondents agreeing and 10.2% disagreeing that there is prompt delivery of sugar into the market. This shows that few of the sugar Milling Companies in Kisumu County do not have prompt delivery system of sugar into the market.

The results also show that the company experiences quarterly increase in sales turn-over rates of (Mean = 3.96) as majority participants agreeing. The outcome indicated that most of respondents 58 (43.3%) strongly agreeing that the company experiences quarterly increase in sales turn-over rates; while 40 (29.9%) agreed. Meanwhile, 22 (16.5%) disagreed and 3 (2.1%) strongly disagreed; while 11 (8.2%) were neutral that the company experiences quarterly increase in sales turn-over rates. Cumulatively, 73.2% of the participants agreed that the company experiences quarterly increase in sales turn-over rates while only 18.5% disagreed. The high percentage score show that the sugar companies experienced quarterly increase in sales turnover.

The findings also suggest that respondents were highly skeptical of the company's sugar being the most preferred in the market as the outcome indicated mean = 3.71 indicating neutrality. Most respondents 58 (43.4) were neutral that the company's sugar is the most preferred in the market, with 8 (6.1%) disagreeing; and 3 (2.1%) strongly disagreeing. Concurrently, 35 (26.3%) of the respondents agreed while 30 (22.2%) strongly agreed that the company's sugar is the most preferred in the market. This shows that the company's sugar is moderately preferred in the market.

Thus, the overall performance of sugar Milling Companies in Kisumu, Kenya was moderate. Findings are in tandem with observations by Nanyama and Ochieng (2018) that supplier chain systems have influence on performance of a company in relation to improving quality of products, timeline in delivery of service and operational flexibility.

#### **4.5 Objective one: To investigate the influence of Direct Strategy on Performance of Sugar Milling Companies in Kisumu.**

The study sought of employees of sugar millers on extent of Direct Strategy. Correlation and simple regression analysis was done between Direct Strategy and Performance of Sugar Milling Companies.

##### **4.5.1 Direct Strategy**

Direct Strategy for Performance of Sugar Milling Companies was measured using four indicators of lead time, level of product handling, distribution cost and product conveyance that were developed on a 5-Likert scale. The outcome were analyzed using frequency, percentage, means and standard deviations as shown in Table 4.6.

**Table 4.1: Direct Strategy**

<b>Direct Strategy</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>STDev</b>
The delivery of sugar is always done in time	0 (0.0%)	10 (7.8%)	22 (16.3%)	62 (46.1%)	40 (29.8)	3.98	0.882
The level of handling sugar on transit assures Quality	0 (0.0%)	7 (5.0%)	16 (12.1%)	65 (48.2%)	47 (34.8%)	4.13	0.809
The activities involved in the distribution of Sugar are expensive	5 (3.5%)	10 (7.1%)	25 (18.4%)	60 (44.7%)	35 (26.2%)	3.83	1.014
The commonly used sugar supplies carriage Mode is generally accessible	10 (7.1%)	27 (19.9%)	29 (21.3%)	46 (34.0%)	23 (17.7%)	3.35	1.190
<b>Composite Mean and Standard Deviation</b>						<b>3.823</b>	<b>1.024</b>

**Source: Author (2022)**

The results in Table 4.6 shows that the delivery of sugar is always done in time (Mean = 3.98) because respondents concurred. Most respondents 62 (46.1%) agreeing; 40 (29.8%) strongly agreed that the delivery of sugar is always done in time, comprising 75.9% respondents agreeing. Meanwhile 3/4 of respondents agreeing, 22 (16.3%) were neutral while 10 (7.8%) disagreed that the delivery of sugar is always done in time thus having the effect of improved performance of sugar Milling Companies.

Similarly, the level of handling sugar on transit assures quality (Mean = 4.13). 65 (48.2%) of the respondents agreed; 47 (34.8%) strongly agreed; thus a total of 83% of participants cumulatively agreed that the level of handling sugar on transit assures quality. Thus, the direct strategy ensures that customers receive sugar in the required quality standards which has the effect of improving performance of sugar Milling Companies.

The findings also shows that the activities involved in the distribution of sugar are expensive (Mean = 3.83). The majority of respondents agreeing 60 (44.7%) who agreed; 35 (26.2%) strongly agreed that the activities involving distribution of sugar are expensive. Meanwhile 10 (7.1%) of the participants disagreed that the activities involving distribution of sugar are expensive; while 5 (3.5%) strongly disagree. Cumulatively 70.9% respondents agreeing, meanwhile 10.6% cumulatively disagreed that the activities involving distribution of sugar are expensive. The finding shows that the expenses incurred in the distribution chain will be passed to the consumer which makes the end product to be expensive hence negatively affecting the performance of sugar Milling Companies.

Further, the results show that the commonly used sugar supplies carriage mode is generally accessible (Mean = 3.35). Respondents were neutral while a bigger chunk disagreeing. Meanwhile, 46 (34.0%) of the respondents agreed; 23 (17.7%) strongly agreed that the commonly used sugar supplies carriage mode is generally accessible, resulting to 51.7% cumulatively agreeing greed. Meanwhile, 27 (19.9%) respondents disagreeing; 10 (7.1%) strongly disagreed that the commonly used sugar supplies carriage mode is generally accessible. This shows that accessibility of transportation system is crucial in improving performance of sugar Milling Companies.

The outcome showed that Direct Strategy influence Performance of Sugar Milling Companies with composite mean = 3.823. The study showed respondents agreeing that Direct Strategy influence Performance of Sugar Milling Companies.

The findings were in tandem with direct distribution channels which enable firms to exercise control over activities of marketing, reduction of ordering lead-cycle, guarantees attention to product, and ensuring producers get feedbacks on their products for adjustments to gain competitive advantage unlike indirect distribution channels (Gichiri and Kiriri, 2020). However, more resources are required to maintain distribution. Conveyance of goods to the ultimate customer in the right place, time, quality and quantity supersedes all marketing endeavors.

#### 4.5.2 Relationship between Direct Strategy and Performance of Sugar Milling Companies

Pearson Correlation was done to establish the relationship between Direct Strategy and Performance of Sugar Milling Companies at an equidistant Likert scale of strongly disagree=1 (1<SD>0.8); Agree=2 (1.8<A>2.6); Neutral=3 (2.6<N>3.4); Agree=4 (3.4<A>4.2) and Strongly Agree=5 (4.2<SA>5) as shown in Table 4.7.

**Table 4.1: Relationship between Direct Strategy and Performance of Sugar Milling Companies**

		Direct Strategy	Performance of Sugar Milling Companies
Direct Strategy	Pearson Correlation	1	.493**
	Sig. (2-tailed)		.000
	N	134	134
Performance of Sugar Millers	Pearson Correlation	.493**	1
	Sig. (2-tailed)	.000	
	N	134	134

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source:** Author (2022)

Table 4.7 correlation results indicates that Direct Strategy and Performance of Sugar Milling Companies are moderately positively correlated ( $R = 0.493$ ) with a statistical significance ( $p=0.000<0.05$ ). This indicates that Direct Strategy moderately increases Performance of Sugar Milling Companies. The outcome is concurrent with Gichiri and Kiriri (2020), Obiero and Ondoro (2017) and Mwanza and Ingari (2015) observes that statistically, significant relationship exist between direct strategy and Performance of Sugar Milling Companies. Direct distribution are characterized by the following; delivery of products faster to customers, possessing considerable control over product marketing, selling and enhancing direct relationship with clients.

### 4.5.3 Influence of Direct Strategy on Performance of Sugar Milling Companies

The study confirmed linear regression between Direct Strategy and Performance of Sugar Milling Companies. Regression output is shown in Table 4.8.

**Table 4.1: Influence of Direct Strategy on Performance of Sugar Milling Companies**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
Summary	.493 <sup>a</sup>	.243	.237	4.140		
Model		Sum of Squares	Df	Mean Square	F	Sig.
ANOVA	Regression	764.035	1	764.035	44.577	.000 <sup>b</sup>
	Residual	2382.433	1328	17.140		
	Total	3146.468	133			
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
Coefficients	(Constant)	3.199	1.864		1.716	.044
	Direct Strategy	.800	.120	.493	6.677	.000

a. Dependent Variable: Performance of Sugar Millers

b. Predictors: (Constant), Direct Strategy

**Source:** Author (2022)

In the output of Table 4.8, model summary gives a  $R^2$  value = 0.243 with  $p=0.000<0.05$ ; indicating that Direct Strategy accounted for 24.3% of Performance of Sugar Milling Companies. The model was appropriate for the data and variables where  $F(1, 139) = 764.035$  ( $p = 0.000<0.05$ ). The coefficient of Direct Strategy ( $\beta = 0.8$ ,  $p = 0.000<0.05$ ) was significant statistically, hence a unit variation in Direct Strategy enhances Performance of Sugar Milling Companies by 0.8 units.

The Linear regression model was:

$$Y = 3.199 + 0.8X_1$$

Where;  $\beta_0=3.199$  (coefficient of the constant term),  $\beta_1=0.8$  (coefficient of Direct Strategy) and  $X_1$  (Direct Strategy).

### 4.5.4 Test for Hypothesis One

Hypothesis one was stated in the null and tested as:

$H_{01}$ : Direct Strategy does not influence Performance of Sugar Milling Companies.

The null hypothesis was tested at 95% confidence level as  $H_{01}: \beta_0 = \beta_1 = 0$  ( $p = 0.05$ ). The null hypothesis was to be accepted when  $p > 0.05$  (There is no significant difference) and rejected when  $p \leq 0.05$  (There is significant difference) between the coefficient of the constant term and the coefficient of the predictor.

Since the results showed that  $\beta_0 \neq \beta_1 \neq 0$  ( $p < 0.05$ ), null hypothesis was rejected and alternative accepted. Thus, there is a significant influence between Direct Strategy and Performance of Sugar Milling Companies.

#### 4.6 Objective two: To investigate the influence of Indirect Strategy on Performance of Sugar Milling Companies in Kisumu.

The study sought of employees of sugar Milling Companies on extent of Indirect Strategy. Correlation and simple regression analysis was done between Indirect Strategy and Performance of Sugar Milling Companies.

##### 4.6.1 Indirect Strategy

Indirect Strategy in Sugar Milling Companies was measured using four indicators of level of distribution intermediaries, intermediary relationship, product branding procedures and unit packaging procedures that were developed on a 5-Likert scale. The outcome were analyzed using frequency, percentage, means and standard deviations as shown in Table 4.9.

**Table 4.1: Indirect Strategy**

<b>Indirect Strategy</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>STDev</b>
More distribution points results to higher the supply cost	0 (0.0%)	10 (7.8%)	13 (9.9%)	66 (48.9%)	45 (33.3%)	4.08	0.862
The commonly experienced sugar hoarding are due collusion between distribution dealers along the supply chain	4 (2.8%)	6 (5.7%)	20 (14.9%)	55 (41.1%)	48 (35.5%)	4.01	0.996
The level of restriction in re-branding of sugar on transit affects the quality of the final delivery	0 (0.0%)	12 (9.2%)	25 (18.4%)	66 (48.9%)	31 (23.4%)	3.87	0.880
The sugar supplies with unrestricted unit packaging attracts more sales	0 (0.0%)	9 (6.4%)	29 (21.3%)	66 (48.9%)	31 (23.4%)	3.89	0.834
<b>Composite Mean and Standard Deviation</b>						<b>3.928</b>	<b>0.896</b>

**Source:** Author (2022)

The outcome in Table 4.9 indicates that the respondents of the study concurred that higher distribution points is correlated with the supply cost (Mean = 4.08). The majority of respondents 66 (48.9%) agreeing that the more the distribution points the higher the supply cost, 45 (33.3%) of the respondents strongly agreed, while 10 (7.8%) of participants disagreeing and 13 (9.9%) were neutral, hence most respondents (82.2%) cumulatively concurred that more distribution points leads to higher supply cost while only 7.8% disagreed. This shows that Indirect Strategy increases the cost of the end sugar product since transportation; processing and storage costs are passed to the final consumer thus negatively affecting the performance of sugar Milling Companies.

Similarly, the commonly experienced sugar hoarding are due to collusion between distribution dealers along the supply chain (Mean=4.01) strongly influenced performance of sugar millers. Majority of respondents 55 (41.1%) agreed with the statement that commonly experienced sugar hoarding are due to collusion between distribution dealers along the supply chain, meanwhile; 48 (35.5%) strongly agreed. This contrasted 6 (5.7%) who disagreed, and 4 (2.8%) who strongly disagreed that the commonly experienced sugar hoarding are due to collusion between distribution dealers along the distribution channel. Total of 76.6% of the participants concurred that the commonly experienced sugar hoarding are due to collusion between distribution dealers along the supply chain and 8.5% disagreed.

The level of restriction in re-branding of sugar on transit affecting the quality of the final delivery was found to have considerable influence on indirect strategy (Mean = 3.87). Taking into cognizant the statement that the level of restriction in re-branding of sugar on transit affecting the quality of the final delivery, majority of the respondents 66 (48.9%) agreed; 31 (23.4%) strongly agreed. Meanwhile, 72.3% of respondents cumulatively concurred that the level of restriction in re-branding of sugar on transit affects the quality of the final delivery and 12 (9.2%) disagreed. Moreover 55 (18.4%) of the respondents were neutral which implies that rebranding restrictions moderately influence the quality of the final sugar product hence moderately influence performance of sugar Milling Companies.

Concurrent outcome concluded that sugar supplies with unrestricted unit packaging attracts more sales (Mean = 3.89). Majority of the respondents 66 (48.9%) concurred that sugar supplies with unrestricted unit packaging attracts more sales and another 31 (23.4%) strongly agreeing, hence, most respondents (72.3%) cumulatively agreeing that sugar supplies with unrestricted unit packaging attracts more sales. However, 29 (21.3%) were neutral, while 9 (6.4%) disagreeing that sugar supplies with unrestricted unit packaging attracts more sales. This shows that sugar suppliers with unrestricted unit packaging attracts more sales hence improving performance of sugar millers.

The composite mean regarding Indirect Strategy for performance of sugar millers was 3.928 (STDEV = 0.896). By approximation, this was equivalent to 4 corresponding to the scale of measurement, indicating that Indirect Strategy influences performance of sugar Milling Companies. In concurrence with the outcome, Mutua and Moronge (2018) observed that indirect strategy enables commodities to be distributed to large scale retailers, relieves manufacturer of distribution constraints, utilizes expert services of middlemen and enjoys a

scattered demand. However, the producer loses control over distribution; producer-consumer relationship weakens and slows the distribution speed. In order to sustain competitiveness, firms must take cognizant of the significance of distribution channel strategies which improves their organizational performance, and resonate with supply chain stakeholders partners to enhance their synergy.

#### 4.6.2 Relationship between Indirect Strategy and Performance of Sugar Milling Companies

Pearson Correlation was done to establish the relationship between Indirect Strategy and Performance of Sugar Milling Companies at an equidistant Likert scale of strongly disagree=1 (1<SD>0.8); Agree=2 (1.8<A>2.6); Neutral=3 (2.6<N>3.4); Agree=4 (3.4<A>4.2) and Strongly Agree=5 (4.2<SA>5) as shown in Table 4.10.

**Table 4.1: Relationship between Indirect Strategy and Performance of Sugar Milling Companies**

		Indirect Strategy	Performance of Sugar Milling Companies
Indirect Strategy	Pearson Correlation	1	.157
	Sig. (2-tailed)		.004
	N	134	134
Performance of Sugar Millers	Pearson Correlation	.157	1
	Sig. (2-tailed)	.004	
	N	134	134

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source:** Author (2022)

Results of correlation in Table 4.10 shows a weak positive correlation ( $R = 0.157$ ) existing between Indirect Strategy and Performance of Sugar Milling Companies statistically significant ( $p = 0.004 < 0.05$ ), indicating that Indirect Strategy and Performance of Sugar Milling Companies are statistically; moderately and positively correlated to the extent that as Indirect Strategy accelerates, Performance of Sugar Milling Companies improves marginally. There was concurrence in the finding as supported by Kitainge and Jemaiyo (2020), Sundram, Chandran and Bhatti (2016) and Serdaris, Antoniadis and Tomlekova (2014) observes that a significant positive relationship between indirect distribution channel and performance of sugar Milling Companies. Multi-level distribution chain tactics ensure accelerated movement of commodities and information both upstream and downstream in the distribution chain thereby increasing customer satisfaction and efficiency of the firm.

### 4.6.3 Influence of Indirect Strategy on Performance of Sugar Milling Companies

The study confirmed linear regression between Indirect Strategy and Performance of Sugar Milling Companies. Regression output is shown in Table 4.11.

**Table 4.1: Influence of Indirect Strategy on Performance of Sugar Milling Companies**

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
Summary	157 <sup>a</sup>	.025	.018		4.699	
ANOVA		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	77.254	1	77.254	3.499	.004 <sup>b</sup>
	Residual	3069.214	132	22.081		
	Total	3146.468	133			
Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
		B	Std. Error	Beta		
Coefficients	(Constant)	10.973	2.413		4.547	.000
	Indirect Strategy	.227	.121	.157	1.870	.004

a. Dependent Variable: Performance of Sugar Millers

b. Predictors: (Constant), Indirect Strategy

Source: Author (2022)

In the output of Table 4.11, model summary gives a R<sup>2</sup> value = 0.25 with p=0.004<0.05; indicating that Indirect Strategy accounted for 25% of Performance of Sugar Milling Companies. The model was appropriate for the data and variables where F (1, 139) = 3.499 (p = 0.004<0.05). The coefficient of Direct Strategy ( $\beta = 0.227$ , p = 0.004<0.05) was significant statistically, hence a unit variation in Indirect Strategy enhances Performance of Sugar Milling Companies by 0.227 units.

The Linear regression model was:

$$Y = 10.973 + 0.2278X_2$$

### 4.6.4 Test for Hypothesis Two

Hypothesis two was stated in the null and tested as:

H<sub>02</sub>: There is no significant influence between Indirect Strategy on Performance of Sugar Milling Companies.

The null hypothesis was tested at 95% confidence level as H<sub>02</sub>:  $\beta_0 = \beta_2 = 0$  (p = 0.05). The null hypothesis was to be accepted when p > 0.05 (There is no significant difference) and rejected when p ≤ 0.05 (There is significant difference) between the coefficient of the constant term and the coefficient of the predictor.

Since the results showed that  $\beta_0 \neq \beta_2 \neq 0$  ( $p < 0.05$ ), null hypothesis was rejected and alternative accepted. Thus, there is significant influence between Indirect Strategy and Performance of Sugar Milling Companies.

#### 4.7 Objective three: To assess the influence of Exclusive Strategy on Performance of Sugar Millers in Kisumu

The study sought of employees of sugar millers on extent of Exclusive Strategy. Correlation and simple regression analysis was done between Exclusive Strategy and Performance of Sugar Millers.

##### 4.7.1 Exclusive Strategy

Exclusive Strategy in Sugar Milling Companies was measured using four indicators of franchisee identification procedures, product pricing control, product consumption pater and nature of the product that were developed on a 5-Likert scale. The outcome were analyzed using frequency, percentage, means and standard deviations as shown in Table 4.12.

**Table 4.1: Exclusive Strategy**

<b>Exclusive Strategy</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>STDev</b>
There is nepotism in contracting sugar dealers by most sugar millers	2 (1.4)	12 (9.2)	16 (12.1)	66 (48.9)	38 (28.4)	3.94	0.950
There is a clear pricing control on sugar products	0 (0.0)	2 (1.4)	16 (12.1)	61 (45.4)	55 (41.1)	4.26	0.724
The motorcycle carriers distributions cannot access gated communities	0 (0.0)	7 (5.0)	20 (14.9)	60 (44.7)	48 (35.5)	4.11	0.834
There are some sugar products that requires special distribution form	1 (0.7)	22 (16.3)	25 (18.4)	46 (34.0)	41 (30.5)	3.77	1.078
<b>Composite Mean and Standard Deviation</b>						<b>4.020</b>	<b>0.922</b>

**Source:** Author (2022)

Finding in Table 4.12 indicates there is nepotism in contracting sugar dealers by most sugar Milling Companies for performance of sugar Milling Companies (Mean = 3.94). This indicates a general rate of concurrence that majority of the participants 66 (48.9%) agreed; 38 (28.4%) strongly agreeing that there is nepotism in contracting sugar dealers by most sugar millers. However, 28 (9.2%) of the participants disagreed that there is nepotism in contracting sugar dealers by most sugar millers; 2 (1.4%) strongly disagreed; and 16 (12.1%) were neutral. Meanwhile; 77.3% respondents concurred; and 10.6% disagreeing that there is nepotism in contracting sugar dealers by most sugar millers. This shows that there is need to liberalize

distribution agency so as to increase the product networks and improve sales for better firm performance.

Similarly, statement that there is a clear pricing control on sugar products was above average (Mean = 4.26). Most participants 61 (45.4%) agreeing there is a clear pricing control on sugar products; while 55 (41.1%) strongly agreeing. Meanwhile, 86.5% of the respondents agreeing that there is a clear pricing control on sugar products with only 2(1.4%) disagreeing. This shows that sugar product have a clear price control from the manufacturing through the distribution channel to the final consumer which reduces chances of price manipulation that burdens the final consumer.

The product consumption frequency increases with exclusive distribution strategy was found to influence performance of sugar Milling Companies strongly (Mean = 4.11). This is due to the fact that most respondents 60 (44.7%) agreeing and 48 (35.5%) strongly agreeing that the product consumption frequency increases with exclusive distribution strategy. In totality, 80.2% of participants agreeing that the product consumption frequency increases with exclusive distribution strategy; 20 (14.9%) were neutral. Meanwhile 7 (5.0%) of respondents disagreeing that the product consumption frequency increases with exclusive distribution strategy. This result underlines the importance of exclusive distribution strategy as it shortens the distribution chain with focus on specialization which increases product consumption frequency and performance of firms.

The results show that there are some sugar products that requires special distribution form to moderate extent in comparison to other indicators (Mean = 3.77). Most of respondents 46 (34.0%) agreeing that there are some sugar products that requires special distribution form; and 41(30.5%) strongly agreeing. Most of the respondents disagreeing 49 (16.3%); and 1 (0.7%) strongly disagreed, while 25 (18.4%) were neutral. The outcome shows that only few sugar products like industrial sugar and molasses requires specialized distribution forms and this has moderate influence on performance of sugar Milling Companies.

Regarding Exclusive Strategy on performance of sugar firms, the outcome indicates that a composite mean = 4.02 (STDEV = 0.922). This is an indicator that the respondents commonly agreed that Exclusive Strategy influenced performance of sugar Milling Companies. Meanwhile; exclusive distribution strategy guarantees great level of profitability for value chain partners, guarantee of dealers' loyalty, improved turnover projection, and control of inventory, enhance customer service and strong brand image control. However, exclusive

distribution may bring conflict between producer and distributor due to high levels of micro management by manufacturers and loss on sales volume besides demand for trained and experienced sales team to persuade focused members of the channel in support of the product (Otieno and Awino, 2018). Further, accelerated cost, increased profit gap and diminishing volume of sales are features of exclusivity of distribution. Brand image can be enhanced in exclusive deals thus a merchandise is deemed peculiar, unique, and challenging to get, hence the product is made more desirable to consumers (Adefulu and Adeniran, 2019).

#### 4.7.2 Relationship between Exclusive Strategy and Performance of Sugar Milling Companies

Pearson Correlation was done to establish the relationship between Exclusive Strategy and Performance of Sugar Milling Companies at an equidistant Likert scale of strongly disagree=1 (1<SD>0.8); Agree=2 (1.8<A>2.6); Neutral=3 (2.6<N>3.4); Agree=4 (3.4<A>4.2) and Strongly Agree=5 (4.2<SA>5) as shown in Table 4.13.

**Table 4.1: Relationship between Exclusive Strategy and Performance of Sugar Milling Companies**

		Exclusive Strategy	Performance of Sugar Milling Companies
Exclusive Strategy	Pearson Correlation	1	.440**
	Sig. (2-tailed)		.000
	N	134	134
Performance of Sugar Millers	Pearson Correlation	.440**	1
	Sig. (2-tailed)	.000	
	N	134	134

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source:** Author (2022)

Results of correlation in Table 4.13 shows a moderate positive correlation ( $R = 0.440$ ) existing between exclusive Strategy and Performance of Sugar Milling Companies statistically significant ( $p = 0.000 < 0.05$ ), indicating that Exclusive Strategy and Performance of Sugar Milling Companies are statistically; moderately and positively correlated to the extent that as Exclusive Strategy accelerates, Performance of Sugar Milling Companies improves marginally. Adefulu and Adeniran (2019), Otieno and Awino (2018) and Kuloba and Nyongesa (2015) established significant relationship between exclusive strategy and Performance of Sugar Milling Companies which is in concurrence with the current study findings. Exclusive distribution strategy minimized production cost, maximizes profit, improved firm reputation, communication control, and ensure quality and timely distribution.

Exclusive strategy ensures that a product has a market niche with high pricing for adequate control over brand image.

### 4.7.3 Influence of Exclusive Strategy on Performance of Sugar Milling Companies

The study confirmed linear regression between Exclusive Strategy and Performance of Sugar Milling Companies. Regression output is shown in Table 4.14.

**Table 4.1: Influence of Exclusive Strategy on Performance of Sugar Milling Companies**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
Summary	.440 <sup>a</sup>	.193	.188	4.273		
ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Model	Regression	608.740	1	608.740	33.343	.000 <sup>b</sup>
	Residual	2537.728	132	18.257		
	Total	3146.468	133			
Coefficients		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Model	(Constant)	2.570	2.255		1.139	.026
	Exclusive Strategy	.800	.138	.440	5.774	.000

a. Dependent Variable: Performance of Sugar Milling Companies

b. Predictors: (Constant), Exclusive Strategy

**Source:** Author (2022)

In the output of Table 4.14, model summary gives a R<sup>2</sup> value = 0.193 with p=0.000<0.05; indicating that Exclusive Strategy accounted for 19.3% of Performance of Sugar Millers. The model was appropriate for the data and variables where F (1, 139) = 33.343 (p = 0.000<0.05). The coefficient of Exclusive Strategy ( $\beta = 0.8$ , p = 0.000<0.05) was significant statistically, hence a unit variation in Exclusive Strategy enhances Performance of Sugar Milling Companies by 0.8 units.

The Linear regression model was:

$$Y = 2.57 + 0.8X_3$$

### 4.7.4 Test for Hypothesis Three

Hypothesis three was stated in the null and tested as:

H<sub>03</sub>: There is no significant influence between Exclusive Strategy and Performance of Sugar Milling Companies.

The null hypothesis was tested at 95% confidence level as 3. H<sub>03</sub>:  $\beta_0 = \beta_3 = 0$  (p = 0.05). The null hypothesis was to be accepted when p > 0.05 (There is no significant difference) and rejected when p ≤ 0.05 (There is significant difference) between the coefficient of the constant term and the coefficient of the predictor. Since the results showed that  $\beta_0 \neq \beta_3 \neq 0$

( $p=0.000<0.05$ ), null hypothesis was rejected and alternative accepted. Thus, there is a significant influence of Exclusive Strategy on Performance of Sugar Milling Companies.

#### **4.8 Objective four: To assess the influence of Intensive Strategy on Performance of Sugar Milling Companies in Kisumu.**

The study sought of employees of sugar millers on extent of Intensive Strategy. Correlation and simple regression analysis was done between Intensive Strategy and Performance of Sugar Milling Companies.

##### **4.8.1 Intensive Strategy**

Intensive Strategy for Performance of Sugar Milling Companies was measured using four indicators of distribution point segmentation, feedback collection procedures, market dominance and product turnover that were developed on a 5-Likert scale. The outcome were analyzed using frequency, percentage, means and standard deviations as shown in Table 4.15.

**Table 4.1: Intensive Strategy**

<b>Intensive Strategy</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>STDev</b>
There are various sugar distribution stages exploited by the company	2 (1.4)	18 (13.5)	7 (5.0)	74 (55.3)	33 (24.8)	3.89	0.979
There is well structured feedback collection mechanism in place	2 (1.4)	13 (9.9)	15 (11.3)	64 (47.5)	40 (29.8)	3.94	0.969
There is fast product turnover	0 (0.0)	10 (7.8)	20 (14.9)	71 (53.2)	32 (24.1)	3.94	0.838
The company sugar product is the most dominant in the market	4 (2.8)	16 (12.1)	23 (17.0)	62 (46.1)	29 (22.0)	3.72	1.029
<b>Composite Mean and Standard Deviation</b>						<b>3.878</b>	<b>0.946</b>

**Source:** Author (2022)

The study found that there are various sugar distribution stages exploited by the company (Mean = 3.89). Most of respondents 166 (55.3%) agreeing that various sugar distribution stages are exploited by the company, while 33 (24.8%) strongly agreeing giving a cumulating aggregate of 80.1% of the respondents agreeing. Meanwhile, 18 (13.5%) of the respondents disagreeing; 2 (1.4%) strongly disagreeing and cumulating aggregate of 14.9% of respondents disagreeing that there are various sugar distribution stages exploited by the company, while 7 (5%) were neutral. Most respondents supported the view that there are various distribution stages exploited by the company, the dissenting voices shows that significant cases of sugar millers had limited distribution stages exploited by the firm, thus hampering performance of sugar firms.

The results also show that there is well structured feedback collection mechanism in place because participants generally agreeing (Mean = 3.94). Most of respondents 64 (47.5%) agreeing that there is well structured feedback collection mechanism in place; 40 (29.8%) strongly agreeing. In totality 77.3% of the respondents agreed that there is well structured feedback collection mechanism in place. In contrast, only 13 (9.9%) disagreeing, 2 (1.4%) of the respondents strongly disagreeing; 15 (11.3%) were neutral. This implies that intensive strategy provides a better feedback mechanism since the product reaches every corner of the market and the manufacturer can get consumption information along the value chain with ease, thus, improving performance of sugar firms.

Similarly, the results show that there is fast product turnover (Mean = 3.94) as shown by most respondents. In the finding, 231 (77.3%) respondents agreeing that there is fast product turnover where 71 (53.2%) agreeing; while 72 (24.1%) strongly agreeing. Meanwhile, 10 (7.8%) of respondents disagreeing and 20 (14.9%) remained neutral. This implies that product turnover was faster since distribution is done intensively to reach every market corner, hence improving performance of sugar firms.

As for the company sugar product is the most dominant in the market, with moderate Mean = 3.72 leaning close to the neutral. Most respondents 62 (46.1%) agreed that the company sugar product is the most dominant in the market; while 29 (22.0%) strongly agreeing. Meanwhile, 16 (12.1%) of respondents disagreeing; and 4 (2.8%) strongly disagreeing that the company sugar product is the most dominant in the market; and the rest 23(17.0%) remained neutral. Cumulatively, whereas 66.1% of participants agreed that the company sugar product is the most dominant in the market, 14.9% disagree. This shows that there are some of the sugar firms whose sugar products are dominant thus improving performance of sugar Milling Companies.

Generally, Intensive Strategy was found to influence performance of sugar Milling Companies (Mean = 3.878 ± 0.946). Composite mean was estimated at four (4) signifying general consensus. Full scale implementation of intensive strategy assures performance of sugar Milling Companies.

Similarly, Ifeanyi, Ezenyilimba and Aghara (2018) and Mbithi, Muturi and Rambo (2015) were in concurrence that Intensive distribution strategy guarantees accessibility of commodities, availability to consumers and secures as many outlets as possible which limits external distributors from accessing a firm's consumer base. The higher the brand distribution

intensity, the lower the firm's control on performance of members of the channel which can jeopardize the image of the brand and competitive position. Meanwhile, underpricing, lower margin attracts more customers culminating into high turnover.

#### 4.8.2 Relationship between Intensive Strategy and Performance of Sugar Milling Companies

Pearson Correlation was done to establish the relationship between Intensive Strategy and Performance of Sugar Milling Companies at an equidistant Likert scale of strongly disagree=1 (1<SD>0.8); Agree=2 (1.8<A>2.6); Neutral=3 (2.6<N>3.4); Agree=4 (3.4<A>4.2) and Strongly Agree=5 (4.2<SA>5) as shown in Table 4.16.

**Table 4.1: Relationship between Intensive Strategy and Performance of Sugar Milling Companies**

		Intensive Strategy	Performance of Sugar Milling Companies
Intensive Strategy	Pearson Correlation	1	.439**
	Sig. (2-tailed)		.000
	N	134	134
Performance of Sugar Millers	Pearson Correlation	.439**	1
	Sig. (2-tailed)	.000	
	N	134	134

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Author (2022)

Results of correlation in Table 4.16 shows a moderate positive correlation ( $R = 0.439$ ) existing between Intensive Strategy and Performance of Sugar Milling Companies statistically significant ( $p = 0.000$ ,  $p < 0.05$ ), indicating that Intensive Strategy and Performance of Sugar Milling Companies are statistically; moderately and positively correlated to the extent that as Exclusive Strategy accelerates, Performance of Sugar Millers improves marginally. Ifeanyi, Ezenyilimba and Aghara (2018) indicated that intensive distribution has significant influence on performance of firms. Intensive distribution strategy, is geared towards obtaining maximum exposure of commodities at retailer level or wholesaler level. Consumers at the final end of chain; will not go out to purchase products or will voluntarily accept substitutes, when the brand is not accessible. The most ideal approach is to saturate every suitable retail outlet with the brand.

### 4.8.3 Influence of Intensive Strategy on Performance of Sugar Milling Companies

The study confirmed linear regression between Intensive Strategy and Performance of Sugar Milling Companies. Regression output is shown in Table 4.17.

**Table 4.1: Influence of Intensive Strategy on Performance of Sugar Milling Companies**

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
Summary	.439 <sup>a</sup>	.193	.187		4.274	
Model	Sum of Squares		df	Mean Square	F	Sig.
ANOVA	Regression	607.473	1	607.473	33.257	.000 <sup>b</sup>
	Residual	2538.995	132	18.266		
	Total	3146.468	133			
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta		
Coefficients	(Constant)	4.495	1.929		2.330	.021
	Intensive Strategy	.564	.098	.439	5.767	.000

a. Dependent Variable: Performance of Sugar Millers

b. Predictors: (Constant), Intensive Strategy

Source: Author (2022)

In the output of Table 4.17, model summary gives a R<sup>2</sup> value = 0.193 with p=0.000<0.05; indicating that Intensive Strategy accounted for 19.3% of Performance of Sugar Millers. The model was appropriate for the data and variables where F (1, 139) = 32.257 (p = 0.000<0.05). The coefficient of Intensive Strategy ( $\beta = 0.564$ , p = 0.000<0.05) was significant statistically, hence a unit variation in Intensive Strategy enhances Performance of Sugar Milling Companies by 0.564 units.

The Linear regression model was:

$$Y = 4.495 + 0.564X_4$$

### 4.8.4 Test for Hypothesis Four

Hypothesis four was stated in the null and tested as:

H<sub>04</sub>: There is no significant influence between Intensive Strategy and Performance of Sugar Milling Companies.

The null hypothesis was tested at 95% confidence level as H<sub>04</sub>:  $\beta_0 = \beta_4 = 0$  (p = 0.05). The null hypothesis was to be accepted when p > 0.05 (There is no significant difference) and rejected when p ≤ 0.05 (There is significant difference) between the coefficient of the constant term and the coefficient of the predictor. Since the results showed that  $\beta_0 \neq \beta_4 \neq 0$  (p < 0.05), null hypothesis was rejected and alternative accepted. Thus, there is a significant influence between Intensive Strategy and Performance of Sugar Milling Companies. Thus, the four (4) Distribution Strategies significantly contribute to the Performance of Sugar Milling Companies.

#### 4.9 Objective five: To investigate the combined influence of Distribution Strategies on Performance of Sugar Milling Companies

Under performance of sugar Milling Companies, the factors investigated by this study do not work in isolation but simultaneously in a system. Therefore, their contribution or effect on implementation cannot be single but combined effect. Thus, the researcher analyzed, through regression, the consolidated effect of distribution strategies on performance of sugar Milling Companies. This was achieved through multiple regression with direct strategy, indirect strategy, exclusive strategy and intensive strategy as the predictor variables and performance being variable output. Table 4.18 represents regression output:-

**Table 4.1: Influence of Distribution Strategies on Performance of Sugar Milling Companies**

Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate		
Model	.565 <sup>a</sup>	.320	.300	3.968		
ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Model	Regression	1005.672	4	251.418	15.972	.000 <sup>b</sup>
	Residual	2140.796	136	15.741		
	Total	3146.468	140			
Coefficients		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Model	(Constant)	-.727	2.617		-.278	.782
	Direct Strategy	.498	.152	.307	3.279	.001
	Indirect Strategy	-.143	.113	-.099	-1.263	.209
	Exclusive Strategy	.394	.157	.217	2.514	.013
	Intensive Strategy	.258	.113	.201	2.289	.024

a. Dependent Variable: Performance of Sugar Milling Companies

b. Predictors: (Constant), Direct Strategy, Indirect Strategy, Exclusive Strategy, Intensive Strategy

Source: Author (2022)

According to Table 4.18, summary of the model gives a  $R^2$  value = 0.320 with  $p = 0.000$ , indicating that Distribution Strategies account for 32.0% of performance of sugar Milling Companies. The model was found appropriate for data and variables with  $F(4, 136) = 15.972$  ( $p = 0.000$ ). Coefficient of constant term ( $B = -0.727$ ,  $p = 0.782$ ) and the coefficient of Indirect Strategy ( $B = -0.143$ ,  $p = 0.209$ ) were not significant statistically as  $p > 0.05$ . The coefficient of Direct Strategy ( $B = 0.498$ ,  $p = 0.001$ ), coefficient of Exclusive Strategy ( $B = 0.394$ ,  $p = 0.013$ ) and coefficient of Intensive Strategy ( $B = 0.258$ ,  $p = 0.024$ ) were significant statistically hence inclusion in the model. Variables can be modeled using the equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;  $\beta_0$  is coefficient of constant term,  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  were the coefficients of the predictors while  $X_1, X_2, X_3$  and  $X_4$  were the predictors (Direct Strategy, Indirect Strategy,

Exclusive Strategy and Intensive Strategy) and  $\varepsilon$  is the error term, hence substituting coefficients, the equation becomes:

$$Y = 0.498X_1 + 0.394X_3 + 0.258X_4$$

The four (4) Distribution Strategy significantly contribute to the performance of sugar Milling Companies. Implementation of multiple approaches improves performance, than using a single practice approach.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The chapter illustrates results summary of the main study findings, conclusion made and policy recommendation for practitioners and decision makers. The chapter illustration is anchored upon the following objectives: assessment of influence of direct Strategy on Performance of Sugar Milling Companies; establish influence of Indirect Strategy on Performance of Sugar Milling Companies; establish influence of Exclusive Strategy and Performance of Sugar Milling Companies and; assess the influence of Intensive Strategy and Performance of Sugar Milling Companies. The chapter provides proposals for further studies to be conducted.

#### 5.2 Summary of Findings

##### 5.2.1 Performance of Sugar Millers

Performance of Sugar Milling Companies in Kisumu, Kenya was averagely above (Mean=3.89). Specifically, 48% of respondents agreeing that Company has been experiencing an increasing profitability in the last 2 years, 84.7% of the respondents agreed that there was prompt delivery of sugar into the market. Further, the company experiences quarterly increase in sales turn-over rates at above average (73.2%) and slightly below average, and 48.5% agreed that the respondents were highly skeptical of the company's sugar being the most preferred in the market was relatively high (91.9%). The participants' view were generally above average as to whether sugar Milling Companies performed.

##### 5.2.2 Objective one: To assess the influence of direct strategy on performance of sugar milling companies

On this objective the study established that the delivery of sugar is always done in time (Mean = 3.98) respondents agreeing. Similarly, level in handling sugar on transit assures quality (Mean = 4.13) as well as the activities involved in the distribution of sugar are expensive (Mean = 3.83). However, the commonly used sugar supplies carriage mode is generally accessible and was below average (Mean = 3.35). The overall findings showed that direct Distribution Strategy influenced Performance of Sugar Milling Companies. The study determined positively moderate correlation ( $R=0.493$ ) between direct Strategy and Performance of Sugar Milling Companies hence significantly statistical and direct Strategy represents 24.3% of Sugar Milling Companies Performance.

### **5.2.3 Objective two: To investigate the influence of indirect strategy on performance of sugar milling companies**

On this objective the study established that the more the distribution points the higher the supply cost (Mean = 4.08) as depicted by 82.2% of respondents agreed. On other hand, commonly experienced sugar hoarding are due to collusion between distribution dealers along the supply chain (Mean = 4.01) which strongly influenced Performance of Sugar Milling Companies as well as the level of restriction in re-branding of sugar on transit affecting the quality of the final delivery (Mean = 3.87). Similar findings on whether sugar supplies with unrestricted unit packaging attracts more sales (Mean = 3.89). The study established a weak correlation positively ( $R = 0.157$ ) between Indirect Strategy and Performance of Sugar Milling Companies significant statistically ( $p = 0.004$ ,  $p < 0.05$ ) with Indirect Strategy covering 2.5% of Performance of Sugar Milling Companies.

### **5.2.4 Objective three: To assess the influence of exclusive strategy on performance of Sugar Milling Companies**

On this objective, the researcher established that there is nepotism in contracting sugar dealers by most sugar millers for performance of sugar Milling Companies (Mean = 3.94), there is a clear pricing control on sugar products (Mean = 4.26), the product consumption frequency increases with exclusive distribution strategy (Mean=3.94) and there are some sugar products that requires special distribution form (Mean = 4.11) influence Performance of Sugar Milling Companies to a greater extent. Overall, Exclusive Strategy influence Performance of Sugar Milling Companies with (composite mean = 4.02; Standard Deviation = 0.922), indicating that respondents overally agreeing that Exclusive Distribution Strategy influenced Performance of Sugar Milling Companies. The study discovered moderately positive correlation ( $R = 0.440$ ) between Exclusive Strategy and Performance of Sugar Millers with Exclusive Strategy accounting for 19.3% of Performance of Sugar Milling Companies.

### **5.2.5 Objective four: To investigate the influence of intensive strategy on Performance of Sugar Milling Companies**

On objective four the study established that there are various sugar distribution stages exploited by the company (Mean = 3.89), there is well structured feedback collection mechanism in place (Mean = 3.94), there is fast product turnover (Mean = 3.94) and that the company sugar product is the most dominant in the market (Mean = 3.90) influence Performance of Sugar Milling Companies. Intensive Distribution Strategy was discovered to influence Performance of Sugar Milling Companies with (Mean =  $3.878 \pm 0.946$ ), establishing positively moderate correlation

( $R = 0.439$ ) between Intensive Strategy and Performance of Sugar Milling Companies and that Intensive Strategy accounts for 19.3% of Performance of Sugar Milling Companies.

### **5.2.6 Objective five: To investigate the combined influence of distribution strategies on Performance of Sugar Milling Companies**

On objective five the study established that distribution strategies influenced performance of sugar Milling Companies with positive correlation ( $R=0.565$ ) between distribution strategies and performance of sugar Milling Companies, hence distribution strategy accounts for 32.0% of performance of sugar Milling Companies. The coefficient of constant term ( $B = -0.727$ ,  $p = 0.782$ ) and coefficient of Indirect Strategy ( $B = -0.143$ ,  $p = 0.209$ ) were not significantly statistical as  $p > 0.05$ , thus not composed as part of the model overall. Coefficient of Direct Strategy ( $B = 0.498$ ,  $p = 0.001$ ), coefficient of Exclusive Strategy ( $B = 0.394$ ,  $p = 0.013$ ) and coefficient of Intensive Strategy ( $B = 0.258$ ,  $p = 0.024$ ) were significantly statistically included in the model. Linearly illustrated,  $Y = 0.498X_1 + 0.394X_3 + 0.258X_4$

Thus, the four Distribution Strategy significantly contributed to the performance of sugar Milling Companies. Multiple practice, simultaneously improves the performance compared to single practice approach.

## **5.3 Conclusion**

Under listed constitutes a summary based on study findings:-

### **5.3.1 Performance of Sugar Milling Companies**

On Performance of Sugar Milling Companies, the study concludes that profitability has been average, delivery of sugar into the market is prompt, sales turn-over rates is high and sugar brand preference was average. Performance of Sugar Milling Companies is moderately effective. Thus, the overall performance of sugar Milling Companies in Kisumu County is moderate.

### **5.3.2 Objective one: To assess the influence of Direct Strategy on Performance of Sugar Milling Companies**

On this objective the study concludes that the delivery of sugar is always done in time, the level of handling sugar on transit assures quality, and the activities involved in the distribution of sugar are expensive. However, the commonly used sugar supplies carriage mode is generally accessible and had negated effect on Sugar Milling Companies Performance. Generally outcome indicated that direct strategy influence Performance of Sugar Milling Companies.

Therefore, there is strong positive relationship between direct Strategy and Sugar Milling Companies Performance.

### **5.3.3 Objective two: To investigate the influence of Indirect Strategy on Performance of Sugar Milling Companies**

On this objective the study concludes that the more the distribution points the higher the supply cost. However, in moderate terms the commonly experienced sugar hoarding are due to collusion between distribution dealers along the supply chain, the level of restriction in re-branding of sugar on transit affecting the quality of the final delivery as well as the sugar supplies with unrestricted unit packaging attracts more sales. In general indirect strategy had significant weak positive influence on Performance of Sugar Milling Companies.

### **5.3.4 Objective three: To assess the influence of Exclusive Strategy on Performance of Sugar Milling Companies**

On this objective the study concluded that there is nepotism in contracting sugar dealers by most sugar millers for performance of sugar Milling Companies; there is a clear pricing control on sugar products, the product consumption frequency increases with exclusive distribution strategy, and there are some sugar products that require special distribution form. Overall, Exclusive Strategy significantly influences Performance of Sugar Milling Companies.

### **5.3.5 Objective four: To investigate the influence of Intensive Strategy on Performance of Sugar Milling Companies**

On this objective the study concludes that there are various sugar distribution stages exploited by the company, there is well structured feedback collection mechanism in place, there is fast product turnover and that the company sugar product is the most dominant in the market. Overall, Intensive Strategy was found to significantly influence Performance of Sugar Milling Companies.

### **5.3.6 Objective five: To investigate the combined influence of Distribution Strategies on Performance of Sugar Milling Companies**

On this objective the study concludes that direct, exclusive and intensive strategies have significant influence on performance of sugar Milling Companies while indirect strategy has a weak influence on performance of sugar Milling Companies. Thus, indirect strategy should be abolished while direct, exclusive and intensive strategies should be applied based on market systems of demand and supply and customers geographical distribution.

## **5.4 Recommendations**

The study recommended the following for performance of sugar Milling Companies:-

### **5.4.1 Objective one: To assess the influence of Direct Strategy on Performance of Sugar Milling Companies**

Based on the findings of the study, it is recommended that Direct Strategy should be exercised in markets where there are no intermediaries by establishing Milling Companies depots to improve on sales share and brand publicity.

### **5.4.2 Objective two: To investigate the influence of Indirect Strategy on Performance of Sugar Milling Companies**

Based on the findings of the study, it is recommended that Indirect Strategy should be cautiously applied to areas where intermediaries exist to offload the company of the storage expenses and improve the market share social networks for a comprehensive feedback for action and improvement of performance.

### **5.4.3 Objective three: To assess the influence of Exclusive Strategy on Performance of Sugar Milling Companies**

Based on the findings of the study, it is recommended that Exclusive Strategy should be exercised in areas where the financial masculinity of the intermediary has been proven to be strong enough to undertake further redistribution without hiccups.

### **5.4.4 Objective four: To investigate the influence of Intensive Strategy on Performance of Sugar Milling Companies**

Based on the findings of the study, it is recommended that Intensive Strategy should be applied in areas where there is intensive competition from rivals that a bigger market chunk is retained by the miller.

### **5.4.5 Objective five: To Investigate the combined influence of Distribution Strategies on Performance of Sugar Milling Companies**

Based on the findings of the study, it is recommended that the distribution strategies should be implemented simultaneously based on the intermediary strength, strength of the competitors, and geographical distribution of customers and market share of the miller.

## **5.5 Suggestions for Further Studies**

The study presented influence of four (4) Distribution Strategies on Performance of Sugar Milling Companies. The researcher proposes that scholars should explore and carry out more

study through use of other Distribution Strategies which are not included in four variables, for assessment of influence on Performance of Sugar Milling Companies. Meanwhile, other case studies not limited to sugar millers should be used for verification of other findings.

### **5.6 New Knowledge**

The overall findings showed that direct Distribution Strategy influenced Performance of Sugar Milling Companies. The study established a weak correlation positively ( $R = 0.157$ ) between Indirect Strategy and Performance of Sugar Milling Companies. Exclusive Distribution Strategy influenced Performance of Sugar Milling Companies. Intensive Distribution Strategy was discovered to influence Performance of Sugar Milling Companies

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## **APPENDICES**

### **Appendix I: Letter of transmittal**

**PATRICK LUMUMBA ODEK**

**P.O.BOX 3025-40100, Kisumu**

**E-mail: Patrick\_odek@yahoo.com**

**0722709114**

**Date**

**TO WHOM IT MAY CONCERN**

I am a Masters student at Jaramogi Oginga Odinga University of Science and Technology. As part of the requirement of the Master's degree in Logistics Supply Chain Management, I am conducting research as a prerequisite for the course in project planning and management on influence of Distribution Strategies on Performance of Sugar Milling Companies in Kisumu County, Kenya this will lead to suggestions on appropriate mechanisms of enhancing Distribution Strategies within the scope of Sugar Milling Companies in Kisumu County, Kenya to ensure projects are implemented within cost, time schedule, within quality and with client satisfaction.

To enable me collect data for the research, you have been selected as one of the participants of the study. Kindly complete the data collection instruments such as the questionnaire and interview guide attached. The research is for academic purpose only and thus your identity will be kept confidential. You are requested to give your response as honestly as possible.

Thank you in advance for participating in this research.

Yours Sincerely,

Patrick Lumumba Odek



Student, School of Business and Economics

Department of Logistic and Supply Chain Management

Jaramogi Oginga Odinga University of Science and Technology

## Appendix II: Questionnaire for Respondents

This questionnaire attempts to ask questions related to Distribution Strategies and Performance of Sugar Milling Companies in Kisumu County, Kenya. Kindly answer the questions as honestly as possible. The instructions and room for responses are provided besides the questions. This questionnaire attempts to ask questions related to Distribution Strategies and Performance of Sugar Milling Companies in Kisumu County, Kenya. Kindly answer the questions as honestly as possible. The instructions and room for responses are provided besides the questions.

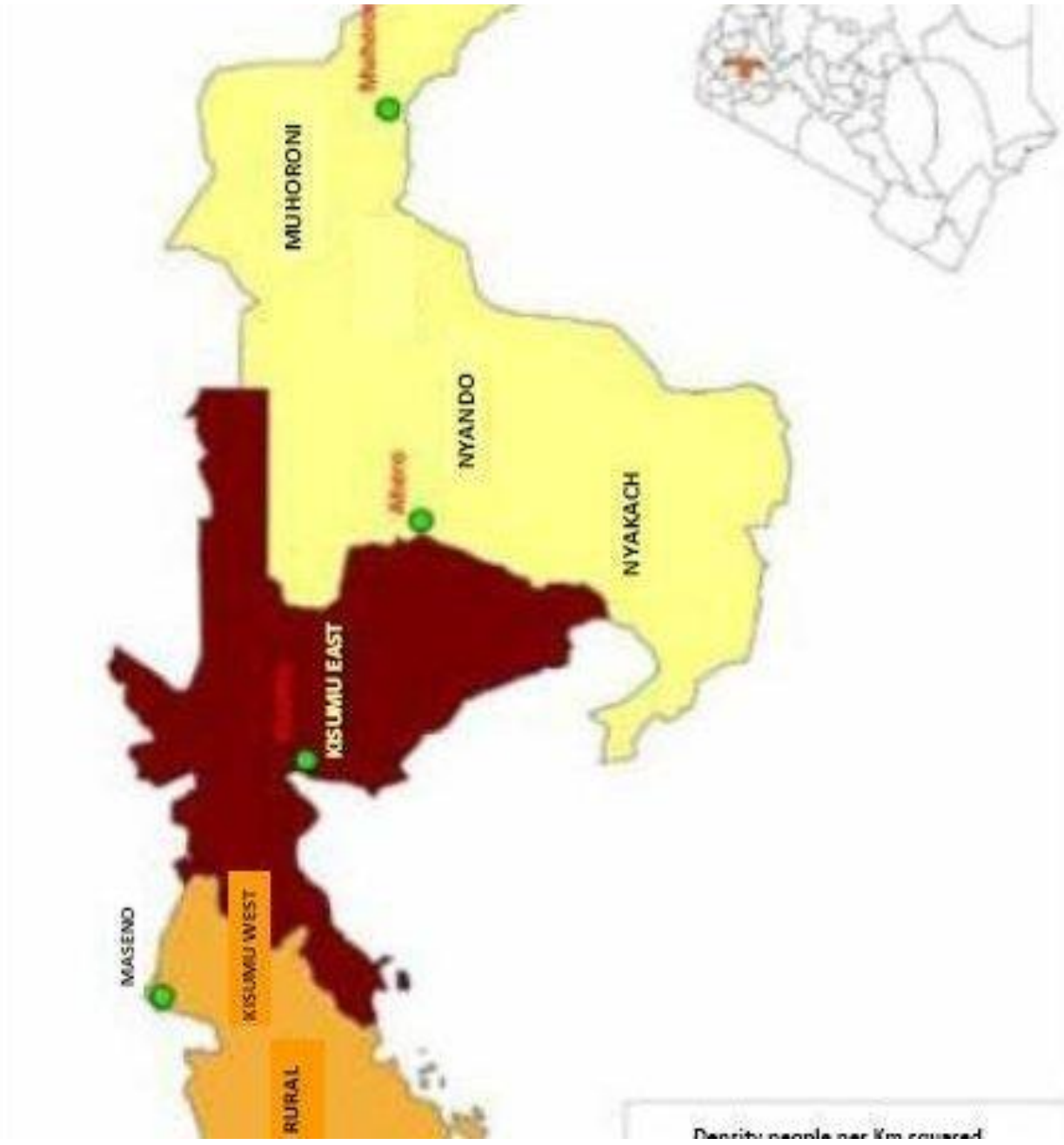
		RESPONSES		
No.	QUESTIONS			INSTRUCTIONS
<b>1.0</b>		<b>Demographic Characteristics of Respondents</b>		
1.1	Date of interview			DD/MM/YY
1.2	Age	29 years and below		Tick as appropriate
		Between 30 and 39		
		Between 40 and 49		
		Over 50 years		
1.3	Gender	1. Male		Tick as appropriate
		2. Female		
1.4	Year of professional experience	4 years and below		Tick as appropriate
		Between 5-10 years		
		Above 10 years		
1.5	Respondents education level	Diploma holder		Tick as appropriate
		Bachelor's degree		
		Master's degree		

**To what extent do you agree with the following statements? Please indicate your answer using the following 5-point scale where:**

1. = Strongly Disagree (SD); 2. = Disagree; 3. = Neutral; 4. Agree (A); 5. Strongly Agree (SA)

<b>2.0</b>	<b>SECTION A: Direct Strategy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
2.1	Delivery of sugar supplies is always not done in time					
2.2	The level of handling of sugar on transit assures quality					
2.3	The activities involved in the distribution of sugar are expensive					
2.4	The commonly used sugar supplies carriage mode is generally accessible and acceptable					
<b>3.0</b>	<b>SECTION B: Indirect Strategy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
3.1	The more the distribution points the higher the sugar supply costs					
3.2	Commonly experienced sugar hoardings are not necessarily caused by collusion between distribution dealers along supply chain					
3.3	The level of restrictions on rebranding of sugar on transit does not necessarily affect the quality of the final delivery					
3.4	Sugar supplies with unrestricted unit packaging attracts more sales					
<b>3.0</b>	<b>SECTION C: Exclusive Strategy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
3.1	There is nepotism in contracting sugar dealers by most sugar millers					
3.2	There is no clear pricing control on sugar products					
3.3	Bicycle carrier distributions cannot access gated communities					
3.4	There are some sugar product forms that cannot be distributed anyhow					
<b>4.0</b>	<b>SECTION D: Intensive Strategy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
4.1	There are various sugar distribution stages exploited by the company					
4.2	There is well structured feedback collection mechanism in place					
4.3	There is fast product turnover rate					
4.4	Our product is the most dominant in the market					
<b>5.0</b>	<b>SECTION E: Performance of Sugar Milling Companies</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
5.1	The company has been experiencing an increasing profitability in the last 2 years					
5.2	There is prompt delivery of sugar into the market					
5.3	The company experiences quarterly increase in sales turn-over rates					
5.4	The company's sugar is the most preferred in the market					

**Appendix III: Map of Kisumu County**



#### **Appendix IV: Sugar Milling Companies in Kisumu County**

<b>Sugar Factory</b>	<b>Sub-County</b>
Kibos Sugar and Allied Industries Ltd	<b>Kisumu East</b>
Chemelil Sugar Company	<b>Muhoroni</b>
Muhoroni Sugar Company	<b>Muhoroni</b>

## Appendix V: Research Approval



**JARAMOGI OGINGA ODINGA  
UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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OUR REF: JOOUST/DVC-RIO/ERC/E3

23<sup>rd</sup> November, 2021

Patrick Lumumba Odek  
B152/4030/2020  
SBE  
JOOUST

Dear Mr. Odek,

**RE: APPROVAL TO CONDUCT RESEARCH TITLED "DISTRIBUTION STRATEGIES AND PERFORMANCE OF SUGAR MILLERS IN KISUMU COUNTY, KENYA"**

This is to inform you that JOOUST ERC has reviewed and approved your above research proposal. Your application approval number is **ERC/17/11/21-08**. The approval period is from 23<sup>rd</sup> November, 2021 – 22<sup>nd</sup> November, 2022.

This approval is subject to compliance with the following requirements:

- viii. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ix. All changes including (amendments, deviations and violations) are submitted for review and approval by JOOUST IERC.
- x. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to NACOSTI IERC within 72 hours of notification.
- xi. Any changes, anticipated or otherwise that may increase the risks of affected safety or welfare of study participants and others or affect the integrity of the research must be reported to NACOSTI IERC within 72 hours.
- xii. Clearance for export of biological specimens must be obtained from relevant institutions.
- xiii. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- xiv. Submission of an executive summary report within 90 days upon completion of the study to JOOUST IERC.

Prior to commencing your study, you will be expected to obtain a research permit from National Commission for Science, Technology and Innovation (NACOSTI) <https://rcis.nacosti.go.ke> and also obtain other clearances needed.


Yours sincerely,


for

Prof. Francis Anga'wa  
Chairman, JOOUST ERC

Copy to: Deputy Vice-Chancellor, RIO    Director, BPS    Dean, SBE


Appendix VI. NACOSTI

  
REPUBLIC OF KENYA

  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

RefNo: 160788 Date of Issue: 14/February/2022

**RESEARCH LICENSE**




**This is to Certify that Mr. Patrick Lumumba Odek of Jaramogi Oginga Odinga University of Science and Technology, has been licensed to conduct research in Kisumu on the topic: DISTRIBUTION STRATEGIES AND PERFORMANCE OF SUGAR MILLERS IN KISUMU COUNTY, KENYA for the period ending : 14/February/2023.**


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