

**INFLUENCE OF DISTRIBUTION LOGISTICS ON PERFORMANCE OF SOFT  
DRINKS MANUFACTURING FIRMS IN KENYA: A CASE OF NAIROBI BOTTLERS  
COMPANY LIMITED, NAIROBI COUNTY**


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Award of Master of Business Degree in the School of Business Administration of Africa  
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**JUNE, 2022**

**DECLARATION****Student's Declaration**


I declare that this research project is my original work and has not been presented in any other learning institution for academic credit.

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## **DEDICATION**

I dedicate this research project to my immediate family members for their love, patience, support, encouragement and perseverance during the entire duration of undertaking this course, I am really grateful the way they have supported me in this journey.

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## ABSTRACT

Growth of a business sometimes complicates the process of moving products from manufacturers to customers. Business organizations must confront the issue of how to effectively optimize distribution logistics to meet customer demands. Most companies are recognizing that distribution strategy must be robust enough to handle current demand, while remaining flexible enough to react to changing market conditions and minimize business risk. The purpose of this study was to find out the influence of distribution logistics on performance of soft drink manufacturing firms in Kenya. The study's specific objectives were to establish the influence of nature of product, distribution structure, organizational resources and industry competitiveness on performance of soft drinks in Nairobi Bottlers Company, Nairobi County. The study was anchored on four theories; resource-based view theory, agency theory, theory of performance and systems theory. The study adopted descriptive survey design to examine the relationship between the independent and dependent variables. Target population was 2345 people who include distribution department, whole sellers as well as retailers in the company. The study used stratified sampling technique to select groups of its subjects. Simple random sampling method was then used to select a sample size of 341 respondents. A pilot test was conducted to ensure validity and reliability of the data collection instrument. Data analysis was done using descriptive as well as inferential statistics. This was done via Statistical Package for Social Sciences (SPSS). The findings revealed coefficient of determination (R squared) of 0.771 at 95% significance level, implying that nature of product, distribution structure, organizational resources and industry competitiveness jointly explains 77.1 percent of the variation in the performance of Nairobi Bottlers in Kenya. The findings also revealed that nature of product had a positive and significant influence on the performance of Nairobi Bottlers in Kenya ( $\beta = .382$ ,  $p = .000 < .05$ ); distribution structure had a positive and significant influence on the performance of Nairobi Bottlers in Kenya ( $\beta = .191$ ,  $p = .000 < .05$ ); organizational resources had a positive and significant influence on the performance of Nairobi Bottlers in Kenya ( $\beta = .103$ ,  $p = .000 < .05$ ) and industry competitiveness had a positive and significant influence on the performance of Nairobi Bottlers in Kenya ( $\beta = .206$ ,  $p = .000 < .05$ ). The study concludes that distribution logistics positive and significant influence on the performance of soft drink firms with focus on Nairobi Bottlers in Kenya. The study recommends that soft drinks firms should ensure that their production have to incorporate the various aspects which enables a product to attract consumers during production. This is to enhance competitiveness of the industry. Organizational resources has to be increased by the Nairobi bottlers has restructure their distribution systems which include distribution structure as well as organizational resources as market for their products is expanding day in day out.

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## ACRONYMS

<b>QCD</b>	Quality-Cost Delivery
<b>US</b>	United States
<b>RBV</b>	Resource Based View

## DEFINITION OF TERMS

<b>Distribution Channels</b>	This was used to mean a chain of business through which goods and services pass until it reaches the final buyer; these include wholesalers, distributors, retailers and the internet
<b>Industry</b>	This was used to refer to the sustained ability of Nairobi bottlers to capture market share and grow the market through productivity improvements along distribution channels, this allows an industry to maintain and improve its position in the global market.
<b>Competitiveness</b>	
<b>Logistics</b>	This was used in this study to refer to the process of coordinating and moving resources which include people materials, inventory and equipment.
<b>Nature of Product</b>	Adopted to mean the process of classification of product and services considering its various attributes like tangible or intangible.
<b>Organizational Resource</b>	This was used in this study to mean all assets that an organization has available to use in the in the production process.
<b>Performance</b>	This was used in this study to refer to the achievement of the Nairobi bottlers in relation with its set objectives and this includes all outcomes achieved.
<b>Soft Drinks</b>	This was used in this study to mean a drink that usually contains carbonated water, a sweetener and a natural or artificial flavoring.

## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.1 Introduction

This chapter presents background information on the influence of distribution logistics on performance of soft drinks in Kenya. The section discusses background of the study, statement of the problem, research objectives, research questions, and significance of the study, the chapter also describes the scope, limitations and delimitations of the study and finally comes up with a conceptual framework.

#### 1.2 Background of the Study

Businesses across the world today have been faced with the challenges of unpredictable distribution costs which are known to build on distribution logistics vulnerabilities. Lee, Hu, Lee, Feng and Notteboom (2022) argue that the application of logistics enables greater efficiency of movements with an appropriate choice of modes, terminals, routes, and scheduling. The implied purpose of logistics is to make available goods, raw materials, and commodities, fulfilling four major requirements related to order, delivery, quality, and cost fulfillment (Pawar, Kolte, Sangvikar & Jain, 2021). Logistics is thus a multidimensional value-added activity, including production, location, time, and control of elements of the supply chain.

Distribution logistics functions make important paradigm shifts of modern business management where individual businesses no longer compete independently but succeed within other existing distribution strategies (Tien, Anh & Thuc, 2019). Businesses today are operating on a competitive environment where the ultimate success of the business is dependent on management's ability to integrate the company's business network relationships. The competitiveness of distribution

logistics is determined by several factors such as nature of product, distribution logistics structure, organizational resources and industry competitiveness (Parvin, Asimiran & Ayub, 2021).

In Ghana, logistics distribution management in the field of the construction industry has become an issue of concern which needs to be focused on in order to ensure effective, successful and timely execution of projects in the construction industry (Appiah, 2021). Distribution logistics practices in the country have been proofed to affect performance especially in Kasapreko Company Limited where its supply chain has been found to minimize the company's system wise costs at the same time satisfying customer service level requirements as projected by the company (Adegoke, Mingbao, Abredu, Ndafira, Amoateng & Owusu-Gyan, 2021). The existing distribution logistics in the company has a customer oriented process which integrates business planning and at the same time balances the supply and demand across the entire value chain system. Production companies apply distribution logistics process to its business activities to influence their performance in terms of sales (Adegoke et al., 2021).

The soft drink industry is one of the very competitive industries in the market (Angira, 2021). Kenya has both local and multinational soft drink companies thus making it one of the very competitive industries. The soft drink industry is classified into; the carbonated soft drinks, the ready to drink juices and the mineral water. In Kenya the soft drink industry consists of Coca cola Kenya which has six strategically located bottling companies in the country (Company's Global Financial Report, 2019). The major brands of coca cola Kenya and to be specific (Nairobi bottlers) are Coke, Fanta, Sprite, Krest, Stoney and Dasani with Coke being their flagship brand. Coca-Cola originated as a soda fountain beverage in 1886 selling for five cents a glass. Early growth was impressive, but it was only when a strong bottling system developed that Nairobi bottlers



became the world-famous brand it is today. It was however until 1948 that the Nairobi bottlers Company founded Nairobi Bottlers in Kenya.

Distribution logistics firms have over the years become important specifically in their role in logistics operations in production firms (Raihan, Ali, Roy, Das, Kabir & Paul, 2022). A strong distribution logistics is fundamental as it provides a competitive edge over competitors by providing customers with a higher level of order accuracy in a shorter period of time. It also ensures the right amount of raw materials is available to produce the right amount of finished products available at the right time for sale to customers (Raihan et al., 2022). Reliable distribution logistics ensure good tracking of inventory and monitoring of transportation as well as coordinated storage so as to meet firm's needs. Control of the flow of products from the point of production to the final shipment is important and ensures the desired level of customer satisfaction. Firms therefore see distribution logistics management as one that is influenced more each day through technological advancement already available. This has brought about enormous pressure to the performance of many production firms across countries (Panya & Marendi, 2021).

Parfenov, Shamina, Niu and Yadykin (2021) opine that there are factors which aid the product down the distribution logistics chain to the next destination before it finally reaches the consumer. This process is known as the distribution logistics. Each of the elements in the distribution logistics has its own specific needs, which the producer must take into account, along with those of the all-important end user (Choudhury, Behl, Sheorey & Pal, 2021). A number of these factors include: Nature of the firm's product/service, nature of the firm's organizational resources, industry competitiveness and the firm's distribution structure to mention but a few.

### **1.2.1 Nature of Product**

A functioning distribution determines the efficiency and movement of products from place of production to the end users, this is coupled with techniques and principles of management which are meant to improve distribution speed (Xiong, 2021). According to Bobokhodjaev (2021), logistics is the process of planning, implementing efficient control, with effective cost and effective distribution of products from point of origin to the end user, with the main aim of satisfying customer requirements. The system of distribution logistics is focused on overcoming the barriers in space and time, from transportation and storage, the delivery of goods and services to the end user.

The nature of product has the ability to affect performance of distribution logistics within companies (Xiong, 2021). The various aspects of the product may enhance or diminish the ability of distribution logistics to meet customer expectations. These aspects include shape, unitization of product, weight of product as well as product range, product perishability and form of product. Product shape and weight affects vehicle capacity unitization plus equipment required for its handling during distribution process. Light products are easier for human handling during loading and offloading of delivery trucks.

According to Senthil and Muthukannan (2021), unitization of products pertains to the batches in which a product is packaged. For units distributed to the customers in homogeneous packages, the time required for the verification of the quantities dispatched or received is much easier. This in turn reduces the delivery time as picking, order assembly and dispatch time is reduced. This again reduces exposure to destruction of goods in transit (Gupta, 2021)

Product perishability relates to how quick that same product retains or losses its quality (Cao & He, 2021). Easily perishable products require specialized handling during the storage and transportation process which may increase the cost of distribution as well as destruction of the product (Burke, Zhang & Wang, 2021). Product range on the other hand is the number of differentiated products available for distribution to customers. The range of a product may also have an influence on the performance of production companies as it affects time required for material handling which involves receiving, stacking, picking, order assembly and even dispatch (Burke, Zhang & Wang, 2021). The form of a product pertains to the state in which the product appears, such as solid, liquid or gas form. The form of a product has several aspects which also influence performance of production companies. Product form is sometimes subject to specialized handling when loading, off-loading and even storage as form (Choi, Narayanan, Novak, Olhager, Sheu & Wiengarten, 2021).

### **1.2.2 Organizational Resources**

Currently, a number of production companies are embracing the concept of integrated management logistics (Choi, Narayanan, Novak, Olhager, Sheu & Wiengarten, 2021). According to Leonidou (2013), the concept of integrated management logistics provides the best service for customers, hence lowering the cost of distribution companies require to deliver goods and services to customers. Within production firms, various segments have to closely work together to maximize the performance of the company's distribution logistics (Choi et al., 2021). According to Savin (2021), a firm's resources can be classified as tangible, intangible or a combination of the two. Tangible resources include financial as well as physical resources. Intangible resources include employee's knowledge, experiences and skills as well as firm's reputation, brand name and organizational procedures.

According to Wu and Yang (2021) the success of resource cooperation in organizations hinges crucially on their ability to achieve superior for performance. Cooperation of organizational resources must always remain competitive, as well as relevantly so as to provide dynamic operations and deploy competitive advantage strategies (Mazaraki, Prisyaznyuk, Bai & Drozdova, 2021). It is important to note that in outside, production companies need to integrate their distribution logistics systems with the one of their suppliers and clients so as to maximize the performance of their entire distribution channel. Integrated distribution systems is a discipline of the unified management of distribution systems that plans and implements the logistical support for production companies that provide quality of product towards trust and availability (Mazaraki et al., 2021).

According to Saruchera and Asante-Darko (2021), a firm's reputation, culture, knowledge and managerial skills can lead to improved distribution logistics. Reputation has been classified as a strategic intangible resource which accrues as an asset through three stages they identify as awareness, assessment and consolidation. The totality of this assessment yields the image which the organization becomes associated with as it improves the firm's performance. It important to note that when an organization's reputation is good, then that firm has a reputational asset. Cultivating a strong reputation is a necessary foundation for today's firms that intend to beat competition, enhance their market outlook and improve financial performance (Saruchera & Asante-Darko, 2021).

### **1.2.3 Industry Competitiveness**

Distribution logistics is fundamental in production industry as it is key to success in the integration and distribution structure which ensures that customers receive required products and services in the right time and place (Tarigan, Jiputra & Siagian, 2021). In a case where product cannot reach

its intended destination in good time then this damages the competitive advantage which in turn also damages customer retention. Today, the issue of distribution is becoming more and more important for the managers, based on the systems of distribution logistics and its management, where the cost and cooperation between the analysis, planning, and the control in the level of services are physical duties though managing the distribution is also important. Production companies have to have industry competitiveness through strategic management of distribution logistics (Alexandrou, Panayides, Tsouknidis & Alexandrou, 2021).

Majority of firms operate in an environment that is characterized by low margins and with intense rivalry for market share by local and international participants. According to there is pressure for firms to drive down costs in order drive profit margin protection and at the same time offer competitive pricing to customers to as to reduce the prospect profit erosion. This has led to profit erosion as a result of the changes in production environment, firms need to innovate and this has given up research and innovation costs and at the same time led to short brand life cycles. Chikán, Czakó, Kiss-Dobronyi and Losonci (2022) contend that production firms need to position themselves in their environment with unique value in order to build a sustainable competitive advantage. Industry competitiveness is thus a firm's administration trade policies which aim to make it perform so as to defend its business interests.

Sahoo, Le and Rath (2021) contend that industry competitiveness is brought about by productivity activities which enlarge the level of rivalry among distribution logistics firms. Distribution logistics flourish on certain conditions which include application of information technology. Information technology is the use of computers and computer networks and other physical devices and processes to create process, store, acquire and exchange all forms of electronic data (Sahoo, Le & Rath, 2021). It is the commercial use of information technology. When production wants to

respond with success to the competitive forces within the industry, then a high level of technology has to be applied (Hassanzadeh, 2021). Any firm that adopts technology attains a competitive edge which makes it strategically locate its processes for competitive advantage. It therefore means that the competitiveness of a firm requires application of information technology (Czakó et al., 2022).

#### **1.2.4 Distribution Structure**

Distribution channel also known as distribution structure consists of a group of individuals or organizations that aid in bringing products and services closer to the consumer at the right time (Lichko & Klein, 2021). Distribution is fundamental as it affects the sales turnover and boosts profit margins within organizations. If the product cannot reach its chosen destination at the appropriate time, then it can erode competitive advantage and customer retention.

According to distribution structure are processes firms set up to ensure distribution logistics in place are performing. The various aspects of distribution structure that can positively or negatively influence performance of the firm's distribution logistics include availability of regional depots, route planning, mode of transport used (Boroun, 2021). Regional depots for instance bring product distribution closer to clients. It allows for proper capacity utilization of transport over long distances as this is not dependent on individual customer orders. It also ensures that the products are in close proximity to the end users within short notice.

Route planning is the selection of routes to take when distributing products by firms. It entails vehicle capacity utilization as well as planning for dispatches. The processes of route selection by firms may influence on the ability to deliver goods in good time as transporting vehicles are able to avoid traffic congestion which may have an influence on the cost of delivery. Mode of transport is also

another aspect that may influence performance of production firms. It determines the flexibility as well as door to door deliveries is made possible. Inflexible modes of transport such as air and rail may not be suitable over short distance but are known to be economical over long distance. It is important for firms to know that distribution logistics encompasses all information and material flows throughout a firm's product transportation processes, this depends on the distribution process available (Scott, 2016).

### **1.2.5 Performance of Distribution Logistics**

According to Larson (2021), there is a significant scope for performance measurement as most aspects of production process can be accurately measured quantitatively. This is an indication of the way producers can measure their performance as provided by the quality-cost delivery known as QCD system (Scott, 2016). Magazzino Alola and Schneider (2021) explain that measuring performance of distribution logistics can help improve businesses within organizations. All levels of organizational performance have to be linked to each other to ensure firms activities on every level are streamlined and leveraged into a desired direction. Some of the performance measures include cost reduction. According to Masudin, Lau, Safitri, Restuputri and Handayani (2021), cost reduction refers to a planned positive approach to reduce expenditure. Cost reduction is a corrective function by continuous process aimed at expanding market for products. This is achieved through conducting an analysis of cost functions and will in turn ensure that the firm attains its intended competitive advantage (Masudin, et al., 2021).

Performance is the accomplishment of any given task that can be measured against known standards of accurate completeness, cost and speed (Zhang, Ding & Liu, 2021). In marketing perspective, performance of distribution logistics is made up of people, processes and systems working together to support efficient and effective delivery of services (Zhang et al., 2021).

Distribution logistics performance can be measured through on time delivery of goods and services. This determines whether a perfect delivery has taken place or not. It has the following measures which makes it successful; delivery to commit date, delivery to request rate, order fill lead time and goods in transit. The quality of information exchange can also be used to determine performance of distribution logistics in most cases (Moons, Waeyenbergh & Pintelon, 2019).

### **1.2.6 Nairobi Bottlers Limited Company**

Nairobi Bottlers Company currently operates between Nairobi province, Machakos up to Mutito Wandeï, and Nakuru regions. The company has had to do more than design a good distribution logistics which they have set in motion. The system has required periodic modifications to meet the new conditions in the market place (Company's Global Financial Report, 2016). Modification becomes necessary since consumers buying patterns have changed, market have expanded, product have matured through the product lifestyle, new competition have arisen and innovative distribution strategies emerged. The most difficult decision has involved revising the overall distribution strategy. The company has even considered replacing independent dealers with company owned dealers or local franchised dealers with centralized operations and direct sales.

Distribution logistics in Nairobi bottlers links the company and its customers/clients. The distribution logistics in the company comprises of activities related to the provision of products and merchandise to clients. Nairobi Bottlers Company can deliver products directly from production process or from trader's stock that is normally located close to the production site or regional distribution warehouses (Coca-Cola Company President Report, 2016). The distribution logistics at the company is a market-linked logistics system. It links a company's production logistics with the customer's procurement logistics. In distribution logistics, the company has adopted customer orientation which plays a special role because of the close link to the customer.



However, Nairobi bottlers have no empirical evidence which shows that the distribution logistics that they have put in place has adopted modern ways of doing business. This study therefore aims at finding out the factors affecting the performance of distribution logistics of Nairobi bottlers, Kenya.

### **1.3 Statement of the Problem**

Production firms such as Nairobi bottlers which is an affiliate of Coca Cola East Africa need to be in a position of ensuring that no risk reoccurs in their distribution logistics cycle through establishment of contingent plans that is capable of reducing the any negative impact in case an event of this nature occurs. Nairobi Bottlers Company use indirect distribution system through its depots and sub depots (Coca-Cola, FEMSA, 2020). In spite of the use of depots in the distribution logistics process, there are still instances of product stock outs which according to the company management has been attributed to its dwindling distribution service timelines, product availability, service quality, distribution service flexibility among others and this has significantly affected customer satisfaction and led to the company losing some of its market share.

The company which had early designed a good distribution logistics system has often required periodic modifications to meet the new market trends (Coca-Cola FEMSA, 2019). This is attributed to lack professional who are conversant with this system. This has become a norm and problematic as the company has seen some of her professional either leave as a result seeking for green pastures or moving to private business (Coca-Cola Company President Report, 2016). The company is also facing stiff competition especially from the juice manufacturing companies that have been coming up in the recent past (Angira, 2021). It is also expecting stiff competition from PepsiCo which is building a new plant in Kenya and SABMiller which has taken control of family owned Crown Foods, the bottlers of Keringet brand of drinking water.

Consumers have become more health conscious and are slowly moving away from carbonated soft drink which is the largest percentage of Coca-Cola products. The most difficult decision the company has undergone is a continuous revision of the overall distribution strategy (Coca-Cola Company President Report, 2019). From the above information, it is evident that Nairobi Bottlers Company is undergoing tough times in its distribution strategy so as to retain its market share. This inspired the researcher in the study to find out the influence of distribution logistics on performance soft drinks manufacturing firms in Kenya.

#### **1.4 Objectives of the Study**

The study was guided by general and specific objectives.

##### **1.4.1 General Objective**

The general objective of the study was to find out the influence of distribution logistics on performance of soft drink manufacturing firms in Kenya using Nairobi Bottlers in Kenya as proxy.

##### **1.4.2 Specific Objectives of the Study**

The specific objectives of the study included:

- i. To establish the influence of the nature of product on performance of soft drinks manufacturing firms in Kenya
- ii. To assess the influence of distribution structure on performance of soft drinks manufacturing firms in Kenya
- iii. to determine the influence of organizational resources on performance of soft drinks manufacturing firms in Kenya
- iv. To assess the extent to which industry competitiveness affects performance of soft drinks manufacturing firms in Kenya

## **1.5 Research Questions**

- i. What is the influence of nature of product on performance of manufacturing firms in Kenya?
- ii. What is the influence of distribution structure on performance of soft drink manufacturing firms in Kenya?
- iii. To what extent do organizational resources influence performance of soft drink manufacturing firms in Kenya?
- iv. What is the influence of industry competitiveness on performance of soft drink manufacturing firms in Kenya?

## **1.6 Significance of the Study**

The study was to find out the influence of distribution logistics functions on performance of soft drinks in Kenya. It was important because it assists policy makers who include the government of Kenya in the formulation and strengthening of policies that help in the management distribution of soft drinks in the country. The study goes a long way in creating reference source for future academicians. It also contributes additional knowledge on the subject of soft drink distribution not only locally but also internationally. It study will contribute to filling knowledge gaps identified early in this subject.

Soft drinks producers also benefited from this study as its findings are of important as it informs on new and reliable distribution strategies. This therefore enables a reduction in the distribution challenges. It is important to note that through the study, the general reputation distribution logistics in Kenya can be internationally recognized and hence this helps attract foreign direct investment which in turn boosts a country's economic development.

## **1.7 Scope of the Study**

The study was conducted in Nairobi's industrial area. This was where Nairobi bottlers was located. The study involved all Nairobi Bottlers employees in the departments charged with the production, storage and transportation of soft drinks in the company. The study covers respondents identified from employees of Nairobi Bottlers Company. It covers the nature of product, distribution structure and effect of Information technology on distribution logistics of soft drinks in Nairobi Bottlers Company, Nairobi County, Kenya. The study was conducted within a period of four months from April, 2020 - July 2020 which was presumed to be enough for researcher to collect sufficient data for analysis.

## **1.8 Delimitations**

In research work delimitations are characteristics set by a researcher that limits the scope. It defines the boundaries and always is under the researcher's control in this study, the delimiting factors in this study it included the choice of objectives, the research questions, variables of interest, theoretical perspectives that the research adopted and the population a researcher chose to investigate (Simon, 2011). This study was delimited to only Nairobi Bottlers Employees who are charged with distribution logistics services. It only investigated three objectives which were nature of product, distribution structure and effect of Information technology, only four months was used to carry out the study.

## **1.9 Limitations**

The major limitations in the study on the field soft drinks distribution is the fact that secrecy and confidentiality which make it central to soft drinks product and distribution. Business information always carries legal basis as it applies secrecy laws on the grounds of information. It was therefore

important to note that the study was limited to gathering correct information from the identified respondents, as some of them were not willing to reveal information about their operations fearing it might compromise their positions of engagement. This limitation was overcome by the researcher administering the questionnaires which were accompanied with an introductory letter with specific information on the purpose of the study and the confidentiality of information provided.

### **1.10 Theoretical Framework**

Theories are done to clarify, comprehend and foresee why some things work as they do and by large to confront and at the same time enlarge the current information within the limits of central deduction. Theoretical system is the configuration that candles a suggestion of research problem. This study utilized four theories; resource based view theory, game theory, and theory of performance and Systems Theory.

#### **1.10.1 Resource Based View Theory**

The study was anchored on the resource based view theory (RVB). The resource based view theory stresses on the firm's resources as the fundamental determinants of competitive advantage and performance. It adopts two assumptions in analyzing sources of competitive advantage Barney (1991). This theory assumes that firms within an industry may be heterogeneous with respect to the bundle of resources that they control. Second, it assumes that resource heterogeneity may persist over time because the resources used to implement firms' strategies are not perfectly mobile across firms. According to Barney (1991), resource heterogeneity is considered a necessary condition for a resource bundle to contribute to a competitive advantage. The argument goes that

if all firms in a market have the same stock of resources, no strategy is available to one firm that would not also be available to all other firms in the market.

The resource-based view (RBV) has since become one of the dominant contemporary approaches to the analysis of sustained competitive advantage. A central premise of the resource-based view is that firms compete on the basis of their resources and capabilities Peteraf and Bergen (2003). Most resource-based view researchers choose to look within the enterprise and down to the factor market conditions that the enterprise must contend with, to search for some possible causes of sustainable competitive advantages holding constant all external environmental factors (Peteraf and Barney, 2003). This inward looking approach has proven to be both influential and useful for the analysis of many strategic issues (Foss & Knudsen, 2003), among which the conditions for sustained competitive advantage is concerned. The theory addresses variable “organizational resource” in the conceptual framework of this study which aids firms’ resources to generate sustained competitive advantage.

In this study, resource based theory is an efficiency-based which explains on performance differences within firms. The theory is fundamental as it demonstrates how well firms supplying products harness their resources to respond to market demands which can be assessed through the Resource Based View Theory (Foss & Knudsen, 2003). Resource based view theory presents itself as the most appropriate of existing theories in distribution process for analyzing the capabilities of production firms as well as suppliers in managing knowledge within the supply chain industry as well as responding to external pressures for it to be environmentally responsible. This theory is again concerned with the scarcity of superior resources in firms (Peteraf & Bergan, 2003), quasi-rents such as the difference between the value of an asset in its first best use and its value in its next best use. Within firms, superior resources are more efficient in the sense that they

enable firms to produce more economically to satisfy customer's wants. In contrast, Porter's industrial organization approach emphasizes the exercise of market power and monopoly-type rents as the sources of performance differentials (Conner, 2004). The demand for superior resources can only be satisfied through proper acquisition within firms. The theory informs the variable on organizational resources, therefore it is important to the study as it seeks to find out factors influencing the performance of distribution logistics of Nairobi Bottlers Company Limited, Kenya.

### **1.10.2 Game Theory**

The game theory was proposed by Neumann and Morgenstern (1942). The theory states that, each player tries to maximize their own value taking into consideration that the other players will do the same and that the decisions other players affect each other's values (Nagarajan & Sošić, 2008). According to Reyes (2005), when each player's individual goal in the manufacturing sector is only to maximize his benefits or to minimize his costs, the agreements obtained by negotiation may be fragile and will generally not guarantee optimality for the distribution logistics process as a whole. Game Theory is the best method to illustrate the decision making in a situation with several interdependent parties where the outcome depends on the choice made by every party (Zhiwen, Yujun, Junxing, Limin & Long, 2020). There is a lot of empirical evidence that proves the importance of cooperation among the supply chain members in order to improve the overall performance. Game theory provides tools for analyzing situations in which parties, called players, make decisions that are interdependent, and this interdependence causes each player to consider the other player's possible decisions, or strategies, in formulating strategy (Zhiwen, et al., 2020).

In game theory, horizontal cooperation in logistics was proved efficient to reduce global cost and improve the performance level (Verdonck, Caris, Ramaekers & Janssens, 2013; Musau,

Namusonge, Makokha & Ngeno, 2017). However, despite these advantages, horizontal cooperation is not considerably employed in logistics (Muir, 2010). The use of game theory in the design / redesign of distribution logistics strategies allows the economic rationalization of these chains by estimating and indicating decision paths that ensure an increase in profits, a decrease in costs, or an improvement in resource management. The distribution of supply chain risk based on cooperative games, indicating the different ranges of applications of Shapley values, risk distributions in different operating conditions, and the proposal of two methods for distributing the decreasing risk of cooperation (Musau et al., 2017).

According to Tuljak-Suban (2018), the Game theory in its assumptions deals with the search for solutions in conflict situations, so the game is a simplified model of the conflict situation, but also possible cooperation. Thus, it apparently inclines to the process approach (concerns relations between players), but taking into account the construction assumptions of the games (rules), which concern, among others: possessed information, communication capabilities, potential results (payoffs) and the usefulness of these results, thoughts are heading towards a systemic approach. It is difficult to analyze the strategy of the entire distribution process (Mouatassim, Ahlaqqach, Benhra & Eloualidi, 2016). However, the subject of the analysis may remain separated distribution subsystems concentrated around selected strategic decisions that constitute an elementary part of the strategy's construction.

One main obstacle in the implementation of distribution logistics system is the absence of an appropriate cooperation decision making model (Xu, et al, 2013). In regard to the present study, the game theory is applicable in that, Nairobi Bottlers Company limited can decide to work hand in hand with their distributors. That is, they can outsource distribution logistics services from their own distributors. Besides, they can also decide to empower one major distributor who can in most



cases act as their point of sale so that at all times, the market is serviced and goods are at the reach of the customers.

Choi, Govindan, Li & Li (2017) opine that optimization of logistics costs by modeling interaction between players in a single channel, two-way supply chain, paying particular attention to sharing information and forecasting demand, coordination of a two-cycle supply chain consisting of a producer and seller with an element of joint advertising and price decisions, in which the seller performs local advertising, and the producer pays for some or all of the cost of advertising to the retailer, using Stackelberg's balance with asymmetrical distribution of power. The theory was considered relevant to the current study in that it informs the distribution structure variable and it is used to analyze a distribution logistics and transportation optimization problem within a supply chain among manufacturing firms composed of two agents: a retailer who faces a random demand of a final product and his supplier of raw materials that is also responsible of the distribution function. Since the retailer is closer to the market and has a better view of demand forecasts careful attention given to Information sharing and its impacts.

### **1.10.3 Theory of Performance**

The Theory of Performance as postulated by Schechner (1985) is used as a framework that explains performance as well as performance improvements. The theory portends that to perform is to produce important outcomes. It believes that performers are people who engage in a collaborative effort. Developing performance is a journey, and level of performance describes location in the journey. Current level of performance depends holistically on six components which are level of skills, level of knowledge, level of identity, fixed factors, personal factors and context. Three of the components are proposed for an effective performance improvement which is enriches the environment, immersion, and engagement in reflective practice (Schechner, 1985).

In production business, a well-functioning logistics and this is the necessary precondition of competitiveness (Arvis, 2014). Production businesses depend on transport operations. This dependency affects a wide range of value added activities along distribution logistics, right from suppliers of raw materials to the consumer, who is the end user as well as after sales service.

Human beings are capable of extraordinary accomplishments especially in production firms; where distribution logistics is really an important factor. From the researchers' perspective, worthy accomplishments are produced from high level performances, the theory then becomes fundamental in that it ensures that only good minds are necessary in taking businesses a head of other competitors (Schechner, 1985). It links firm growth positively to performance as it influences the survival probability of a company. In this study the theory is important as it is considered as a measure of a firm's growth among all stakeholders in the distribution logistics cycle.

This theory addresses the dependent variable performance of distribution logistics. Any production business demands that their products can reach the end user in good time, form and shape. In the process, it ensures that there is effective and quality distribution firms such as Nairobi bottlers as this is good in gaining that competitive edge.

#### **1.10.4 Systems Theory**

Systems Theory was propounded by Katz and Kahn (1966). The theory views organizations as open social systems that have to interact with their environment for them to survive. According to Cutlip and Broom (2006), organizations rely on their environment for various important reasons which include customers to come to buy products or services to suppliers who are in position to provide materials, employees who are capable of providing labour and management, shareholders who invest and the government who provide policies and regulations. It is also important to note

that public relations play a fundamental role in helping organizations adapt to organizational changes.

From the above explanations, as a system of components are linked together for the efficient movement of products in soft drinks industry. This theory applies to the dependent variable Performance of Distribution Logistics of Soft Drinks” where four independent variables of nature of product, organizational resources, industry’s competitiveness and distribution structure have been applied for distribution logistics to effectively perform. Using a system approach to describe physical distribution, the components include; customer service, transportation, warehousing, order processing, inventory control, protective packaging and materials handling (Miles, 1965).

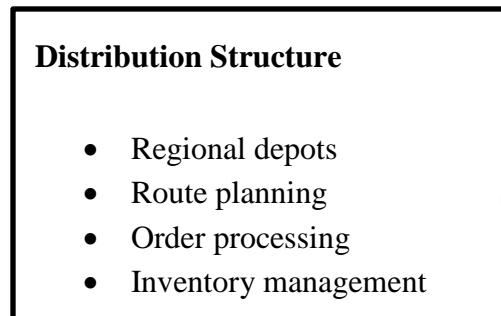
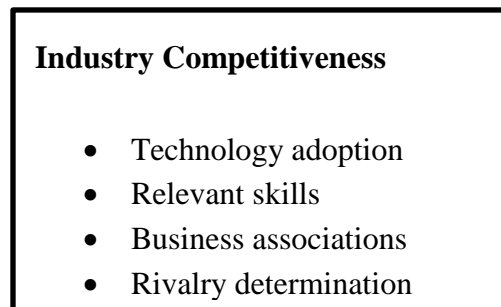
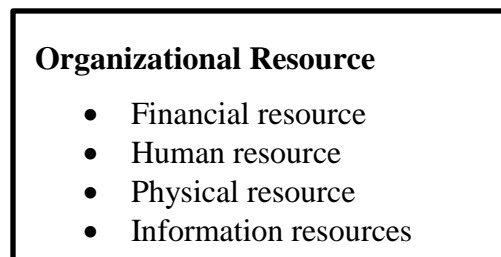
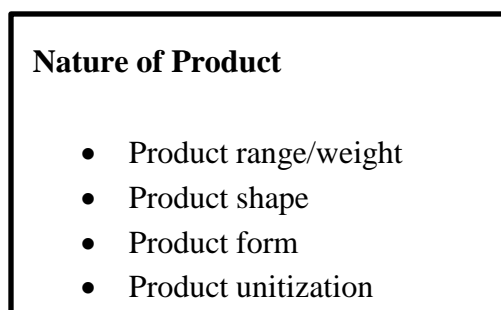
This theory views an organization and its members as a collective, linked through networks of relationships. Within the system, individuals engage in patterned activities in the form of networks of relationships, which in turn results in the construction and enactment of the whole organization. The systems tradition seeks a holistic understanding of organizational phenomena. The researcher in this study therefore follows that multiple levels must be considered in the investigation of organizational performance where systems must be aligned to distribution logistics that are in existence.

This theory addresses variables of nature of product and industry competitiveness. The interrelation of sub components means decisions made in one area affect the relative efficiency of others. For example, a small business that provides customized personal computers may transport finished products by air rather than by truck, as faster delivery times may allow lower inventory costs, which would more than offset the higher cost of air transport. Viewing physical distribution from a system’s perspective can be the key to providing a defined level of customer service at the lowest possible cost in Nairobi Bottlers.

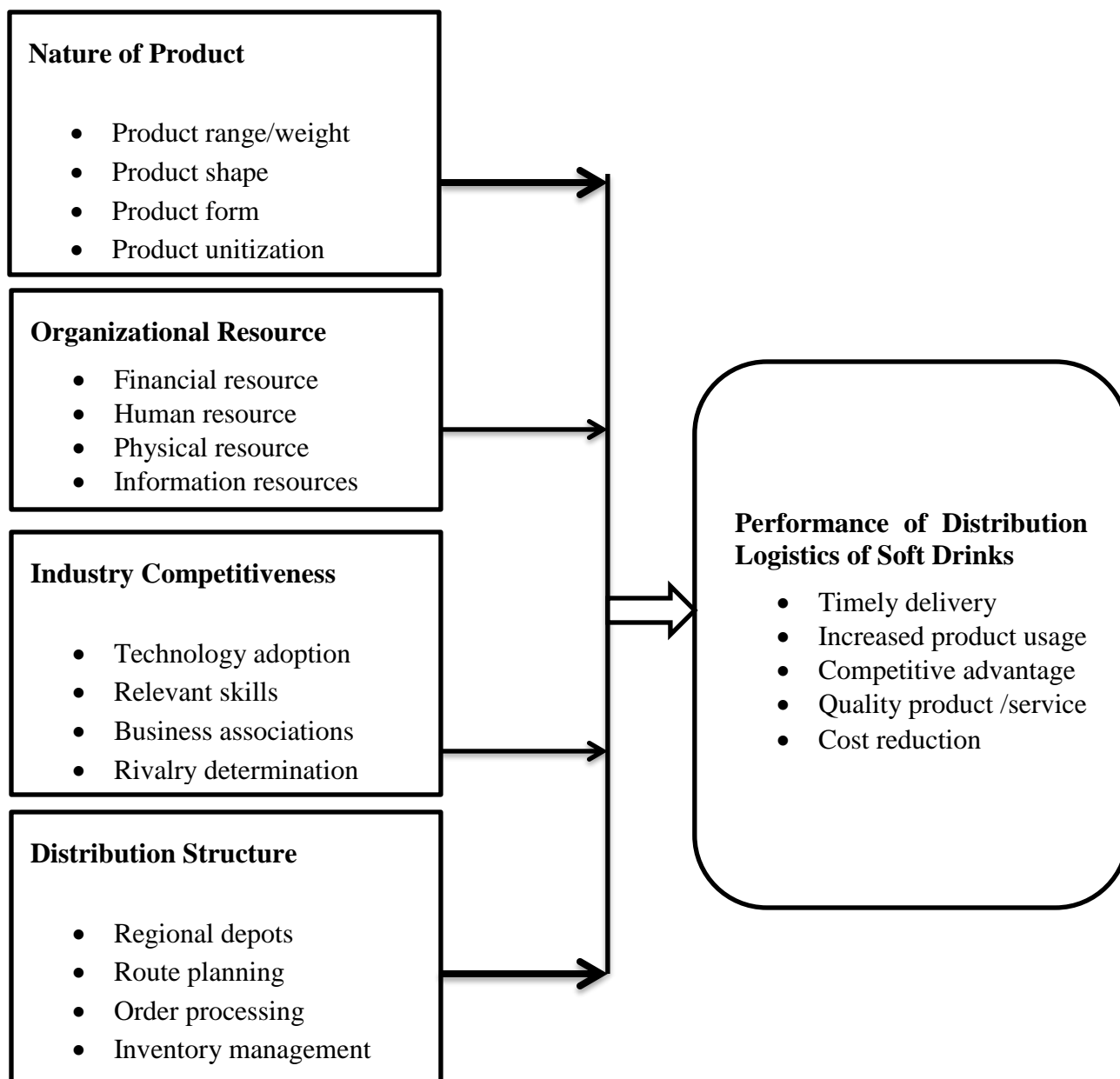
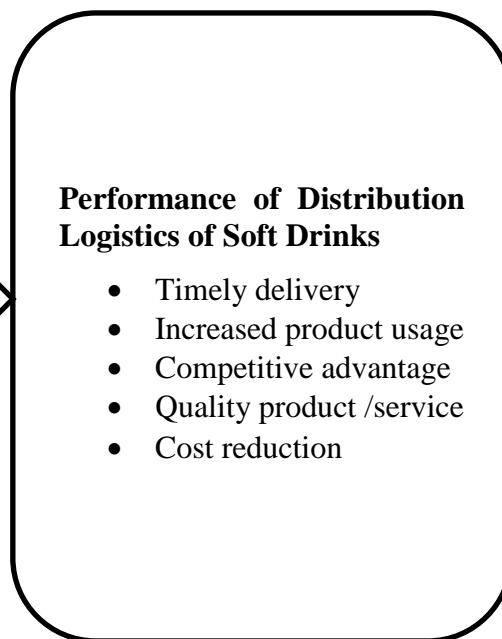
## 1.11 Conceptual Framework

According to Kothari (2014) a conceptual is a figure that depicts the relationship between the dependent and the independent variables within a study. This figure relates the research subject and the relevant objectives as shown in Figure 1.1

### Independent Variables



### Dependent Variable



## **Figure 1.1 Conceptual Framework**

Source: Researcher (2021)

The conceptual framework figure (1.1) describes the relationship between the independent and dependent variables. The figure had distribution logistics of soft drinks as dependent variable whose indicators are timely delivery, increased product usage, competitive advantage and quality product/service; nature of product where product range/weight, product shape, product form and product unitization are used as indicators; distribution structure with regional depots, route planning, order processing and inventory management as indicators, organizational resource with financial resource, human resource, physical resources and information resources as indicators; industry competitiveness with technology adoption, relevant skills, business associations and rivalry determination as indicators. All the independent variables used in this study relate either positively or negatively to the dependent variable; hence this made it fundamental for the study to be conducted in the location.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents literature that has been done on the influence of distribution logistics functions on performance of soft drinks. It scrutinizes what other researchers have established about performance of distribution logistics. The chapter therefore covers theoretical framework, gives a summary of related literature and identifies the research gap.

#### **2.2 Empirical Review**

Empirical review is based on observed and measured phenomena. It derives knowledge from the actual experiences rather than belief (John, 2007). This study will review literature via independent and dependent variables

##### **2.2.1 Nature of Product and Performance of Distribution Logistics**

In a marketing perspective, a product is an object that can be availed for consumer use. According to Stark (2015), a product is anything that is offered to a market for satisfaction of consumer desires. In retailing products are normally referred to as merchandise but in manufacturing, they are bought as raw materials. According to Bowers ox and Cooper (2010), the nature of a product may have some effect on the performance of distribution logistics right from the producer to the consumer. These aspects of the product may boost or reduce the ability of performance of distribution logistics of a product so as to meet customer expectations. The aspects may include the weight of the product, shape, unitization of product, product range, perishability, and form of the product. The weight and shape of a product has effect on vehicle capacity utilization as well as the equipment's required for its handling during the distribution process. Light products are easier

for human handling when loading and offloading delivery trucks (Stark, 2015). Light products are fundamental to the distribution logistics systems especially at Nairobi bottlers as this will ensure customers receives these products at the right place and in good time

In production business, the nature of a product always has some influence on the performance of distribution logistics of products and services. According to Sinitsyun (2012), there are various product aspects under which it enhances or diminish the ability of distribution logistics to effectively meet customer requirements. The aspects include shape through good packaging of the product is an integral part during distribution and sale of goods and services. Product shape is an important tool for product presentation, packaging requires regular attention right from marketers and distributors (Stark, 2015). Units distributed to the customers in homogeneous packages, the time required for the verification of the quantities dispatched or received is much easier. This in turn reduces the delivery time as picking, order assembly and dispatch time is reduced. Distribution of goods in units by Nairobi bottlers will ensure faster delivery of these goods to clients where time will not be wasted during confirmation

The range of a product is the number of differentiated products available for distribution to customers. Product range may at the same time influence the performance of distribution logistics of any given firm (Xu, 2013). Firms that offer of product range work on variations of a theme. The firm specializes in a type of product or service, but offers addition or alterations to suit different types of customers. When a firm develops a strong core product line, the product range allows the firm to focus on those product lines while still offering enough variety in size, color, taste or functionality to appeal to a wide range of potential customers. This is because product range has a great influence on the time required for product handling which encompasses receiving, picking, stacking, order assembly as well as dispatch of the same product (Li and

Graves, 2012). Such services if adopted by Nairobi Bottlers Company will ensure that the company attains that competitive advantage and hence challenge its competitors.

Distribution through unitization of products is the aspect where goods are put into batches in which products are packaged. According to Ntim (2012), units of products distributed to customers in homogenous packages, is important as time required for verification of the quantities dispatched is normally easier. This way, delivery time becomes less as order assembly as well as dispatch time also is reduced. Proper unitization may also reduce exposure to destruction or pilferage of goods in transit (Bowersox & Cooper, 2010). Packaging of products by companies such as Nairobi bottlers will reduce breakage of products

Distribution logistics also take into account of product perishability. Perishability of product refers to the whether a product is perishable or not. These items include fresh foods, daily products or pharmaceuticals (Barcik & Jakubiec, 2013). The period of shelf life complicates distribution of the product as they must be processed and moved through the supply chain for sale to customers before they perish and loose either part of their value or the overall value. Perishable goods therefore require specialised handling during storage and transport is required. This may in turn increase the cost of distribution and lack of the recommended handling may result in destruction of the products and services (Bowersox & Cooper, 2010). These will assist companies such as Nairobi bottlers to avoid the problem of perishability.

In production the expression of a product is not the form, but the way form is created to the same product. The form of product pertains to the state where the product appears, and this encompasses solid, liquid or in gas form. According to Mukhamsd and Kiminami (2011), the form of product has several aspects which may influence performance of distribution logistics as some form of these products may require specialized when loading, offloading and storage. Product form is not



how the materiality of the product is rendered by design, because product are things designed by people, this therefore means that the manifestation of the product cannot be wholly separated from the designer (Saremi & Mosavi, 2014). The unavailability of the necessary equipment's may also lead to delays in delivery. In products where human handling is possible, the number of people involved in the task may also determine whether there will be delays or not. This is fundamental as helps in ensuring that delays in delivery is avoided by companies

In the United States of America (USA), distribution logistics cost constitutes about 30% of the cost of the products sold (Stark, 2015). Within the distribution and logistics system, which is the highest single expense and usually bigger as compared to warehousing cost, inventory, and order processing costs, distribution logistics has captured management's attention due to rapid wage and freight rate inflation, a fundamental swing of distribution logistics (Prabhakareri, 2010). From the study by Parthanadee and Logendran (2006), it implies that distribution logistics is major concern as most of the costs incurred in a production system are majorly in the sector. The present study therefore sought to find out if nature of product is factors that affect performance of distribution logistics in production within organizations.

Another distinctive feature of South African organizations is the degree of concentration in their product markets. Traditionally, South African companies are faced with a very high degree of concentration in market shares, which does not encourage competition (Kahia, 2014). Using both the company level and composite industry information as product competition is relatively low in South Africa because of the nature under which distribution logistics is structured (Ntim, 2012).

In Kenya, Nyariaro (2017) conducted a research on green supply chain management practices and performance of soft drinks manufacturing firms in Nairobi, Kenya. The research used three objectives that is to establish the extent of green supply chain management, find out the correlation

involving green supply chain management practices and identify challenges faced by soft drinks firms in implementing green supply chain management. The study used descriptive research design approach. The study concluded that green supply chain seeks to maximize the economic benefits by decreasing consumption of resources, energy and emission of pollutants so as to create socially responsible enterprises. Implementation of green supply chain management practices improves both environmental and financial performance of a firm (Nyariaro, 2017).

This section was fundamental as it established how nature of product influences performance of Nairobi Bottlers Company Limited. This can happen right from the producer to the consumer, hence an important aspect of the study.

### **2.2.2 Distribution Structure and Performance of Distribution Logistics**

The purpose of distribution structure is to describe how the distribution process is set in order for it to succeed. Distribution structures adopted especially by production companies sometimes have an impact on the ability of its distribution logistics to perform. The various aspects of distribution structure that can positively or negatively impact on the performance of the organization's distribution logistics include route planning, mode of transport used and availability of regional depots (Barcik & Jakubiec, 2013). Availability of regional depots intends to determine whether a production company has set up depots in the various regions so as to bring distribution near to the clients. Regional depots allow for proper capacity utilization of transport over long distances as this is not dependent on individual customer orders. It also ensures that the products are in close proximity to the customer thus making it possible for deliveries under short notice. Regional depots are fundamental as they solve the problem product storage which makes it possible for these products made available to customers in good time.

Route planning on the other hand relates to matters of vehicle capacity utilization, planning of dispatches and route selection to mention a few (Prabhakareri, 2010). In route selection, the route selected may impact highly on the ability to deliver goods in time as trucks can avoid traffic congestions or use the shortest routes available, the route selected may also have impact on the cost of delivery. The mode of transport used is another aspect that may have effect on the performance of distribution logistics. The mode of transport will determine the flexibility and also whether door to door deliveries are possible. Inflexible modes such as rail or air may not be suitable over short distances while they may be economical over long distance. Road transport may also lead to delays due to traffic congestion and unpredictable weather which may result in some roads becoming impassable (Prabhakareri, 2010). Route planning solves the problem of delays as this makes companies deliver product to customers in good time.

The great depression temporarily stifled the United States (US) economic growth, but organization that survives and emerges with their vertically oriented bureaucratic distribution structures towards World War II. The post-world war rebuilding reignited economic growth, where powering organizations that survived the Great Depression toward increasing in size in terms of sales revenue, employees, and geographic dispersion. Along with increasing growth, however, came increasing complexity. Problems in U.S. distribution logistics structures became apparent and new ideas began to appear. Studies of employee motivation raised questions about the traditional model. The one best way to do a job gradually disappeared as the dominant logic. It was replaced by concerns that traditional organizational structures which encompasses distribution logistics might prevent, rather than help, promote creativity and innovation distribution logistics of products in the country

Effectiveness as a performance indicator can be referred to as a long term organizational positioning. Various scholars normally equate effectiveness to non-economic performance or non-financial measure (Ataollah, 2010). Important to distribution issue is the effectiveness closely related to customer satisfaction. For example, in Nigeria the law states that, if a customer expects a delivery of an order is on a two-week time; then, the delivery service is considered effective once the order arrives in less than two weeks or on the last day of the delivery time. Otherwise, it is said ineffective, when the order reaches the customer later than the expected time. Distribution logistics structure must therefore be effective for products easy delivery to consumers (Mukhamsd & Kiminami, 2011). It is therefore important to develop good distribution logistics structure to enhance its performance. However, the impact of such innovation on firm performance would be less if it does not improve the effectiveness of distribution logistics structure.

Studies have been conducted by various researchers across the world. Workalemahu (2018) did a research to determine the factors influencing distribution performance at mugger cement factory in Addis Ababa Ethiopia. The study only used one research question of to what extent does financial capacity, transport outsourcing and information systems impact distribution performance of mugger cement factory. The findings of the study indicates that financial capacity, transport outsourcing and information system had a positive impact on the distribution performance of the factory. Financial capacity and information system followed by transport outsourcing have the greatest influence on distribution performance respectively. This implies that financial capacity, transport outsourcing and information system must be given due attention if the factory wants to enhance their distribution performance. The research therefore recommends that the factory need to have efficient payment system with liquidity in place together with training of employees with

respect to proper planning and management of outsourcing and implementation of information technology (Workalemahu, 2018).

In Kenya, the interaction between the adoption and promotion of product channels by companies and the changes in customer segments is input to a change process where the structure of distribution channel is adopted to the new environment (Xu, 2013). However, this is not likely to happen overnight because of barriers and temporal constraints. For instance, some production companies will have invested in a huge distribution network, which will be of no use if all or most of its customers want to switch to another channel, and the customers will be tied to their present company and its distribution logistics because of habits, and perceived social, psychological and financial risks associated with switching companies. Besides, customers will have to spend time searching and evaluating alternative companies in order to find a more suitable one (Stark, 2015).

This section was fundamental to the study as it ascertained whether distribution structure has an influence on performance of Nairobi Bottlers Company limited, Nairobi County. This is again fundamental as the existing distribution logistics strategy will influence the changes in the whole system of distribution logistics strategy to enhance performance in the company.

### **2.2.3 Organizational Resources and Performance of Distribution Logistics**

The notion that strategic resources are distributed across organizations, and that this is stable overtime is linked to the potential of a firms' resources to generate sustained competitive advantage. These indicators include; rareness, value, non-substitutability and inimitability (Prabhakareri, 2010). Through conducting analysis on the potential of Nairobi bottlers company resources for the generation of a competitive edge, (Barcik & Jakubiec, 2013). Organizational resource includes all the capabilities, organizational processes, assets, organizational attributes

information and knowledge to mention a few. These resources enable companies to conceive and implement strategies to improve its efficiency and effectiveness. As a result, an organization is said to have competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when competitors are unable to duplicate the benefits of this strategy (Stark, 2015).

The various types of resources owned and controlled by organizations have the potential and capacity to generate competitive advantage, which eventually leads to a more superior organization. Resources can be categorized as tangible and this is mainly human, physical, organizational and financial, and intangible which include reputation, regulatory, positional, functional, social and cultural (Mukhamsd & Kiminami, 2011). Out of the mentioned resources, human resources and intangible resources are deemed to be the more fundamental in attaining and sustaining a competitive advantage position because of their natures, which are not only valuable but also hard-to-copy relative to the other types of tangible resources namely physical and financial. Organizational resources are the foundation for attaining and sustaining competitive advantage and eventually superior distribution logistics performance (Mukhamsd & Kiminami, 2011). Organizational resources assist companies such as Nairobi bottlers to conceive and implement strategies to improve its efficiency and effectiveness

Various scholars have argued that physical resources such as machinery, equipment, production technology and capacity contribute positively towards organizational competitive advantage and eventually result in superior organizational performance (Saremi & Mosavi, 2014). In addition, financial resources such as cash-in-hand, bank deposits or savings and financial capital also help explain the level of organizational competitive advantage or performance. Besides, experiential resources such as product reputation, production experience and brand name can also account for

the variation in organizational competitive advantage and performance. Human resources such as top and middle management, administrative and production employees are also able to explain the extent of organizational competitive advantage and resulting to organizational performance. In short, organizational resources are the foundation for attaining and sustaining competitive advantage (Xu, 2013).

According to Vijayaraghayan and Raju (2008), there is a relationship that existed between organizational resources and distribution logistics capabilities in the United States of America. The results were positive as both organizational resources and distribution logistics capability affect organizational performance (Sezhiyan & Nambirajan, 2010). This study did not consider other factors on organizational performance measurements including growth, market share and customer satisfaction. By ignoring to put into account those variables could not provide the correct results on organizational performance measurements. The Michigan State University study (1995), revealed how production organizations used distribution logistics management to achieve competitive superiority by consistently meeting customer expectations. Unfortunately, this study was done almost many years ago and many things in distribution logistics have changed then, hence the findings may not be applicable currently.

In Kenya, Muma (2014) conducted a study on the competence of organizations in distribution logistics. The findings from this study were that the level of distribution competence is a determinant of the efficiency of distribution logistics performance within production organizations. It is necessary to have organizational resources which include the human resource with sufficient skills to ensure efficient distribution logistics performance of the organization. Professional qualification of logistics staffs affects efficiency of logistics performance in an organization and the level of education of logistics staff affect the efficiency of distribution

logistics performance. The study found that training of logistics staffs has an effect on the efficiency of distribution logistics performance in the distribution within organization (Muma, 2014).

For an organization to have the potential of generating a competitive advantage, its resources must have certain attributes which makes it stand tall. These attributes must also be valuable in the sense that it exploits opportunities and neutralizes threats from external environment, it must be rare among the organization's current and potential competition, it must be imperfectly imitable and there cannot be strategically equivalent substitutes for this resource (Mukhamsd & Kiminami, 2011). Competitive advantage is the basis for superior distribution logistics performance and understanding the structure of competitive advantage is fundamental to organizational managers who bear the ultimate responsibility for its long term survival.

#### **2.2.4 Industry Competitiveness and Performance of Distribution Logistics**

It is important to know that in a production industry, competition in the market place is like war and every company need to have necessary equipment for it go a head of others (Li & Graves, 2012). In this war there are injuries and casualties, and it means therefore that the best strategy wins. Competition is the act of striving against another force for the purpose of achieving dominance. It is also about attaining a goal. According to Kariuki and Murimi (2015), competition causes production companies to develop new products, services, and technologies. This provides end users with a greater selection and better products. The greater selection typically causes lower prices for the products either creating a bigger market share for the company or make it smaller. Industry competitiveness ensures companies such as Nairobi come up products that are attractive and have quality so as put the company a head of others



Industrial strategists turn its attention from diversification to optimization of company's competitive strategies and optimization of the company's total portfolio when different markets of the organization have growth prospects (Saremi & Mosavi, 2014). Before further prospects can be estimated it becomes necessary to segment the company's environment into distinctive areas of threats, trends and opportunities. The complications, uncertainty and turbulence in the resource expertise and socio, political environment make it desirable to segment these environments into strategic resource areas, thus the essence of strategic industry competitiveness (Saremi & Mosavi, 2014).

Competition in production industry is rooted in its underlying economic structures and goes well beyond the behaviour of current competitors (Bowersox & Cooper, 2010). The level of rivalry or competition in the industry therefore is determined by the concentration ratio of industry. Rivalry is low if the larger proportion of market share is held by a few large organizations and high when the industry is fragmented. The most businesses must respond to five basic competitive forces that drive industry competition. according to Obaji (2011), the five forces are; threat of new entrants; threat of substitute products; bargaining power of suppliers; bargaining power of buyers and rivalry among current competitors. Existence of these factors; high exit barriers, slow market growth, high fixed costs, low buyer switching costs and low levels of product diversification intensify rivalry in an industry. These forces rival firms seek competitive advantage in ways that elicit to counter-response from rivals, reducing profitability and industry attractiveness (Awino, 2011).

Finkelstein (2004) Analyzed the Supply Chain in the Consumer Packaged Goods Industry in Brussels Belgium. The study attempts to delineate factors in the supply chain of InBev which are excellent. The study was conducted based on the effectiveness of its underlying operating activities and how they cohesively its competitive strengths. The findings of this study was that the

operations in Brussels, Belgium do not comprise an excellent supply chain and consequently lack an activity system which supportive of the business practices. The study found out that Belgium has no competitive advantage at all, but only a distinction in their production methods. Some degree of consistency is also apparent, but the chain lacks solid first-and second order fit (Finkelstein, 2004).

Kenya has a study done by Aira and mise (2012) examined the impact of channel strategy on consumer value in Kenya where they assessed the demand side issues for customers of Kenyan soft drink companies. The study used three objectives of assessing the relationship between order cycle time, stock availability sales gave the impact of description strategy on customer value. The study used structured cross sectional survey to collect data from respondents. There was a high positive correlation between stock availability and sales and a weak positive correlation between satisfactory delivery speed and sales. The correlation between order cycle time and sales were negative though weak. 53% of the variance in sales was explained by stock availability which significantly determined customer value. The results also indicated that if sales were to be increased, it was necessary to increase stock availability. This implied that management needed sufficient stock availability to meet customer needs and achieve the desired customer value levels (Aira & Mise, 2012).

As production industry is dynamic and unpredictable with high costs, low consumption and increased security, Nairobi Bottlers should be flexible, reading insight as the trends require and also trying to get out of every situation and being proactive to competitive forces (Obaji, 2011). With the knowledge of intensity and power of competitive forces, Nairobi bottlers can develop options to influence them in a way that improves their own competitive position. The result could

be a new strategic direction, new positioning, strategic partnerships, collaboration or strategic alliances (Bosire, 2011).

### **2.3 Research Gap**

The potential factors that affect organizational performance have received great attention from a business management perspective. Kariuki and Murimi (2015) investigated how human resource empowerment can impact distribution logistics performance. The study was done at Tata chemicals in Magadi Kenya and found out that human resource empowerment through information sharing and training tended to have a moderate impact on distribution logistics performance. This is in line with Chimwani, Iravo, and Tirimba, 2014) who contends that in order for any responsive organization to meet its desired distribution goals, there is need to continuously monitor the key measures of distribution performance. Furthermore, opinions have been made to the effect that adherence to distribution logistics effectiveness has the potential to reduce operational costs and result in outputs that match organizational goals (Osuga, 2015). More evidence on the importance of distribution logistics practices is attributed to Kimotho (2014) who argues that satisfactory distribution performance has a direct impact on organizational profitability which leads to organizational competitiveness.

Reviewed literature which includes Finkelstein (2004) analyzed the supply chain in the consumer packaged goods industry in Brussels Belgium. The study attempted to delineate factors in the supply chain of InBev which are excellent. The study was based on the effectiveness of its underlying operating activities and how they cohesively its competitive strengths. The findings of this study was that the operations in Brussels, Belgium do not comprise an excellent supply chain and consequently lack an activity system which supportive of the business practices. The study found out that Belgium has no competitive advantage at all, but only a distinction in their

production methods. Some degree of consistency is also apparent, but the chain lacks solid first- and second order fit.

In another study conducted by Workalemahu (2018) which determined the factors influencing distribution performance at mugger cement factory in Addis Ababa Ethiopia. The study used a research question; to what extent does financial capacity, transport outsourcing and information systems impact distribution performance of mugger cement factory. The findings of the study indicates that financial capacity, transport outsourcing and information system had a positive impact on the distribution performance of the factory. Financial capacity and information system followed by transport outsourcing have the greatest influence on distribution performance respectively. This implies that financial capacity, transport outsourcing and information system must be given due attention if the factory wants to enhance their distribution performance.

In Kenya studies have been conducted by various researchers in the field of distribution logistics. Studies such as Muma (2014) was conducted a study the competence of organizations in distribution logistics. The findings from this study were that the level of distribution competence is a determinant of the efficiency of distribution logistics performance within production organizations. Nyariaro (2017) looked at the green supply chain management practices and performance of soft drinks manufacturing firms in Nairobi, Kenya. The study found out that there is a correlation involving green supply chain management practices and identify challenges faced by soft drinks firms in implementing green supply chain management. Green supply chain seeks to maximize the economic benefits by decreasing consumption of resources, energy and emission of pollutants so as to create socially responsible enterprises. Implementation of green supply chain management practices improves both environmental and financial performance of soft drinks firms.

From the above studies which include Workalemahu (2018) which determined the factors influencing distribution performance at mugger cement factory in Addis Ababa Ethiopia; it was found out that financial capacity, transport outsourcing and information system had a positive impact on the distribution performance of the factory; Nyariaro (2017) looked at the green supply chain management practices and performance of soft drinks manufacturing firms in Nairobi, Kenya where it was found out that there is a correlation involving green supply chain management practices as well as challenges faced by soft drinks firms in implementing green supply chain management. The study intended to maximize the economic benefits by decreasing consumption of resources, energy and emission of pollutants. It is apparent that most of the above mentioned studies have not used the objectives utilized in study. The locations where these studies have been conducted were also outside Nairobi bottlers. The methodologies used by researchers in the above studies were somehow different from the one used by Workalemahu (2018) and Nyariaro (2017). This therefore justifies why the researcher in the study was compelled to conduct this study to find out the influence of distribution logistics on performance of soft drinks in Nairobi bottlers company limited, Kenya.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the methods and procedures that were used in conducting the study. It describes the research design, target population, sampling frame, design and size, the data collection methods and the procedures of analyzing data, plan on how to ensure, validity, reliability and provision of ethical considerations in the study.

#### **3.2 Research Design**

Cooper and Schindler (2010) assert that a research design is the arrangement of all condition that can affect a research outcome. A research design is the blueprint that enables the researcher to come up with solutions to problems and guide him in the various stages of the research (Kombo & Tromp, 2010). It is an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Kothari, 2014). The study adopted descriptive survey design to examine the relationship between the independent and dependent variables. The design helped the researcher to obtain information concerning the current status of the problem under study and describes it with respect to its variables.

#### **3.3 Study Site**

This study was conducted within Nairobi Bottlers Company in Nairobi County. This location was chosen as Nairobi County is the capital city of Kenya, meaning the number of people doing living and business is high. It involved distribution and logistics stakeholders of the company.

### 3.4 Target Population

Target population is important to a research study, it is the entire group of people, objects or entities that is of interest to the researcher, target population is also the whole set of individuals who meet the criteria of concern to the researcher Mugenda and Mugenda (2008). The study population in the research included all stakeholders currently involved in Nairobi bottlers' distribution logistics. These included; company employees, wholesalers and retailers who ensure distribution logistics function was complete. According to information from the company, there are 2345 people behind the success of distribution logistics of the company. This number was distributed as shown in table 3.1

**Table 3.1 Target Population**

<b>Categories</b>	<b>Target population</b>
Distribution Dept.	197
wholesalers	325
Retailers	1823
<b>Total</b>	<b>2345</b>

Source: Nairobi Bottlers (2020)

### 3.5 Sampling Procedure and Sample Size

According to Babbie (2016), both sampling procedure and sample size are methods and processes involved in a research work to determine different strata which a sample size was calculated.

#### 3.5.1 Sampling Procedure

According to Nachimias (2010), sampling technique is a system of taking part of the unit as representative number from the entire population for the purposes of convenience. A researcher should take as big a sample as possible. This study applied stratified sampling method to identify the various respondent groups from which data was collected. This was because the population

responsible for the study was scattered as shown in table 3.1. First the researcher brought together distribution stakeholders with the same characteristics together, in this case employees of Nairobi Bottlers, wholesalers as well as retailers. They were grouped into three strata totaling to 2345 people. This number was then subjected to simple random sampling technique. Population was then subjected to Yamane 1967 formula for calculating the actual respondents from each stratum. This was important as it helped achieve the best desired result from the target population of the study.

### 3.5.2 Sample Size

Babbie (2016) asserts that a sample is a sub set of a larger population that has been selected to reflect or represent characteristics of the whole population. The accuracy of the results under sample size will dictate the level of generalization to be applied so as to demonstrate as the whole target population (Kombo & Tromp. 2010). For this particular study the sample size was mainly based on a selection of company employees, wholesalers and retailers who best suited the study. Sample size was then arrived at using Yamane (1967). This formula was seen as important because of its nature and determination in collecting data capable of producing confidence level. The formula was as follows

$$n = \frac{N}{(1 + Ne^2)}$$

Where:

n = minimum sample size

N = population

E = precision set at 95 % (5%=0.05)



Hence;  $n = 2345/1 + (2345 \times 0.0025)$

$n = 341$

**Table 3.2 Sample Size**

<b>Categories</b>	<b>Target population</b>	<b>Sample size</b>
Distribution Dept.	197	29
wholesalers	325	47
Retailers	1823	265
<b>Total</b>	<b>2345</b>	<b>341</b>

Source: Researcher (2020)

### **3.6 Data Collection Instruments**

According to Kombo and Tromp (2010) data collection instrument are the tools that a researcher uses to gather information from respondents. It is an important step in the research process where a researcher plans the instrument of data collection keeping in mind the type of data to be collected, whether qualitative or quantitative.

#### **3.6.1 Questionnaire**

The main instrument for data collection was the questionnaires. According to Kothari (2014), a questionnaire is a schedule containing various items on which information is sought from respondents. The use of questionnaire was to make it easier to approach respondents since they do not have any distribution bias as they do not show any particular preference or dislike for a certain individual. Questionnaires also helped avoid issues arising from any inhibition in answering questions of personal nature, and those that the respondent may hesitate to answer in the presence of the researcher.

The method of using questionnaire was also economical and helped reduce bias and errors that might have resulted from personal characteristics of questions. In the study a Likert scale type of

questionnaire was prepared with six parts which include general information, nature of product, distribution structure, organizational resources, industry competitiveness and performance of distribution logistics and all this aimed at enhancing data collection.

### **3.6.2 Reliability of Research Instruments**

Reliability of research instrument is the ability of the instrument to give out the same results at different places (Nachimias, 2010). Reliability is the degree to which the instrument measures the same way each time it is issued under the same condition with the same subject. The internal consistency of reliability was achieved by grouping questions in the questionnaire that measures the same concept. In this research there are questions measuring the same concept and after collecting the responses a correlation was run to determine the reliability of the questions. Reliability was measured using Cronbach International Consistency method, generally, reliability (R) of the research instruments was found to be 0.982. Specifically, nature of product produced (R=.980), distribution structure produced, (r=1.000), organizational resources produced (R=.734) and industry competitiveness produced (r=1.000). All these were above the minimum acceptable scale. Of 0.70 and this implies that the instruments of data collection were reliable

Pilot test of the questionnaire was also conducted before main data collection was carried out. This was done to discover any weakness in the questionnaire design or content and its ability to procure the essential information for the research study. A pilot test was carried out to identify the weakness in design in a small number of respondents from an equal company that eastern bottlers in Machakos County. This served as a pilot test which determines the accuracy of the questionnaire. The study assumed that the rule of thumb at 5% of the sample size consisted of pilot test (Babbie, 2016). This meant that the pilot test was done on  $5/100 \times 136 = 7$  people were the

number who was pilot tested. The outcome of the pilot test helped in the improvement of the questionnaire used in the study.

### **3.6.3 Validity of Research Instruments**

Validity is the ability of the research instrument to measure and generate the intended or desired results of the study (Kothari, 2014). This is the most critical criterion that indicates the extent to which differences found with a measuring instrument reflect true differences among those being tested. There are two types of validity to be considered in this study, which included content and construct validity. Content validity refers to the extent to which an assessment represents all facets of talks within the domain being assessed. Construct validity defines how well a test or experiment measures up to its claims.

Content analysis was used to analyze respondent views on the influence of distribution logistics on performance soft drinks firms, since it uses a set of categorizations for making valid and replicable inferences from data and in the development of the instruments, a research expert was consulted to assist in the framing of the questions. The external validity of the questionnaires was achieved by the selection of a population sample that was representative of the population. The questions asked in the instrument adequately covered all the variables identified in the problem definition stage. The instruments developed were compared against standard instruments used in previous studies that form the baseline of the field of knowledge in which this study was related. This added some predictive utility to the instruments and also involved the assessment and checking of the relevance of the questions in the research.

### **3.7 Data Analysis**

Data processing and analysis is the process of organizing, interpreting and presenting of data. Since this research is a descriptive survey design in nature, descriptive data was collected (Nachimias, 2010). After data collection, the questionnaires were checked for completeness and consistency and data obtained from completed questionnaire was cleaned, coded and entered into the computer software called Statistical Package for Social Sciences (SPSS) version 26.0 which aided the analysis process. Data analysis involved descriptive statistics. The specific descriptive included mean, standard deviation, frequency and percentage.

### **3.8 Legal and Ethical Considerations**

Any research work which involves collection of data at times intrudes into the respondent's lives, same thing to the life of the researcher. To ensure that the study remains ethical, the researcher requested for a permission letter from Africa Nazarene University for conducting the study. Consent was also sought from national commission for science and technology and technology and innovation (NACOSTI) which authorizes permission for conducting research. The researcher also sought permission from other stakeholders who included; the Nairobi Bottlers Company management. Information created by the study was sensitive and this meant that it may discredit stakeholder image, hence the right to confidentiality and privacy was observed. Before issuing the questionnaire to the respondents, the researcher sought written informed consent from them. This made sure that the identity of respondents was concealed and data collected treated confidentially with access being limited to the study team using passwords and data encryption techniques.

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION OF FINDINGS

#### 4.1 Introduction

The chapter presents an analysis of study findings. The findings are organized as per the research questions as presented in the questionnaire. The first part in the presentation was the general information comprising of gender, age bracket, highest academic qualification position occupied and involvement in distribution logistics. The second part captures the data on nature of product; the third part was on distribution logistics structure, followed by organizational resources, industry competitiveness and performance of distribution logistics.

#### 4.2 Response Rate

Out of a sample size of 341 respondents who were identified to take part in this study, 301 questionnaires were duly filled and returned for analysis. 40 of the questionnaires were either wrongly filled or not returned at all.

**Table 4.1 Response Rate**

<b>Response</b>	<b>Frequency</b>	<b>Percent (%)</b>
Returned	301	88.3
Not returned	40	11.7
<b>Total</b>	<b>341</b>	<b>100</b>

Source: Researcher (2021)

The returned questionnaires accounted for 88.3% response rate. The response rate is in line with Mugenda and Mugenda (2008) who posit that a response rate of 60% is good for a study, 88.3% is therefore considered as adequate enough to drive this study to conclusion. The results in this section were presented as shown in Figure 4.1

### 4.3 Demographic Characteristics of Respondent

This section captured the general information of the identified respondents; this included gender, age bracket, highest academic qualification, position occupied as well as involvement in distribution logistics.

#### 4.3.1 Gender of Respondent

The study sought to find out the gender of the respondent who participated in this study with the assumption that variations in gender had an influence on the distribution logistics performance of Nairobi Bottlers Company Limited. The results in this section were presented as shown in Table 4.2.

**Table 4.2: Gender of Respondent**

<b>Gender</b>	<b>f</b>	<b>%</b>
Male	187	62.1
Female	114	37.9
<b>Total</b>	<b>301</b>	<b>100</b>

Source: Researcher (2021)

As shown in Table 4.2, out of 301 respondents who participated in this study, 62.1% of them were male while 37.9% of them were female. This was important in the study as it helped to establish the level of representation by gender in the company. This outcome clearly indicates that the company has observed the 1/3 gender rule in Kenya.

#### 4.3.2 Age of Respondent

The study sought to determine the age distribution of sampled respondents. The results in this section were presented as shown in Table 4.3.

**Table 4.3: Respondent's Age**

<b>Age</b>	<b>f</b>	<b>%</b>
18-25 years	56	18.6
26-35 years	135	44.9
36-45 years	65	21.6
46-55 years	34	11.3
Above 55 years	11	3.6
<b>Total</b>	<b>301</b>	<b>100</b>

Source: Researcher (2021)

From the findings as presented in Table 4.3, majority of the respondents in Nairobi Bottlers Company's distribution logistics were aged between 26 and 35 years with 44.9%, followed by the age bracket of 36-45 years with 21.6%, then 18-25 years with 18.6% , 46-55 years was next with 11.3% and lastly 56 and above years with 3.6%. This was in the pretext that age describes experience earned by the respondent in their line of work. This can be in terms of the knowledge an individual has acquired in his or her line of duty

### 4.3.3 Respondent's Highest Academic Qualification

The study sought to determine the respondent's highest academic qualification. The results of this section is as shown in Table 4.4.

**Table 4.4: Respondent's Highest Academic Qualifications**

<b>Qualification</b>	<b>f</b>	<b>%</b>
Primary	6	2.0
Secondary	86	28.6
College	167	55.4
University	42	14.0
<b>Total</b>	<b>301</b>	<b>100</b>

Source: Researcher (2021)

From the results as shown in Table 4.4, majority of the respondents had college level of education with 55.4% of the total. Secondary school was second with 28.6%, and then those with university

level of education with 14.0% and lastly those with primary level of education had 2.0%. This shows that majority of employees at Nairobi Bottlers Company were educated and this is important because education may be a measure of excellence in business.

#### 4.3.4 Position Held in the Company

The study inquired on the position the respondent holds in the company. Positions held in companies determine levels of decision making. The findings in this section were as shown in Table 4.5.

**Table 4.5: Position Held in the Company**

<b>Position</b>	<b>f</b>	<b>%</b>
Top level manager	49	16.1
Middle level manager	84	27.9
Lower level manager	168	56.0
<b>Total</b>	<b>301</b>	<b>100</b>

Source: Researcher (2021)

From the results as depicted in Table 4.5, 168 respondents were lower level managers representing 56%, 84 of them were middle level managers with 27.9% while the remaining 49 respondents representing 15.1% were top level managers. This shows that in terms of position held, Nairobi Bottlers Company had more numbers of lower level managers as compared to middle and top level managers. Position held is an important aspect of decision making to organizational operations within organizations. In this study this is important as it assisted the researcher to determine how Nairobi Bottlers Company is structured for service delivery.



### 4.3.5 Any Involvement in Distribution Logistics

The study intended to know from the respondents if they had been involved in distribution logistics before. This was important as it shows how experienced respondents are in the field. The findings in this section were as shown in Table 4.6.

**Table 4.6: Any Involvement in Distribution Logistics**

<b>Involvement Status</b>	<b>f</b>	<b>%</b>
Yes	238	79.1
No	63	20.9
<b>Total</b>	<b>301</b>	<b>100</b>

Source: Researcher (2021)

The study investigated if respondents had prior involvement in the distribution logistics at the Nairobi Bottlers Company Limited. Majority of the respondents (79.1%) had prior experience in the field while a few (20.9%) of them did not have any prior experience in the field of distribution logistics. This means that employees in the distribution logistics department at the Nairobi Bottlers Company had prior experience in distribution business before joining the company.

### 4.4 Descriptive Results

The purpose of this study was to find out the influence of distribution logistics functions on performance of soft drink firms with focus on Nairobi Bottlers in Kenya. The study analyzed descriptive statistics for the specific objectives on the nature of product, the influence of distribution structure, the influence of organizational resources and the extent to which industry competitiveness affects performance of soft drinks in Nairobi Bottlers Company, Nairobi County, the results in this section were presented as shown in the following sub sections.

#### **4.4.1 Nature of Product and Performance of Distribution Logistics**

The study in this section required respondents to determine the influence of nature of product in the performance of distribution logistics of Nairobi Bottlers Company, Nairobi County. Specifically the study focused on how effective distribution logistics of Nairobi Bottlers is in satisfying its customers. The research questions were, what is the influence of nature of product on performance of Nairobi Bottlers Company, Nairobi County?

The researcher developed six statements to measure the effect of the nature of product on performance of distribution logistics at the Nairobi Bottlers Company. Responses in this section required respondents to agree with statements rating nature of product and its influence on distribution logistics of Nairobi Bottlers Company on a five point Likert Scale ranging from 1-5 and where 1 = very low agreement; 2= Low Extent; 3 = Moderate extent; 4 = High Extent while 5 shows an agreement to a very high extent. The results in this section were as presented in Table 4.7.

**Table 4.7: Nature of Product and Performance of Distribution Logistics**

<b>Nature of Product and Performance of Distribution Logistics</b>	<b>VH</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>Mean</b>	<b>SD</b>
Nairobi Bottlers Company handles perishable products	204 (67.8)	82 (27.4)	3 (0.9)	10 (3.3)	2 (0.6)	1.74	1.831
There is high prioritization of product shape	81 (26.9)	117 (39)	102 (33.8)	1 (0.3)	0	1.26	0.437
Nairobi bottlers values product utilization	270 (89.8)	23 (7.6)	0	6 (2)	2 (0.6)	2.73	1.845
Distribution logistics at Nairobi Bottlers Company prioritizes product range	252 (83.8)	38 (12.6)	7 (2.3)	4 (1.3)	0	2.72	1.483
Weight of product is fundamental in Nairobi bottlers	214 (71.1)	64 (21.3)	15 (5)	7 (2.3)	1 (0.3)	1.94	1.831
Product form effected in Nairobi bottlers	74 (24.6)	129 (42.9)	32 (10.6)	59 (19.6)	7 (2.3)	1.71	0.829
<b>Composite Score &amp; Overall SD</b>						<b>1.874</b>	<b>1.241</b>

Source: Researcher (2021)

Generally the research findings revealed that majority of the respondents (85.8%) were in agreement with statements on nature of product on performance of soft drinks in Nairobi bottlers while 5.4% disagreed with the statements. 8.8% indicated a moderate effect of the nature of products on performance of distribution logistics of soft drinks at the Nairobi Bottlers company.

Statement (1) Nairobi Bottlers Company handles perishable products, 204(67.8%) out of the 301 respondents who participated in this study indicated very high effect and 82(27.4%) indicated high effect. Only 0.9% of the respondents indicated a moderate effect while 3.3% and 0.6% indicated a low effect and very low effect respectively. This variable had a mean of 1.74 and a standard deviation of 1.831 which is less than the composite mean of 1.874, implying that the statement negatively influences performance of distribution of soft drinks at the Nairobi Bottlers company, even though majority of the respondents believe that the item is highly effective. The mean of the

variable is less than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study.

Statement (2) there is high prioritization of product shape, 26.9% of the respondents indicated a very high effect while 39% indicated a high effect. 3.8% indicated a moderate effect with 0.3% indicating a low effect. No respondent that indicated a very low effect. The statement had a mean of 1.26 and a standard deviation of 0.437 which is less than the composite mean of 1.874, implying that the statement does not have any effect on the performance of distribution logistics of soft drinks at the Nairobi Bottlers Company. The mean of the variable is less than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study.

Statement (3) Nairobi Bottlers values product utilization, 89.8% of the respondents indicated a very high effect while 7.6% indicated a high effect. 2% indicated a low effect with 0.6% indicating a very low effect. No respondent that indicated a moderate effect. The item had a mean of 2.73 and a standard deviation of 1.845 which is higher than the composite mean of 1.874, implying that the statement has a positive effect on the performance of distribution logistics of soft drinks at the Nairobi Bottlers Company. The mean of the variable is less than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study. The mean of the variable is greater than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study.

Statement (4) distribution logistics at the Nairobi Bottlers Company prioritizes product range, 83.8% of the respondents indicated a very high effect while 12.6% indicated a high effect. Only 2.3% and 1.3% indicated a moderate effect and a low effect respectively. There was no respondent that indicated a very low effect. The statement had a mean of 2.72 and a standard deviation of 1.483 which is more than the composite mean of 1.874, implying that the statement has positive effects on the performance of distribution logistics of soft drinks at the Nairobi Bottlers Company. The mean of the variable is greater than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study.

Statement (5) weight of product is fundamental in Nairobi Bottlers, 71.1% of the respondents indicated a very high effect while 21.3% indicated a high effect. 5% indicated a moderate effect while 2.3% indicated a low effect. Only 0.3% of the respondents that indicated a very low effect. This variable had a mean of 1.94 and a standard deviation of 1.831 which is higher than the composite mean of 1.874, implying that the statement has a positive effect on the performance of distribution logistics of soft drinks at the Nairobi Bottlers Company. The mean of the variable is less than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study.

Statement (6) product form effected in Nairobi Bottlers, 24.6% of the respondents indicated a very high effect while 42.9% indicated a high effect. 10.6% indicated a moderate effect, 19.6% indicated a low effect, while 2.3% indicated a very low effect. The statement had a mean of 1.71 and a standard deviation of 0.829 which is less than the composite mean of 1.874, implying that the statement does not have any effect on the performance of distribution logistics of soft drinks at the Nairobi Bottlers Company. The mean of the variable is less than the composite mean and the standard deviation is greater than the overall one, hence the variable has influence on the study.

The findings from this study concurs with the views of Sinitsyun (2012) who believes that the various aspects of a product is known to enhance the ability of distribution logistics and this effectively meets customer requirements.

#### 4.4.2 Distribution Structure and Performance of Distribution Logistics

The study in this part intended to find out the influence of distribution structure on performance of distribution logistics of Nairobi Bottlers Company, Nairobi County. The study sought to answer the question, what is the influence of distribution structure on performance of soft drink firms in Nairobi Bottlers Company, Nairobi County? Specifically the study focused on how effective distribution structure of Nairobi Bottlers is organized to satisfy the company's customers. Responses in this part required respondents to agree with statements rating distribution structure and its influence on performance of distribution logistics of Nairobi Bottlers Company on a five point Likert Scale ranging from 1 to 5, very low agreement; (1), Low Extent; (2), Moderate extent; (3), High Extent (4) and very high extent (5). The results in this section were as presented in Table 4.8.

**Table 4.8 Distribution Structure and Performance of Soft Drinks Firms** [reduce font .. or](#)

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<b>Distribution Structure and Performance of Soft Drinks Firms</b>	<b>VH</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>Mean</b>	<b>SD</b>
Nairobi bottlers has planned routes	221 (73.5)	74 (24.6)	2 (0.6)	1 (0.3)	3 (1)	2.60	1.367
Nairobi bottlers has established good storage systems	294 (97.7)	4 (1.3)	3 (1)	0	0	2.81	1.208
Order processing at Nairobi bottlers is effective	96 (31.8)	102 (34)	72 (23.9)	28 (9.3)	3 (1)	1.98	1.837

Nairobi bottlers company has good inventory management procedures	112 (37.2)	97 (32.2)	51 (16.9)	36 (12)	5 (1.7)	2.80	1.327
Handling products is good in Nairobi bottlers	234 (77.7)	47 (15.6)	19 (6.4)	1 (0.3)	0	2.60	1.367
<b>Composite score</b>						<b>2.398</b>	<b>1.276</b>

Source: Researcher (2021)

The findings of this section revealed that majority of the respondents (85.1%) were in agreement with statements on influence of distribution structure on performance of soft drinks in Nairobi bottlers while 5.1% disagreed with the statements. 9.8% of the respondents were on moderate agreement with the statements.

Specifically, 73.5% of the respondents agreed that Nairobi Bottlers has planned routes as they indicated very high extent, as well as 26.4% who indicated high extent. 0.6% indicated a moderate extent, 0.3% low extent while 1% indicated very low extent. This item had a mean of 2.6 and a standard deviation of 1.367 which was higher than the composite mean of 2.398, implying that the statement has a positive effect on distribution structure and performance of distribution logistics; and that majority of the respondents agree with the statement.

Secondly, 97.7% of the respondents agreed that Nairobi Bottlers has established good storage systems as they indicated very high extent, as well as 1.3% who indicated high extent. Only 1% of the respondents indicated a moderate extent. This statement had a mean of 2.81 and a standard deviation of 1.208 which was higher than the composite mean of 2.398, implying that the statement has a positive effect on distribution structure and performance of distribution logistics; and that majority of the respondents agree that the Nairobi Bottlers Company has established good storage systems.

On the third statement, 31.8% of the respondents agreed that the order processing at Nairobi Bottlers is effective to a very high extent, 34% to a high extent while 23.9% indicated a moderate extent. 9.3% and 1% indicated a low extent and a very low extent respectively. This item had a mean of 1.98 and a standard deviation of 1.837 which was lower than the composite mean of 2.398, implying that the statement has a negative or no effect on distribution structure and performance of distribution logistics.

These findings are in tandem with a study by Barcik and Jakubiec (2013) who posit that distribution structures adopted especially by production companies should have an impact if the ability of its distribution logistics is to perform. The various aspects of distribution structure that can positively or negatively impact on the performance of the organization's distribution logistics include route planning, mode of transport used and availability of regional depots.

#### **4.4.3 Organizational Resources and Performance of Soft Drinks Firms**

The third research question was, to what extent do organizational resources influence performance of soft drink firms in Nairobi Bottlers Company, Nairobi County? In this section, the researcher developed five statements to measure the influence of organizational resources on performance of soft drinks at the Nairobi Bottlers Company. Specifically the study focused on how Nairobi Bottlers Company has strategically placed its organizational resources to aid performance of its distribution logistics. Respondents in this section were required to agree with statements rating to the influence of organizational resources on performance of distribution logistics in the Company on a five point Likert Scale ranging from 1 to 5; Very Low Extent (1), Low Extent (2), Moderate Extent (3), High Extent (4) and Very High Extent (5). The results in this section were as presented in Table 4.9.



**Table 4.9: Organizational Resources and Performance of Soft Drinks Firms**

<b>Organizational Resources and Performance of Soft Drinks Firms</b>	<b>VH</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>Mean</b>	<b>SD</b>
There is enough financial resources in Nairobi bottler company	186 (61.8)	71 (23.6)	13 (4.3)	29 (9.7)	2 (0.6)	2.32	1.221
Nairobi bottlers has skilled human resource	142 (47.2)	59 (19.6)	2 (0.6)	87 (28.9)	11 (3.7)	1.90	1.128
Nairobi bottlers company has the required information resources	127 (42.2)	141 (46.9)	32 (10.6)	0	1 (0.3)	2.61	1.122
Nairobi bottlers has appealing organizational processes	211 (70.1)	56 (18.7)	23 (7.6)	7 (2.3)	4 (1.3)	2.20	1.327
The company has effective physical resource	199 (66.1)	71 (23.6)	27 (9)	3 (1)	1 (0.3)	3.10	1.447
<b>Composite Score</b>	<b>57.5</b>	<b>26.4</b>	<b>6.4</b>	<b>8.4</b>	<b>1.3</b>	<b>2.273</b>	<b>1.213</b>

Source: Researcher (2021)

Findings of the study revealed that 61.8% of the respondents agreed that there is enough financial resources at the Nairobi Bottlers Company and that there is a very high extent that it has an influence on performance of distribution logistics. 23.6% indicated a high extent while 4.3% indicated a moderate extent. At least 9.7% of the respondents indicated a low extent with only 0.6% indicating a very low extent. This item had a mean of 2.32 and standard deviation of 1.221 that was slightly higher than the composite mean of 2.273, indicating that majority of the respondents agree with the statement, and that it has a positive effect on performance of distribution logistics.

On the other hand, 47.2% of the respondents indicated that Nairobi Bottlers Company has skilled human resource and that there is a very high extent that it has an influence on performance of distribution logistics. 19.6% indicated a high extent while 0.6% indicated a moderate extent. 28.9%

of the respondents indicated a low extent while only 0.3% indicated a very low extent. The statement had a mean of 1.90 and standard deviation of 1.128 that was lower than the composite mean of 2.273, implying that the statement has a no effect or it has a negative effect on performance of distribution logistics.

Additionally, 42.2% of the respondents agreed that the Nairobi Bottlers Company has the required information resources and that there is a very high extent that it has an influence on performance of distribution logistics. 46.9% of the respondents indicated a high extent and 10.6% indicated a moderate extent. Only 0.3% indicated a very low extent, and there was no respondent that indicated a low extent. This item had a mean of 2.61 and standard deviation of 1.122 which was more than the composite mean of 2.273 and this implied that majority of the respondents agree with the statement, and that it has a positive effect on performance of distribution logistics.

Further, 70.1% of the respondents indicated to a very high extent that the Nairobi Bottlers has appealing organizational processes. 18.7% indicated a high extent, 7.6% indicated a moderate extent and 2.3 % of the respondents indicated a low extent. Only 1.3% of the respondents indicated a very low extent. The statement had a mean of 2.20 and standard deviation of 1.327 that was slightly less than the composite mean of 2.273, indicating that the statement has no effect on performance of distribution logistics, even though majority of the respondents agreed with the statement.

Finally, 66.1% of the respondents agreed that the company has effective physical resource and that there is a very high extent that it has an influence on performance of distribution logistics. 23.6% indicated a high extent while 9% indicated a moderate extent. Only 1% and 0.3% of the respondents indicated a low extent and a very low extent respectively. This item had a mean of 3.10 and standard deviation of 1.447 which was higher than the composite mean of 2.273. This

implied that majority of the respondents agree with the statement, and that it has a positive effect on performance of distribution logistics.

Generally the research findings revealed that majority of the respondents (83.9) were in agreement with statements on influence of organizational resources on performance of soft drinks in Nairobi bottlers, with a composite mean of 2.273 and a standard deviation of 1.213.

The results of this section are in agreement with that of Prabhakareri (2010) who posit that when organizational resources are distributed strategically across all sections of an organization. Overtime this is linked to the potential of firms generating sustained competitive advantage.

#### **4.4.4 Industry Competitiveness and Performance of Soft Drinks Firms**

The fourth research question was, what is the influence of industry competitiveness on performance of soft drink firms in Nairobi Bottlers Company, Nairobi County? Respondents in this part were required to rate statements on the influence of industry competitiveness on performance of Soft Drinks Firms, Nairobi County. Specifically the study focused on how Nairobi Bottlers Company has put in place strategies aiding performance of its distribution logistics. Respondents were required to agree with statements rating to the influence of influence of industry competitiveness on performance of distribution logistics in the Company on a five point Likert Scale ranging from 1 to 5; Very Low Extent (1), Low Extent (2), Moderate Extent (3), High Extent (4) and Very High Extent (5). The results in this section were as presented in Table 4.10.

**Table 4.10: Industry Competitiveness and Performance of Soft Drinks Firms**

<b>Industry Competitiveness and Performance of Soft Drinks Firms</b>	<b>VH</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>Mean</b>	<b>SD</b>
Nairobi bottlers company regularly introduces new products	229 (76.1)	54 (18)	12 (4)	5 (1.6)	1 (0.3)	2.33	1.375
Introduction of new services is regularly witnessed in Nairobi bottlers company	92 (30.6)	79 (26.2)	102 (33.9)	21 (7)	7 (2.3)	1.50	0.764
Nairobi bottlers has adopted new production technology	178 (59.1)	49 (16.3)	67 (22.3)	7 (2.3)	0	1.83	0.899
Nairobi bottlers practices price regulation	54 (18)	139 (46.1)	78 (26)	17 (5.6)	13 (4.3)	2.50	0.928
The company hires skilled manpower	213 (70.8)	71 (23.6)	9 (3)	5 (1.6)	3 (1)	2.99	1.532
<b>Composite Score</b>						<b>2.231</b>	<b>1.099</b>

Source: Researcher (2021)

Five statements were analyzed to assess the extent to which industry competitiveness affects performance of distribution logistics at the Nairobi Bottlers Company. Firstly, results revealed that 76.1% of the respondents agreed that to a very high extent, Nairobi Bottlers Company regularly introduces new products and that this affects distribution logistics at the Nairobi Bottlers Company. 18% agreed with the statement to a high extent, 4% to a moderate extent and 1.6% to a low extent. Only 0.3% of the respondents agreed with the statement to a very low extent. The statement had a mean of 2.23 and standard deviation of 1.375 that was higher than the composite mean of 2.231, indicating that the statement has a positive effect on performance of distribution logistics, and that majority of the respondents agreed with the statement.

Secondly, 30.6% of the respondents agreed that introduction of new services is regularly witnessed at the Nairobi Bottlers Company, and that to a very high extent, it affects industry distribution logistics of the Company. 26.2% agreed with the statement to a high extent, 33.9% to a moderate extent and 7% to a low extent. 3% of the respondents agreed with the statement to a very low extent. This statement had a mean of 1.50 and standard deviation of 0.764 which was less than the

composite mean of 2.231, indicating that the statement has no effect or it has a negative effect on performance of distribution logistics.

Thirdly, results revealed that 59.1% of the respondents agreed that to a very high extent, Nairobi Bottlers has adopted new production technology and that it affects distribution logistics at the Nairobi Bottlers Company. 16.3% agreed with the statement to a high extent, 22.3% to a moderate extent and 2.3% to a low extent. There was no respondent that agreed with the statement to a very low extent. The item had a mean of 1.83 and standard deviation of 0.899 that was slightly less than the composite mean of 2.231, indicating that the statement had no effect on performance of distribution logistics.

Fourthly, 18% of the respondents agreed that Nairobi Bottlers practices price regulation and that it affects distribution logistics at the Nairobi Bottlers Company to a very high extent. 46.1% indicated that the statement affects distribution logistics to a high extent, 26% to a moderate extent and 5.6% to a low extent. 4.3% of the respondents were of the opinion that the statement affects distribution logistics to a very low extent. The statement had a mean of 2.5 and standard deviation of 0.928 that was higher than the composite mean of 2.231, indicating that the statement has a positive effect on performance of distribution logistics, and that majority of the respondents agreed with the statement.

Lastly, results indicated that 70.8% of the respondents agreed that the company hires skilled manpower and that to a very high extent, the statement affects distribution logistics at the Nairobi Bottlers Company. 23.6% agreed with the statement to a high extent, 3% to a moderate extent and 1.6% to a low extent. Only 1% of the respondents agreed with the statement to a very low extent. The statement had a mean of 2.99 and standard deviation of 1.532 that was higher than the

composite mean of 2.231, implying that the statement has a positive effect on performance of distribution logistics, and that majority of the respondents agreed with it.

Generally the research findings revealed that on average, majority of the respondents (76.9%) were in agreement with the statements on the influence of industry competitiveness on performance of soft drinks firms in Nairobi bottlers, while only 5.3% agreed with the statements to a low extent. 3.7% of the respondents had a moderate opinion on the statements.

Results of this section were in agreement with a study by that of Kariuki and Murimi (2015) who found out that competition causes production companies to develop new products, services, and technologies which are capable of providing end users with a greater selection and better products. Industry competitiveness ensures companies to come up with products that are attractive and have quality so as a competitive edge.

#### **4.4.5 Performance of Soft Drinks Firms**

The section required respondents to rate statements on performance of Soft Drinks Firms, Nairobi County. Specifically the study focused on how Nairobi Bottlers Company has put in place strategies which ensure performs in its distribution logistics. Respondents in this section were required to agree with statements rating to performance of Nairobi Bottlers Company on a five point Likert Scale ranging from 1 to 5; Very Low Extent (1), Low Extent (2), Moderate Extent (3), High Extent (4) and Very High Extent (5). The results in this section were as presented in Table 4.11.

**Table 4.11: Performance of Distribution Logistics**

<b>Performance of Distribution Logistics</b>	<b>VH</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>Mean</b>	<b>SD</b>
Nairobi bottlers offers quality products	271 (90.1)	23 (7.6)	7 (2.3)	0	0	2.12	1.275
There are reduced prices on products in Nairobi bottlers	77 (25.6)	121 (40.2)	83 (27.6)	19 (6.3)	1 (0.3)	1.61	0.767
There is increased product usage in Nairobi Bottlers	101 (33.5)	39 (13)	129 (42.9)	31 (10.3)	1 (0.3)	1.75	0.828
There is timely delivery of goods and services	217 (72.1)	71 (23.6)	11 (3.7)	0	2 (0.6)	2.52	1.985
Nairobi bottlers has products that pose a competitive edge	174 (57.8)	92 (30.6)	33 (11)	1 (0.3)	1 (0.3)	1.84	1.521
<b>Composite Score</b>						<b>1.968</b>	<b>1.275</b>

Source: Researcher (2021)

Results of the study revealed that majority of the respondents (90.1%) agreed to a very high extent that Nairobi Bottlers offers quality products. 7.6% of the respondents agreed with the statement to a high extent, while only 2.3% agreed with it to a moderate extent. No respondents agreed with the statement to a low or to a very low extent. This statement had a mean of 2.12 and standard deviation of 1.275 which was higher than the composite mean of 1.968, indicating that the statement has a positive effect on performance of distribution logistics, and that majority of the respondents agree with the statement.

On the other hand, 25.6% of the respondents agreed with the statement that there are reduced prices on products at the Nairobi Bottlers Company and that to a very high extent, the statement affects distribution logistics. 40.2% agreed with the statement to a high extent, 27.6% to a moderate extent and 6.3% to a low extent. Only 0.3% agreed with the statement to a very low extent. The statement had a mean of 1.61 and standard deviation of 0.767 that was less than the composite mean of 1.968, indicating that the statement has a negative or no effect on performance of distribution logistics.

Additionally, 33.5% of the respondents agreed to a very high extent that there is increased product usage at the Nairobi Bottlers. 13% agreed with the statement to a high extent, 42.9% to a moderate extent and 10.3% to a low extent. Only 0.3% agreed with the statement to a very low extent. The statement had a mean of 1.75 and standard deviation of 0.828 which was less than the composite mean of 1.968, indicating that the statement has a negative or no effect on performance of distribution logistics and that majority of the respondents did not agree with the statement.

Further, results of the study revealed that majority of the respondents (72.1%) agreed to a very high extent that there is timely delivery of goods and services at the Nairobi Bottlers. 23.6% of the respondents agreed with the statement to a high extent, 3.7% agreed with it to a moderate extent while only 0.6% agreed with the statement to a very low extent. No respondent agreed with the statement to a low extent. The item had a mean of 2.52 and standard deviation of 1.985 which was higher than the composite mean of 1.968, indicating that the statement has a positive effect on performance of distribution logistics, and that majority of the respondents agree with the statement.

Lastly, 57.8% agreed that to a very high extent that Nairobi Bottlers has products that pose a competitive edge and that the statement affects distribution logistics. 30.6% of the respondents agreed with the statement to a high extent, while 11% agreed with it to a moderate extent. Only 0.3% agreed with the statement to a low extent as well to a very low extent. This statement had a mean of 1.84 and standard deviation of 1.521 which was slightly lower than the composite mean of 1.968, indicating that the statement has a negative or no effect on performance of distribution logistics, even though majority of the respondents agree with it.

Generally the research findings revealed that majority of the respondents (78.8%) were in agreement with the statements on performance of soft drinks, while only 0.6% of the respondents disagreed with the statement. 11% of them were of moderate agreement with the statements.



## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The chapter provides summary of findings, discusses, and provides conclusions as well as recommendations on the influence of distribution logistics functions on performance of soft drink firms with focus on Nairobi Bottlers in Kenya.

#### 5.2 Summary of Major Findings

The general objective of the study was to find out the influence of distribution logistics on performance of soft drinks firms with focus on Nairobi Bottlers Company, Nairobi County, Kenya.

The study generally found out that majority of the respondents (78.8%) were in agreement with statements on the influence of distribution logistics on performance of soft drinks. Specifically the study results established that nature of product has an influence on performance of Nairobi Bottlers Company Limited as indicated by 85.8% of the respondents.

The study assessed the influence of distribution structure on performance of Nairobi Bottlers Company Limited. Generally the findings of the study revealed that distribution structure has an influence on performance of soft drinks firms with a mean of ( $M = 2.398$ ) and standard deviation of 1.276 were registered. The specific results of the study found revealed majority of the respondents were in agreement with statements on influence of distribution structure on performance of Nairobi Bottlers Company as indicated by 85.1% of the respondents.

The study again in tended to find out the influence of organizational resources on performance of soft drinks in Nairobi Bottlers Company, Nairobi County. Generally the research findings revealed

that majority of the respondents (83.9%) were in agreement with statements on the influence of organizational resources on performance of distribution logistics in Nairobi bottlers.

The study also assessed the extent to which industry competitiveness affects performance of soft drinks in Nairobi Bottlers Company, Nairobi County. Generally the study found out that majority of the respondents was in agreement with statements on performance of soft drinks firms as shown by means of 2.231 and standard deviation of 1.099. Specifically the findings of the study revealed majority of respondents (76.9%) were agreement with statements on extent to which industry competitiveness influence performance of Nairobi Bottlers Company. The findings from this study concurs with the views of Sinitsyun (2012) who believes that the various aspects of a product is known to enhance the ability of distribution logistics and this effectively meets customer requirements.

### **5.3 Discussion**

#### **5.3.1 Influence of Nature of Product on Performance of Soft Drinks Firms**

The first objective of the study was to establish the influence of nature of product on performance of soft drinks in relation to Nairobi Bottlers Company Limited, Nairobi County. The study revealed that there exist a strong relationship between nature of product and performance of soft drinks firms, and specifically Nairobi Bottlers Company Limited, Nairobi County. This is in agreement with the findings of Sinitsyun (2012) who beliefs that the various aspects of a product is known to enhance the ability of distribution logistics and this effectively meets customer requirements.

According to Stark (2015) the various aspects of nature of product such as shape through good packaging has an influence on distribution and sale of goods and services. Product shape is also an important tool for product presentation, packaging and this enhances performance of soft drinks

companies. According to Xu (2013), the aspects which include weight of the product, shape, unitization of product, product range, perishability, and form of the product have been found to influence performance of soft drinks firms across the world.

The study results also concurs with the findings of Li and Graves (2012) who found out that when firms develops a strong core product line, the product range allows them to focus on those product lines while still offering enough variety in size, color, taste or functionality to appeal to a wide range of potential customers. This is because product range has a great influence on the time required for product handling which encompasses receiving, picking, stacking, order assembly as well as dispatch of the same product.

These findings are clearly in support of Systems Theory which views organizations as open social systems that have to interact with their environment for them to survive. Just like the theory states, organizations rely on their environment for various important reasons which include customers to come to buy products or services to suppliers who are in position to provide materials, employees who are capable of providing labour and management, shareholders who invest and the government who provide policies and regulations. It is also important to note that public relations play a fundamental role in helping organizations adapt to organizational changes.

### **5.3.2 Influence of Distribution Structure on Performance of Soft Drinks Firms**

The second objective of the study was to assess the influence of distribution structure on performance of Nairobi Bottlers Company Limited, Nairobi County, Kenya. The results of this section saw majority of respondents agree with statements on the influence of distribution structure and this are in agreement with the findings of Prabhakareri (2010) who posit that when organizational resources are distributed strategically across all sections of an organization.

Overtime this is linked to the potential of firms generating sustained competitive advantage. The study also found out a strong relationship between distribution structure and performance of Nairobi Bottlers Company with majority of respondents attesting to this. The findings from this study agrees with that of Barcik and Jakubiec (2013) who believes that the various distribution structure can positively or negatively influence performance of soft drinks forms in generally.

The results findings also agree with a study by Workalemahu (2018) who determined the factors influencing distribution performance. The study findings indicated that various aspects of distribution structure had a positive impact on firm's performance. This implies that the various structures of distribution structure must be given due attention if the production firms wants to enhance their performance. Production firms need to have efficient all distribution logistics structure in place together with respect to proper planning and management of all distribution logistics structure.

This is consistent with the conclusion made by Mukhamsd and Kiminami (2011) that it is important to develop good distribution logistics structure to enhance performance; however, the impact of such innovation on firm performance would be less if it does not improve the effectiveness of distribution logistics structure. These findings are in tandem with a study by Barcik and Jakubiec (2013) who posit that distribution structures adopted especially by production companies should have an impact if the ability of its distribution logistics is to perform. The various aspects of distribution structure that can positively or negatively impact on the performance of the organization's distribution logistics include route planning, mode of transport used and availability of regional depots.

Additionally, the findings are in agreement with the the game theory as proposed by Neumann and Morgenstern (1942) that, each player tries to maximize their own value taking into

consideration that the other players will do the same and that the decisions other players affect each other's values. According to the theory, when each player's individual goal in the manufacturing sector is only to maximize his benefits or to minimize his costs, the agreements obtained by negotiation may be fragile and will generally not guarantee optimality for the distribution logistics process as a whole. Game Theory is the best method to illustrate the decision making in a situation with several interdependent parties where the outcome depends on the choice made by every party when designing distribution structure.

### **5.3.3 Influence of Organizational Resources on Performance of Soft Drinks**

The third objective of the study was to find out the influence of organizational resources on performance of soft drinks Nairobi Bottlers Company Limited Nairobi County. Majority of respondents were in agreement with statements on organizational resources. These findings are in tandem with a study by The results of this section are in agreement with that of Prabhakareri (2010) who posit that when organizational resources are distributed strategically across all sections of an organization. Overtime this is linked to the potential of firms generating sustained competitive advantage.

According to Saremi and Mosavi (2014), physical resources such as machinery, equipment, production technology and capacity contribute positively towards organizational competitive advantage and eventually results in firms' performance. Organizational resources are the foundation for attaining and sustaining competitive advantage (Xu, 2013). The findings were also in tandem with a study by Sezhiyan and Nambirajan (2010). Who found a positive relationship between organizational resources and performance of production firms in the United States of America?

Results of the study concur with a study done Muma (2014) in Kenya on the competence of organizations in its distribution logistics. The findings from this study were that the level of distribution competence is a determinant of the efficiency of firm's distribution logistics on performance. The study reminded that it is necessary to have organizational resources which include the human resource with sufficient skills to ensure efficient distribution logistics performance of the organization. The results of this section are in agreement with that of Prabhakareri (2010) who posit that when organizational resources are distributed strategically across all sections of an organization. Overtime this is linked to the potential of firms generating sustained competitive advantage.

The results on organizational resources concurs with the arguments presented by the resource based view theory (RVB) which points out that stresses on the firm's resources as the fundamental determinants of competitive advantage and performance. It adopts two assumptions in analyzing sources of competitive advantage. Just like the theory assumes that firms within an industry may be heterogeneous with respect to the bundle of resources that they control, it assumes that resource heterogeneity may persist over time because the resources used to implement firms' strategies are not perfectly mobile across firms. The findings of the study affirmed what the theory presents. According to the theory, resource heterogeneity is considered a necessary condition for a resource bundle to contribute to a competitive advantage. The argument goes that if all firms in a market have the same stock of resources, no strategy is available to one firm that would not also be available to all other firms in the market.

#### **5.3.4 Influence of Industry Competitiveness on Performance of Soft Drinks**

The fourth objective of the study was to assess the extent to which industry competitiveness affects performance of soft drinks in Nairobi Bottlers Company, Nairobi County. Majority of the

respondents agreed with statements on influence of industry competitiveness. Results of this section are in agreement with a study by that of Kariuki and Murimi (2015) who found out that competition causes production companies to develop new products, services, and technologies which are capable of providing end users with a greater selection and better products. Industry competitiveness ensures companies to come up with products that are attractive and have quality so as a competitive edge.

This study also agrees with a study by Sareem and Mosavi (2014) which agrees that industrial strategists turn its attention from diversification to optimization of company's competitive strategies and optimization of its total portfolio when different markets of the organization have growth prospects. This is important as segmented environments make firms desirable thus the essence of strategic industry competitiveness.

According to Aira and Mise (2012), there is a high positive correlation between influence industry competitiveness and performance of production firms the results of this study agrees the findings of Aira and Mise studies. Their results also indicated that if sales were to be increased, it was necessary to increase stock availability. This implied that firm management need sufficient stock availability to meet customer needs and achieve the desired customer value levels.

This was found to be in agreement with the assertion by Kariuki and Murimi (2015) that, competition causes production companies to develop new products, services, and technologies and this provides end users with a greater selection and better products. The greater selection typically causes lower prices for the products either creating a bigger market share for the company or make it smaller. Industry competitiveness ensures companies such as Nairobi come up products that are attractive and have quality so as put the company a head of others.

## 5.4 Conclusions

From the study findings, it is concluded that nature of product has a significance influence on performance of Nairobi Bottlers Company Limited, This evidently implies that taking care of nature of product enhances performance of the company. Considering the fastness the world is moving in terms of production of soft drinks, it is essential that firms embrace the various aspects of nature of product which include form shape perishability as well as range of such products which enhances the ability for firms to perform.

The results of this section saw majority of respondents agree with statements on the influence of distribution structure on performance of soft drinks firms. Distribution structure has been found to significantly influence performance of Nairobi Bottlers Company. This has been realized through the company ensuring that their distribution structure is done strategically across all market zones to ensure the potential of firm's generation of sustained competitive advantage.

The finding of the 3rd objective was to find out the influence of organizational resources on performance of soft drinks Nairobi Bottlers Company. Organizational resources were found to have a positive relationship with performance of the Company. This mainly attributes to the company ensuring that their organizational resources are distributed strategically across all sections, which has been associated with the potential of firm's generation of sustained competitive advantage.

Results of assessing the extent to which industry competitiveness affects performance of soft drinks in Nairobi Bottlers Company saw majority of the respondents agreed with statements where it was found out that industry competitiveness has a significant relationship with performance of Nairobi Bottlers Company. Through competition, the company has come up with new products



which are capable of providing end users with a greater selection. Industry competitiveness therefore ensures companies come up with products that are attractive and have quality for them to be competitive.

### **5.5 Recommendations**

The study recommends that firms ensure that the products they produce take into account the various aspects associated products to enhance their competitiveness and this will in turn assist firms to perform. The quality of products that is associated with their various aspects if properly coordinated will ensure prosperity of production firms.

Ensure that distribution structure is enhanced more in the company. This will assist in eliminating some of the doubts that is expressed by a few respondents who were against the statements as not all of the respondents support the statements.

Nairobi bottlers plus other coca cola branches need to increase funding on resource acquisition as well as training of their personnel as some of the respondents were not fully in supportive of the influence of existing distribution of organizational resources.

Nairobi bottlers' management should also train their staff further on impact of distribution logistics on performance of the company. This is to enable them achieve effective means of ensuring industry competitiveness and hence increase further the performance of the company.

### **5.6 Areas of Further Research**

This study only focused on finding out the influence of distribution logistics on performance of soft drinks firms with focus on Nairobi Bottlers Company, Nairobi County, Kenya. The influence of distribution logistics on performance of soft drink firms with focus on Nairobi Bottlers Company was investigated from its influence and was measured by its distribution logistics

performance using four objectives which included .establishing the influence of the nature of product assessing the influence of distribution structure finding out the influence of organizational resources and assessing the extent to which industry competitiveness affects performance of soft drinks in Nairobi Bottlers Company, Nairobi County. However there are other major objectives other than the ones used in this study which future research works if pursued in future could add more value to distribution logistics of production firms in general.

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## APPENDICES

### APPENDIX I: INTRODUCTION LETTER

Dear Respondents

Accept my Greetings

#### **Ref; Collection of Data**

My name is Josephine. a student at Africa Nazarene University. I am currently conducting a study on the factors affecting the performance of distribution logistics of soft drinks in Nairobi Bottlers, Company Kenya. Your participation will be of great importance to me as a student, Africa Nazarene university and Nairobi county in general. I therefore take this opportunity to request you give your input through filling the questionnaire. This questionnaire seeks your views on the above issue. Do not provide your identity. The information you will provide will only be applied in the academic purposes.

Thank you in advance for your Cooperation,

Yours Faithfully

Josephine Mutindi Kithu.

## APPENDIX 11: QUESTIONNAIRE

This questionnaire aims at establishing the factors affecting the performance of distribution logistics of soft drinks in Nairobi Bottlers, Company Kenya. Kindly answer all questions as truthfully as possible. All information volunteered, including respondent's identity, will be confidential.

### Section One: General Information

Please Tick (✓) Appropriately

1. Please indicate your gender

Male  Female

2. Please indicate your age bracket (Optional)?

18- 25 years  26-35 years  36-45 years  46-55 years  56 years and above

3. What is your highest academic qualification?

Primary  Secondary  College  University  Others (Specify)

4. What is your position in the company?

Top Level Manager  Middle Level Manager  Lower Level Manager

5. Do you often get involved in the distribution logistics in your company?

Yes  No.

### Section Two: Nature of Product and Performance of Distribution Logistics

For each of the following objective on “the nature product has an effect on performance of distribution logistics of soft drinks in Nairobi Bottlers Company” use a scale of 0-4.5 and above

where 0-1.5 = very low agreement; 1.5-2.5 = Low Extent; 2.5-3.5 = Moderate extent; 3.5-4.5 = High Extent while 4.5 and above shows an agreement to a very high extent.

Nature of Product		Very high extent	High extent	Moderate extent	Low extent	Very low extent
		4.5& above	3.5-4.5	2.5-3.5	1.5-2.5	0-1.5
6	Nairobi Bottlers Company handles perishable products					
7	There is high prioritization of product shape					
8	Nairobi Bottlers values product utilization					
9	Distribution logistics at Nairobi Bottlers Company prioritizes product range					
10	Weight of product is fundamental in Nairobi bottlers					
11	product form effected in Nairobi bottlers					

12. What is your general comment on the nature product has an effect on performance of distribution logistics of soft drinks in Nairobi Bottlers Company?

.....  
 .....

### Section Three: Distribution Structure and Performance of Distribution Logistics

For each of the following objective on “distribution structure and performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya” use a scale of 0-4.5 and above where 0-1.5 = very low agreement; 1.5-2.5 = Low Extent; 2.5-3.5 = Moderate extent; 3.5-4.5 = High Extent while 4.5 and above shows an agreement to a very high extent.

		<b>Very high extent</b>	<b>High extent</b>	<b>Moderate extent</b>	<b>Low extent</b>	<b>Very low extent</b>
		<b>4.5 &amp; above</b>	<b>3.5-4.5</b>	<b>2.5-3.5</b>	<b>1.5-2.5</b>	<b>0-1.5</b>
13	Nairobi bottlers has planned routes					
14	Nairobi bottlers has established good storage systems					
15	Order processing at Nairobi bottlers is effective					
16	Nairobi bottlers company has good inventory management procedures					
17	handling products is good in Nairobi bottlers					

18 What is your general comment on distribution structure and performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya?

.....  
 .....

#### **Section Four: Organizational Resources and Performance of Distribution Logistics**

For each of the following objective on “organizational resources and performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya” use a scale of 0-4.5 and above where 0-1.5 = very low agreement; 1.5-2.5 = Low Extent; 2.5-3.5 = Moderate extent; 3.5-4.5 = High Extent while 4.5 and above shows an agreement to a very high extent.

		Very high extent	High extent	Moderate	Low extent	Very low extent
		4.5 & above	3.5-4.5	2.5-3.5	1.5-2.5	0-1.5
19	There is enough financial resources in Nairobi bottler company					
20	Nairobi bottlers has skilled human resource					
21	Nairobi bottlers company has the required information resources					
22	Nairobi bottlers has appealing organizational processes					
23	The company has effective physical resource					

24 What is your general comment on organizational resources and performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya?

.....  
 .....

### **Section Five: Industry Competitiveness and Performance of Distribution Logistics**

For each of the following objective on “Industry competitiveness and performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya” use a scale of 0-4.5 and above where 0-1.5 = very low agreement; 1.5-2.5 = Low Extent; 2.5-3.5 = Moderate extent; 3.5-4.5 = High Extent while 4.5 and above shows an agreement to a very high extent.

		Very high extent	High extent	Moderate	Low extent	Very low extent
		4.5 & above	3.5-4.5	2.5-3.5	1.6-2.5	0-1.5
25	Nairobi bottlers company regularly introduces new products					
26	Introduction of new services is regularly witnessed in Nairobi bottlers company					
27	Nairobi bottlers has adopted new production technology					
28	Nairobi bottlers practices price regulation					
29	The company hires skilled manpower					

30 What is your general comment on industry competitiveness and performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya?

.....  
 .....

### **Section Six: Performance of Distribution Logistics of Soft Drinks in Nairobi Bottlers Company**

For each of the following objective on “performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya” use a scale of 0-4.5 and above where 0-1.5 = very low

agreement; 1.5-2.5 = Low Extent; 2.5-3.5 = Moderate extent; 3.5-4.5 = High Extent while 4.5 and above shows an agreement to a very high extent.

		<b>Very high extent</b>	<b>High extent</b>	<b>Moderate Extent</b>	<b>Low extent</b>	<b>Very low extent</b>
		<b>4.5 &amp; above</b>	<b>3.5-4.5</b>	<b>2.5-3.5</b>	<b>1.5-2.5</b>	<b>0-1.5</b>
31	Nairobi bottlers offers quality products					
32	There are reduced prices on products in Nairobi bottlers					
33	There is increased product usage in Nairobi Bottlers					
34	There is timely delivery of goods and services					
35	Nairobi bottlers has products that pose a competitive edge					

36 What is your general comment on performance of distribution logistics of soft drinks in Nairobi Bottlers Company Limited, Kenya?

.....  
 .....

Thank you very much for your participation



**APPENDIX III: ANU RESEARCH PERMI**

E-mail: [researchwriting.mba.anu@gmail.com](mailto:researchwriting.mba.anu@gmail.com)  
Tel. 0202711213

*14<sup>th</sup>, December, 2020*

*Our Ref: 19MO3EMBA024*

**The Director.**

National Commission for Science,  
Technology and Innovation (NACOSTI),  
P. O. Box 30623, 00100  
**Nairobi. Kenya**

**Dear Sir/Madam:**

**RE: RESEARCH AUTHORIZATION FOR: JOSEPHINE MUTINDI KITHU**

Miss. Josephine is a postgraduate student of Africa Nazarene University in the Master of Business Administration (MBA) program.






In order to complete her program, Miss. Josephine is conducting a research entitled: **“Influence of Distribution Logistics on Performance of Soft Drinks Firms in Kenya: A Case of Nairobi Bottlers Company Limited, Nairobi County”**

Any assistance offered to her will be highly appreciated.

Yours Faithfully,

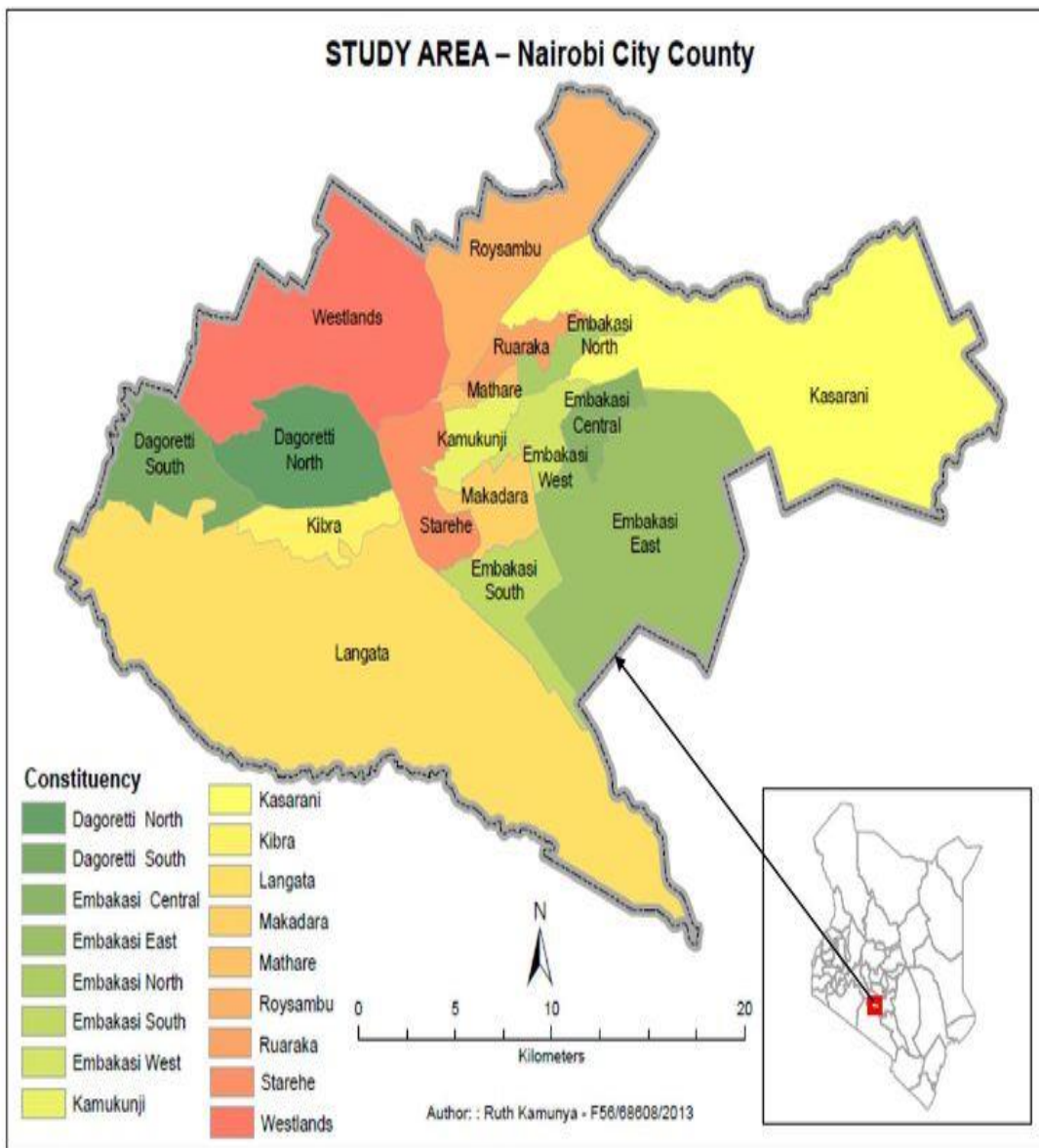
**DR. Kimani Gichuhi,**  
**MBA, Coordinator,**  
**School of Business,**  
**Africa Nazarene University.**

**APPENDIX IV: RESEARCH PERMIT**

 REPUBLIC OF KENYA	 <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
RefNo: <b>661674</b>	Date of Issue: <b>19/January/2021</b>
<b>RESEARCH LICENSE</b>	
	
<b>This is to Certify that Ms. Josephine MUTINDI Kithu of Africa Nazarene University, has been licensed to conduct research in Nairobi on the topic: INFLUENCE OF DISTRIBUTION LOGISTICS ON PERFORMANCE OF SOFT DRINKS FIRMS IN KENYA: A CASE OF NAIROBI BOTTLERS COMPANY LIMITED, NAIROBI COUNTY for the period ending : 19/January/2022.</b>	
License No: <b>NACOSTI/P/21/8568</b>	
<b>661674</b> Applicant Identification Number	 Director General <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
	Verification QR Code 
<b>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</b>	

Appendix V: MAP OF STUDY AREA (Nairobi County)

# Study Area



Study Area – Nairobi City County