DISTRIBUTION CHANNELS AND SUPPLY CHAIN MANAGEMENT IN COCA-COLA COMPANY IN MOGADISHU-SOMALIA

BY

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NOVEMBER, 2016
DECLARATION

I, hereby declare that this piece of work is my original and has never been presented to any institution for any award.

Signature: Mohamed Date: 13/11/2016
APPROVAL

I confirm that the work on this thesis report was carried out by the candidate under my supervision.

Signature: [Signature] Date: 12/11/2016

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ACKNOWLEDGEMENTS

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DEDICATION

I dedicate this work to my mom Hawa and my uncle Abdi, whom provided me moral support for the success, thank you for your endless amount of love and courage.
# TABLE OF CONTENTS

DECLARATION ................................................................................................................................. i  
APPROVAL .................................................................................................................................... ii  
ACKNOWLEDGEMENTS ................................................................................................................ iv  
DEDICATION .................................................................................................................................. iv  
TABLE OF CONTENTS ...................................................................................................................... vi  
LIST OF TABLES .............................................................................................................................. x  
LIST OF FIGURES ........................................................................................................................... xi  
LIST OF ACRONYMS ....................................................................................................................... xii  

CHAPTER ONE ................................................................................................................................. 1  
INTRODUCTION ............................................................................................................................... 1  
1.0 Introduction ............................................................................................................................... 1  
1.1 Background of the Study .......................................................................................................... 1  
1.1.1 Historical Perspective ........................................................................................................ 1  
1.1.2 Theoretical Perspective ..................................................................................................... 3  
1.1.3 Conceptual Perspective ..................................................................................................... 5  
1.1.3 Contextual Perspective ..................................................................................................... 5  
1.2 Problem Statement ................................................................................................................... 6  
1.3 Purpose of the study .................................................................................................................. 6  
1.4 Objectives of the study ............................................................................................................ 6  
1.5 Research Questions .................................................................................................................. 6  
1.6 Hypothesis ............................................................................................................................... 6  
1.7 Scope of the study ..................................................................................................................... 6  
1.7.1 Content Scope ................................................................................................................ 6  
1.7.2 Geographical scope ........................................................................................................ 7
3.5 Sources of data ................................................................................. 22
3.5.1 Primary Data ............................................................................. 22
3.6 Data Collection methods ............................................................... 23
3.6.1 Questionnaire ........................................................................... 23
3.7.0 Validity and Reliability of the instrument................................. 23
3.7.1 Validity ..................................................................................... 23
3.7.2 Reliability of the study ............................................................... 24
3.8 Data collection procedure ............................................................. 25
3.9 Data analysis ................................................................................ 25
3.10 Ethical Considerations ................................................................. 25
3.11 Limitations of the study ............................................................... 26

Chapter four .................................................................................... 27

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDING ... 27

4.0 Introduction .................................................................................. 27
4.1 Demographics of respondents ....................................................... 27
4.2 Descriptive analysis of independents variable.............................. 30
    4.2.1 Descriptive analysis of outsourcing ....................................... 31
    4.2.2 Descriptive analysis of distribution center .............................. 34
    4.2.3 Descriptive analysis of warehousing ...................................... 36
4.3 Descriptive analysis of dependent variable ................................. 39
4.4 Relationship between dependent and independent variables ........ 43
    4.4.1 Outsourcing and supply chain management .......................... 43
    4.4.2 Hypothesis one testing .......................................................... 44
    4.4.3 Distribution centers and supply chain management ............... 45
4.4.4 Hypothesis two testing ................................................................. 46
4.4.3 Warehousing and supply chain management .............................. 46
4.4.4 Hypothesis three test ................................................................. 47

CHAPTER FIVE .................................................................................. 48

SUMMARY OF THE FINDINGS AND RECOMMENDATION OF THE STUDY....... 48

5.0 Introduction ................................................................................. 48
5.1 Summary of the findings ............................................................. 48
5.1.1 Relationship between outsourcing and supply chain ................ 48
5.1.2 Relationship between distribution centers and supply chain ....... 48
5.1.3 Relationship between warehousing and supply chain ............... 49
5.2 Recommendations ...................................................................... 49
5.3 Further researches ..................................................................... 50

References ....................................................................................... 52

Appendix i: Research Questionnaire ................................................. 56
Appendix ii: research budget .............................................................. 60
Appendix iii: research time frame ...................................................... 61
LIST OF TABLES

Table 3.1: Population Sample Size Summary ......................................................... 28
Table 3.2: Reliability Test Results ........................................................................... 31
Table 3.3: Mean Interpretation Guide ...................................................................... 32
Table 4.1: Gender of the Respondents ................................................................. 33
Table 4.2: Age of The Respondents ...................................................................... 34
Table 4.3: Education Level of the Respondents ...................................................... 34
Table 4.4: Marital Status of the Respondents .......................................................... 35
Table 4.5: Experience of the Respondents ............................................................. 35
Table 4.6: Descriptive Statistics of Outsourcing ...................................................... 37
Table 4.7: Descriptive Statistics of Distribution Center .......................................... 42
Table 4.8: Descriptive Statistics of Warehousing .................................................... 46
Table 4.9: Correlation Test Results Of Outsource and Supply Chain Management ........ 49
Table 4.10: Correlation Test Results of Distribution Center and Supply Chain Management .... 53
Table 4.11: Correlation Test Results of Warehousing and Supply Chain Management .... 55
Table Appendix 1: Questionnaire Section (A) .................................................... 68
Table Appendix 2: Questionnaire Section (B) ..................................................... 69
Table Appendix 3: Research Budget .................................................................... 70
Table Appendix 4: Time Frame of the Study ......................................................... 73
LIST OF FIGURES

Figure 2.1: conceptual frame work of the study .................................................. 12
LIST OF ACRONYMS

CHDR  College of higher degree and research
SCM  supply chain management
DC  distribution channels
JIT  just in time
3PL  third part logistics
PLCC  Pearson's correlation coefficient
ABSTRACT

Distribution channel plays a key role within the context of supply chain, to ensuring that customers get their products at the right place and at the right time. This study was intended to examine the relationship between distribution channels and supply chain management with specific objectives of 1) To assess the relationship between outsourcing and supply chain management 2) To examine the relationship between distribution centers and supply chain management 3) To find out the relationship between warehousing and supply chain management. The study employed descriptive research design and researcher used structured questionnaire. A research population of 225 was identified and a sample size of 144 respondents was selected using the Slovene’s formula. In selecting the respondents the researcher used the simple random sampling technique. The study found that using a bivariate Pearson linear correlation analysis that outsourcing and supply chain management of Coca-Cola Company, Mogadishu, Somalia has a weak positive relationship with R of 0.365. Distribution centers and supply chain management have also a strong positive relationship with R of 0.628. The study also found that warehousing and supply chain management of Coca-Cola company in Mogadishu Somalia, has also strong positive relationship with R of 0.756. The researcher recommended that Coca-Cola company must consider outsourcing as an important factor on their supply chain, they also take into account that distribution center plays an important role in their supply chain and the company must aware that warehousing contributes the wellbeing of their supply chain management. The study concluded and found that there is a relationship between distribution channels and supply chain management of Coca-Cola Company in Mogadishu- Somali.
CHAPTER ONE
INTRODUCTION

1.0 Introduction
This chapter is the basis upon which the researcher was built up the whole study and it is the overall introduction of the study. The topic of the study is contribution of distribution channel to the efficiency of supply chain management, case study Coca-Cola in Mogadishu Somalia and it is aimed to describe how distribution channel can contribute the efficiency of supply chain management. The chapter is about the background of the study that was be explored in terms of historical, theoretical, conceptual and contextual background, the problem statement, the purpose of the study, the objectives of the study, the research questions, research hypothesis, scope of the study and the significance of the study.

1.1 Background of the study
The background of this study was be presented in form of historical, theoretical, conceptual, and contextual perspectives.

1.1.1 Historical Perspectives
Distribution channel management has played an important role in the marketing discipline for over 40 years and its historical importance can be summarized into two. First, how channels are organized or structured has been a focal point, centering on the level of channel integration, reliance on multiple channels, distribution intensity and organizational policies relating to centralization, formalization, standardization, and surveillance, Second, how ongoing channel relationships are coordinated in a behavioral sense has been even more prominent, dealing with methods of channel governance, including the impact of contracts, the development and application of inter firm power, communication approaches, levels of control and conflict, and the attainment of trust and commitment.

Many companies do not sell their products directly to end users. In mass production and consumption industries in particular, many manufacturers rely on distributors, representatives, sales agents, brokers, retailers or some combination of these intermediaries to distribute their
products (Hughes and Ahearne, 2010). Many foreign companies wish to establish a commercial presence abroad, especially USA and UK. The first thing that comes to mind is how to establish a presence and ensure that products are distributed to customers in an efficient way, i.e., with the least expenditure of money (Hughes and Ahearne, 2010).

Sometime an independent contractor or agents are needed; these intermediaries perform a variety of functions and constitute a marketing channel, which is also referred to a trade channel or distribution channel (Kotler and Keller, 2008). The importance of channel intermediaries has grown in recent years, largely due to increased size, improved level of product knowledge, technical competence, specialization and various other factors. In a typical distribution channel for consumer goods, for example, manufacturers sell to retailers, which sell to consumers in markets. Retailers break bulk, holds inventory, provide shelf space, create promotional displays and advertising, create one-stop-shopping convenience and a pleasant shopping environment, all of which increases demand for the manufacturer’s product (Desiraju and Moorthy, 1997). Retailers gain a central position in many industries thanks to their increasing degree of concentration and internalization, successful launching of retailer brands and by controlling more and more of the value-adding functions with the distribution supply chain (Burt, Dawson and Elg, 2003).

To develop an excellent business model for Africa, one consideration is how to distribute your products and services. Historically, Africa is challenged with lack of infrastructure, even today. Yet, corporations have found ways to develop distribution and supply channels that both help them to serve the growing markets in the developing world while creating opportunities for small entrepreneurs to bring their product to market.

In Somalia, a country ravaged by civil war and desperate poverty, Somalia’s local manufacturing companies are mostly operates in the capital city, Mogadishu, whether both road and infrastructure of the countries made less probability of successful distribution system. After years of strife, Somalia is slowly moving towards recovery. In September, the country elected its first president on home soil in decades.

There are blades of hope growing among these cobblestones of difficult history in both business sectors as well as public sectors (Ismail, 2014).
According to Rhonda (1999) Interest in supply chain management has steadily increased since the 1980s when firms saw the benefits of collaborative relationships within and beyond their own organization. Firms are finding that they can no longer compete effectively in isolation of their suppliers or other entities in the supply chain. A number of definitions of supply chain management have been proposed in the literature and in practice. This paper defines the concept of supply chain management and discusses its historical evolution. The term does not replace supplier partnerships, nor is it a description of the logistics function. The competitive importance of linking a firm's supply chain strategy to its overall business strategy and some practical guidelines are offered for successful supply chain management.

In Africa, ancient times, transportation technology was basic and the cost of moving goods was an important determinant of the production and distribution of a product. Thus, goods were put together close to the source of raw materials. Then, these products made their way in a largely linear chain to their end consumer.

In Somalia represents one of the most critical, complex and prolonged humanitarian emergencies in the world today. The majority of Somali people have not experienced effective rule of law for more than twenty years, and during that time, most of the country has experienced protracted conflict. Unfortunately, the Somali context affects children, who constitute almost half of the estimated 10 million people, more than it does adults. The majority of supplies for Somalia are procured internationally. Logistical challenges remain difficult with poor transport infrastructure (UNICEF report, 2014).

1.1.2 Theoretical perspective
This study was guided by agent theory put forward by Stephen (1974). Agency theory is relevant for the situations wherein one party (the principal) delegates authority — in terms of control and decision-making about certain tasks — to another party which is called the agent (Halldorsson, 2010).

During the last four decades, agency theory has been widely used across a variety of disciplines, but little work has been undertaken with regard to how agency theory might be used to explain relations between organizations within the supply chain (SC). More recently, supply chain
management (SCM) scholars have shown growing interest in using agency theory to understand how participants within the SC manage risks, align incentives and forge relationships. (See for example, Halldórsson, 2010; Schary, Skjott & Larsen, 2010; Ritchie, 1960), all adopted this theory in their studies and suggested that the application of agency theory in logistics, have only partially contributed to our understanding of Supply Chain relationships. In agency relationships, one party (the principal) delegates work to another party (the agent) (Ross, 1996; Shah., 1989). When the agent is acting for the principal it resembles behaviors such as performing for the benefit of the principal or acting as the principal's representative or employee. While the profit maximization approach and self-interest persists. The focus of agency theory centers on determining the most efficient contract governing the principal-agent relationship. Developments in agency theory are largely based on two important streams of inquiry, namely, principal-agent research and positivist agency theory. The classical approach to understanding agency theory has historically followed the principal-agent relationships route, which assumes that the principal and agent were attempting to maximize their positions through individual interpretation of the contract, as highlighted earlier. The principal-agent research owes much of its development to the work of economists, who have used self-interest, bounded rationality and agent risk aversion as the principal determinants for mathematically modeling relationship building (Roger, 2011).

1.1.3 Conceptual perspective
Supply chain management (SCM) is the management of the flow of goods and services. It includes the movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption. Interconnected or interlinked networks, channels and node businesses are involved in the provision of products and services required by end customers in a supply chain. Supply chain management has been defined as the "design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand and measuring performance globally (Druckler, 1998).

Desiraju and Moorthy (1997) defined distribution channels as a chain of businesses or intermediaries through which a good or service passes until it reaches the end consumer. A distribution channel can include wholesalers, retailers, distributors and even the internet.
Coca-Cola Company in Mogadishu Somalia has been opened in 2004 as a franchised manufacturing company. The Company sold diverse products in the Somali capital and in upcountry regions and spread their products over the capital city of Somalia and its one of the major source of income for a several families where the company recruited the largest number of employees as that time. The plant has been dysfunctional over a number of years. Briefing the media at the plant along the Industrial Road in North Mogadishu, Mr. Mohamed Hassan Awale, The Managing Director of Mogadishu Coca Cola Company, stated that the company has cleared plans to resume production after being out of the market for nearly six years.

1.1.4 Contextual perspective
Coca Cola Company in Mogadishu Somalia opened its factory in the capital city, Mogadishu. SCM is the management of the flow of goods and services. It includes the movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption. The company performs the major activities of supply chain but they poorly faced their supply chain management. The Company reengages the old system as well as introducing new product lines but unfortunately they are still facing a dilemma of their distribution channel and delivering system (Ismail, 2014).

The reason why the researcher would emphasize only in Coca-Cola is that the company is the biggest manufacturing company in Mogadishu-Somalia. In addition to that, the other manufacturing companies majorly operate without a formal procedure and it is not easy to access and gain a reliable data from the management and staffs as well.

1.2 Problem statement
Coca-Cola company in Somalia is currently facing poor supply chain management (annual report 2016), customer complaints, lack of order fulfillment and delay delivery are major signs of poor supply chain management. Poor supply chain management usually increases the overall expenses of the company which might negatively affect the financial performance and profitability of the organization Inadequate information sharing, poor supplier relationship and improper distribution system are the major causes of poor supply chain management (Rossen, 2007).

The company reported financial losses due to distribution problem and additional cost they were incurred for reverse logistics or bring back the bottles to refill or recycle again. Major of
manufacturing companies in Somalia have not been recognized supply chain management as a single entity or department which has its own right and independence.

Many studies have been conducted to examine distribution channels and supply chain management (see for example, Gibson 2000; Hughes and Aheama, 2010; and Kothari, 2004). However, their geographical content was differing from this study and it implies that there is no previous studies related to these variables have been carried out in Mogadishu Somalia, and the researcher intended to fulfill this gap.

1.3 Purpose of the study
The main purpose of the study is to describe the relationship between distribution channels and supply chain management of Coca-Cola companies in Mogadishu Somalia.

1.4 Research objectives
1. To assess the relationship between outsourcing and supply chain management
2. To examine the relationship between distribution centers and supply chain management
3. To find out the relationship between warehousing and supply chain management

1.5 Research question
1. What is the relationship between outsourcing and supply chain management?
2. How are distribution centers and supply chain management related?
3. What is the relationship between warehousing and supply chain management?

1.6 Hypothesis
H_{0} 1: There is no significant relationship between outsourcing and supply chain management
H_{0} 2: There is no significant relationship between distribution centers and supply chain management
H_{0} 3: There is no significant relationship between warehousing and supply chain management
1.7 Scope of the study

1.7.1 Geographical scope
This study was conducted in Yaqshid, Mogadishu Somalia. Yaqshid district is in the southeastern Banadir region of Somalia and it is a neighborhood in the northwestern part of Mogadishu, the reason the researcher prefers is that the most manufacturing companies operate in that specific area apart from Mogadishu.

1.7.2 Content scope
The study examined the distribution channels and supply chain management of manufacturing companies in Mogadishu Somalia, the cause and effect relationship between the independent variable (distribution channels) and dependent variable (supply chain management).

1.7.3 Theoretical scope
This study was guided by agent theory put forward by Stephen (1974). Agency theory is relevant for the situations wherein one party (the principal) delegates authority – in terms of control and decision-making about certain tasks – to another party which is called the agent (Halldorsson, 2010).

1.7.4 Time scope
The study was conducted from February, 2016 to October 2016.

1.8 Significance of the Study
It is expected that the findings of this study will be useful to Coca-Cola Company in Somalia to improve their supply chain management by concentrating their distribution channel. In addition to that, the researcher expects that this study will provide a reliable solution for distribution and supply chain management by highlighting some recommendations and suggestions which will be useful to the manufacturing and service companies in Somalia.

The future researchers will utilize the findings of this study to embark on a related study.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction
This chapter shows theoretical review, the conceptual review, and additional literature review.

2.1 Theoretical Review
This study was guided by agent theory put forward by Stephen (1974). Agency theory is relevant for the situations wherein one party (the principal) delegates authority in terms of control and decision-making about certain tasks to another party which is called the agent (Halldórsson, 2010).

During the last four decades, agency theory has been widely used across a variety of disciplines, but little work has been undertaken with regard to how agency theory might be used to explain relations between organizations within the supply chain (SC). More recently, supply chain management (SCM) scholars have shown growing interest in using agency theory to understand how participants within the SC manage risks, align incentives and forge relationships (See for example, Halldórsson, 2010; Ronen, 1998; and Shah, 1989) all adopted this theory in their studies and suggested that the application of agency theory in logistics, have only partially contributed to our understanding of Supply Chain relationships. In agency relationships, one party (the principal) delegates work to another party the agent (Ross, 1996).

When the agent is acting for the principal it resembles behaviors such as performing for the benefit of the principal or acting as the principal's representative or employee. While the profit maximization approach and self-interest persists. The focus of agency theory centers on determining the most efficient contract governing the principal-agent relationship. Developments in agency theory are largely based on two important streams of inquiry, namely, principal-agent research and positivist agency theory. The classical approach to understanding agency theory has historically followed the principal-agent relationships route, which assumes that the principal and agent were attempting to maximize their positions through individual interpretation of the contract, as highlighted earlier. The principal-agent research owes much of its development to the work of
economists, who have used self-interest, bounded rationality and agent risk aversion as the principal determinants for mathematically modeling relationship building.

Many SCM researchers have highlighted the need for greater practical application of organizational theories and in doing so have recognized organizational theory's pivotal role in explaining, describing, and predicting complex organizational behaviors. These researchers have also been instrumental in identifying the significant bias towards transaction-cost economics (TCE) in the literature, Kothari (2004). TCE argues that during any economic exchange, the cost of the product or service should also include all hidden costs. For example, when establishing a relationship between a buyer and supplier, hidden costs might include time spent on developing the relationship, the drawing up of contracts by a lawyer, or travel between various locations. The explicit focus for TCE is the reduction of transaction exposure by accounting for all organizational costs (i.e., transaction and production costs). Alternatively, SC relationships are often intangible and TCE does not provide a sufficient explanation of social, political, legal and behavioral dynamics. TCE exclusively translates the many trade-offs within a make or buy decision into cost, which mainly implies tangibility.

Whilst not invalidating the agency theory's value in terms of explaining SC relationship behavior, the limitations of this theory need to be acknowledged. For example, an over-emphasis towards economic drivers has become an important area of weakness in agency theory use (Heracleous and Lan, 2011). This is in part an historical legacy, and also occurs because many SCs have traditionally been conceptualized as economic exchange mechanisms, rather than being comprised of complex social and economic relationships.
The conceptual framework indicates the elements or the measurement of both independent and dependent variables. The independent variable is distribution channels while the dependent variable is supply chain management case Coca-Cola Somalia. Distribution channels consist of third part intermediation, distribution centers or depots and warehousing.

Supply chain management can also be measured in terms of on time delivering or real time delivering, transport costs and service quality.

2.3 Related studies of distribution channel

In order to sustain the growth of the international marketplace and the integration of the world’s economic activities it is vital to conduct efficient and cost-effective distribution (Ross 1996).

The challenge to global distribution management is to structure a supply chain that is responsive and flexible enough to cope with differences in customers' requirements and yet enable the benefits of focused manufacturing to be achieved (Schary & Skjott-Larsen, 2010).
According to Black, John and Danny (2002) the past decade have seen some of the most rapid and substantive changes in channels of distribution for goods and services in developed economies. What companies must remember is that the choice of distribution channel is quite complicated in the home market of a company but even more complicated when going international and starting to export. It is vital for companies who are about to establish abroad that they realize that the choice of distribution channel is crucial for future success and growth. There are many alternative distribution channels to choose from and the conditions may vary from different companies and markets. Furthermore, the choice of distribution channel is often complex and expensive if changing it subsequently. Therefore, it is central that the decision is given the attention and acknowledgement which is called for due to the fact that it has such a long-term outcome of the export investment’s success.

Distribution builds stable competitive advantages, since marketing channels have a long-run character and to build them it is necessary to have a consistent structure; and due also to the fact that they are focused on people and relationships (Neves, Jerry and Schary 2001).

With channels of distribution changing rapidly studies of consumers was need to focus not just on understanding product choice but also on understanding the reasons for channel choice (Black et al, 2002).

A common assumption that is made in many writings in the area of distribution is that the choice of channel can be seen in the same conceptual framework as choice of product. While this position might be a useful starting point, and while consumer choice models may provide useful insights, they do not readily deal with product-channel interactions in which the characteristics of the product affect the channels considered; nor do they examine consumer-channel interactions in which the motivation for behavior affects channel choice. Therefore, there is a case for further research to consider the most appropriate framework for evaluating the determinants of consumer choice of channel (Black et al, 2002).
Root (1991) states that even with the guidance of performance specifications, the determination of the most appropriate channel type is a difficult task. For one thing, managers must try to satisfy several channel objectives like sales volume, low costs, control, the cooperation of channel members, and so on — that can seldom be met fully by any given channel system. Furthermore, managers' ability to estimate the sales potentials and costs of alternative channels is commonly limited by insufficient and/or unreliable information. Therefore, the determination of the most appropriate channel becomes a screening process that leans heavily on qualitative assessments and judgment. According to Black et al (2002) the type of product appears to be a key-influencing factor for channel selection. The product can be described along two key dimensions that affect level of buyer involvement, i.e. complexity and the perceived risk associated with its purchase. Given the importance in distribution of matching product and channel, then clearly, as well as considering attributes of products, it would appear that attributes of the channels themselves was also be influential.

2.3.1 Outsourcing

Outsourcing is the process of delegating (in term of tasks, functions, responsibilities) to a contracted part to do it on behalf of the company’s name. Logistics services for part, or all of their supply chain management functions. Third party logistics providers typically specialize in integrated operation, warehousing and transportation services that can be scaled and customized to customers' needs based on market conditions, such as the demands and delivery service requirements for their products and materials. Often, these services go beyond logistics and include value-added services related to the production or procurement of goods, i.e., services that integrate parts of the supply chain. When this integration occurs, the provider is then called a third-party supply chain management provider (3PSCM) or supply chain management service provider (SCMSP). 3PL targets a particular function in supply management, such as warehousing, transportation, or raw material provision (Gibson, 2015).
2.3.2 A distribution centers

Distribution depots or center is a warehouse or other specialized building, often with refrigeration or air conditioning, which is stocked with products (goods) to be redistributed to retailers, to wholesalers, or directly to consumers. (Wikipedia).

A distribution center is a principal part, the order processing element, of the entire order fulfillment process. Distribution centers are usually thought of as being demand driven. A distribution center can also be called a warehouse, a DC, a fulfillment center, a cross-dock facility, a bulk break center, and a package handling center. The name by which the distribution center is known is commonly based on the purpose of the operation. For example, a "retail distribution center" normally distributes goods to retail stores, an "order fulfillment center" commonly distributes goods directly to consumers, and a cross-dock facility stores little or no product but distributes goods to other destinations (Halldorsson, 2010).

Distribution centers are the foundation of a supply network, as they allow a single location to stock a vast number of products. Some organizations operate both retail distribution and direct-to-consumer out of a single facility, sharing space, equipment, labor resources, and inventory as applicable.

A typical retail distribution network operates with centers set up throughout a commercial market, with each center serving a number of stores. Large distribution centers for companies such as Wal-Mart serve 50–125 stores. Suppliers ship truckloads of products to the distribution center, which stores the product until needed by the retail location and ships the proper quantity.

Since a large retailer might sell tens of thousands of products from thousands of vendors, it would be impossibly inefficient to ship each product directly from each vendor to each store. Many retailers own and run their own distribution networks, while smaller retailers may outsource this function to dedicated logistics firms that coordinate the distribution of products for a number of companies. A distribution center can be co-located at a logistics center racks and then convey out of the racks to trucks, all automatically. With a wide variety of product sizes and weights, these systems are designed to handle a specific range of products. Very large, small, heavy, or light products require varying degrees of manual handling; the process of handling involves more steps and becomes increasingly manualized, the cost increases. Storing products instead of receiving and immediately shipping those added cost (Ross 1996).
2.3.3 Warehousing

In today's context, production is made in expectation of demand. Therefore, products are to be stored or preserved safely for the future demand. And also, all the production is not sold directly. Warehousing plays an important role for balancing demand and supply. For example, most of the agricultural products are produced seasonally, but have demand throughout the year.

It facilitates both continuous production and continuous marketing of the production. Warehousing service can contribute to customer satisfaction. Be clear that storage and warehousing are not similar terms, though are closely related (O'Neil and Bommer, 2009).

Storage is marketing activity that involves holding and preserving products from the time of their production until their sale. Warehousing embraces storage plus a broad range of functions, such as assembling, breaking the bulk, dispatching as per need of middlemen, sorting/classification, providing market intelligence, preparing product for reshipping, etc. Warehousing involves more activities. We need different types of goods in our day-to-day life. We may buy some of these items in bulk and store them in our house. Similarly, businessmen also need a variety of goods for their use. Some of them may not be available all the time. But, they need those items throughout the year without any break. (Ross 1996).

Warehousing is one of the important auxiliaries to trade. It creates time utility by bridging the time gap between production and consumption of goods. The effective and efficient management of any organization requires that all its constituent elements operate effectively and efficiently as individual SBUs/facilities and together as an integrated whole corporate.

2.4 Supply chain management

Supply chain management is coordination and management of both an organization's upstream (supplier) and downstream (customer) relationships to achieve superior value for end-customers (Iqbal, 2006).

The goal of Supply Chain Management (SCM) is to integrate both information and material flows seamlessly across the supply chain as an effective competitive weapon. The name is somewhat misleading as a supply chain is not a formal Chain of businesses, but a network of businesses and relationships. In reviewing the prevailing literature available, it is clear that one common definition
of SCM does not exist. The Global Supply Chain Forum consists of top executives of leading firms from a wide variety of industries, such as communications and technology, consumer packaged goods, fashion apparel, commodity merchandising, oil and petrochemicals, automotive manufacturing, athletic equipment, household plumbing and accessories, and consumer electronics. Member companies represent all possible locations across a supply chain: original suppliers, manufacturers of industrial products (business to business), manufacturers of consumer products, distributors, and retailers. Therefore, the views presented by the Global Supply Chain Forum represent combined knowledge and experiences from leading firms in the corresponding industry.

The members of the Global Supply Chain Forum (2009) have developed the following definition which neatly encapsulates the aspects of SCM: Supply chain management is the integration of key business processes from end-user through original suppliers that provides products, services, and information that add value for customers and other stakeholders (Drucker, 1998).

2.4.1 Transport Costs

Transport systems face requirements to increase their capacity and to reduce the costs of movements. All users (e.g. individuals, enterprises, institutions, governments, etc.) have to negotiate or bid for the transfer of goods, people, information and capital because supplies, distribution systems, tariffs, salaries, locations, marketing techniques as well as fuel costs are changing constantly. There are also costs involved in gathering information, negotiating, and enforcing contracts and transactions, which are often referred as the cost of doing business. Trade involves transactions costs that all agents attempt to reduce since transaction costs account for a growing share of the resources consumed by the economy. Frequently, enterprises and individuals must take decisions about how to route passengers or freight through the transport system. This choice has been considerably expanded in the context of the production of lighter and high value consuming goods, such as electronics, and less bulky production techniques. It is not uncommon for transport costs to account for 10% of the total cost of a product. This share also roughly applies to personal mobility where households spend about 10% of their income for transportation, including the automobile which has a complex cost structure. Thus, the choice of a transportation mode to route people and freight within origins and destinations becomes important and depends on a number of factors such as the nature of the goods, the available infrastructures, origins and
destinations, technology, and particularly their respective distances. Jointly, they define transportation costs. Transport costs are a monetary measure of what the transport provider must pay to produce transportation services. They come as fixed (infrastructure) and variable (operating) costs, depending on a variety of conditions related to geography, infrastructure, administrative barriers, energy, and on how passengers and freight are carried. Three major components, related to transactions, shipments and the friction of distance, impact on transport costs. Transport costs have significant impacts on the structure of economic activities as well as on international trade. Empirical evidence underlines that raising transport costs by 10% reduces trade volumes by more than 20% and that the general quality of transport infrastructure can account for half of the variation in transport costs. In a competitive environment where transportation is a service that can be bid on, transport costs are influenced by the receptiveness of transport companies, the portion of the transport costs charged to users. Rates are the price of transportation services paid by their users. They are the negotiated monetary cost of moving a passenger or a unit of freight between a specific origin and destination. Rates are often visible to the consumers since transport providers must provide this information to secure transactions. They may not necessarily express the real transport costs. The difference between costs and rates either results in a loss or a profit from the service provider. Considering the components of transport costs previously discussed, rate setting is a complex undertaking subject to constant change. For public transit, rates are often fixed and the result of a political decision where a share of the total costs is subsidized by the society. The goal is to provide an affordable mobility to the largest possible segment of the population even if this implies a recurring deficit (public transit systems rarely make any profit). It is thus common for public transit systems to have rates that are lower than costs and targeted at subsidizing the mobility of social groups such as students, the elderly or people on welfare. For freight transportation and many forms of passenger transportation (e.g. air transportation) rates are subject to a competitive pressure. This means that the rate was be adjusted according to the demand and the supply. They either reflect costs directly involved with shipping (cost-of-service) or are determined by the value of the commodity (value-of-service).
2.4.2 Service quality

Service quality is an achievement in customer service. It reflects at each service encounter. Customers form service expectations from past experiences, word of mouth and advertisement. In general, Customers compare perceived service with expected service in which if the former falls short of the latter the customers are disappointed (Drucker, 1998).

The measurement of subjective aspects of customer service depends on the conformity of the expected benefit with the perceived result. This in turns depends upon the customer's expectation in terms of service, they might receive and the service provider's ability and talent to present this expected service. Successful Companies add benefits to their offering that not only satisfy the customers but also surprise and delight them. Delighting customers is a matter of exceeding their expectations.

Pre-defined objective criteria may be unattainable in practice, in which case, the best possible achievable result becomes the ideal. The objective ideal may still be poor, in subjective terms.

Service quality can be related to service potential (for example, worker's qualifications); service process (for example, the quickness of service) and service result (customer satisfaction).

2.5. The relationship between distribution channels to supply chain management

"Distribution" includes the activities that are associated with moving goods or services from a source (such as a manufacturer) to their destination. Like purchasing, distribution greatly impacts the final cost of products and services, and quality. Distribution systems have great contribution to efficiency of supply chain management than any other aspect of entire supply chain management (Drucker, 1998). In order to response to retail developments and remain competitive, manufacturers have made several shifts regarding their business strategies and practices. Distribution strategy has, and is likely to continue to enjoy increased attention as a means of achieving a sustainable competitive advantage which contributes the efficiency of supply chain management (Rosen, 1988). According to Rosen (1988) the main reason for this development is that it is more difficult for competitors to quickly copy well-formulated and well-managed distribution channels. Developments of distribution channels have exhibited certain characteristics. Firstly, the multiple channel strategy is widely used by companies to deliver their products and services to customers.
Examples include the sales force channel, the distributor channel, the sales rep channel, the e-commerce channel and the newly emerged m-commerce channel including mobile telephony, SMS and text messaging, and WAP and 3G mobile services. William (2008) argued that companies are moving towards multiple channel integration, characterized as a synergistic combination of channel functions.

2.6 Empirical review of the literature

Asiamah (2013) addressed effective distribution management as a pre-requisite for retail and do mentioned that for any organization to be effective there should be effective distribution management process to convey finished products from the manufacturer to the final consumers. Their methodology was inductive rather than standard quantitative survey (deductive). This is due to the fact that the research seeks to build theory rather than theory testing. This study aims at exploring the best distribution strategy and its impact on supply chain. The finding of their study suggested that the consumers in today's marketplace are enlightened and empowered by the information that they have at their disposal from the internet and from many other sources, they also discovered that Consumers have the opportunity to compare prices, quality, and service. In turn, they demand competitive prices, high quality, tailored or customized products, convenience, flexibility, and responsiveness.

According to Shukla (2011), addressed supply chain as a network of facilities that obtains raw materials, transform them into intermediate goods and then final products, and deliver the products to customers through a distribution system. The management of the supply chain and the roles of various actors involved differ from industry to industry and company to company. He concluded his study mentioning that organizations have multiple objectives like enhanced competitiveness, better customer service and increased profitability etc. To seek these objectives organizations employ various defensive as well as offensive business performance improvement approaches.

His recommendations and suggestion were six-step approach to meet this challenge supply chain. This step-by-step assessment of business operations would certainly assist organizations to completely understand the concept of supply chain management. Current trends like outsourcing, information technology adoption and third party logistics presents an opportunity for development of SCM. It is felt that in future all organizations will have to adopt partnership information sharing initiative with suppliers. Therefore establishment of mutual trust within supply chain to share the
vital information for effective SCM practice; and development of suitable mathematical model for the same would be the greatest challenge for researchers and practitioners.

Lieutenant (2013) addressed the issue of distribution and supply chain management both in business perspective and as a military perspective. He asserts that supply chain management is one of the key practices developed in the private sector over the past two decades. This concept, which involves significant process change, holds great promise for improving military logistics support as well. The methodology he used was survey research design with helping of inferential statistics specifically regression and correlation. His conclusion and findings include: The trend appears to be in the right direction, as logisticians gain operational experience in distribution management operations, and as Army education continues to incorporate distribution and supply chain management principles into its curriculum.

Sharma (2014) mentioned that supply chain is a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished goods and supply it to customers. The methodology adopted here is that of ‘Bottom Up’ approach. All the branch managers project the future need based on the past sales trend and intuitive judgment. This judgment is primarily based on the market reaction, which is obtained by frequent surveys. This whole process is carried out for three months tentative and one month fixed. Finding, conclusion and recommendations include: Effective and efficient distribution network, for a consumer goods industry, is very essential for a responsive supply chain. The focus in the present study has been on the following elements of distribution network in supply chain context: Forecasting the future demand. Balancing and delayering of the distribution network setup. Scientific assortment of stocks.

Ariane, Alex and Danny (2014) who examined private Sector pharmaceutical Supply and distribution Channels in Africa and do mentioned that Africa region accounts for 11 percent of the world’s population and 24 percent of the global disease burden. Continuous access to high-quality medicines is an important component of health care but is still problematic in many African countries. The supply and distribution of medicines in the public sector is often highly centralized and marked by inadequate storage facilities, poor forecasting of needs, stock pilfering, insufficient human resources, and limited financing all resulting in chronic stock outs. Their methodology they used was case studies particularly three countries among the continent are Ghana, Malawi And Mali. The three focus countries chosen for this study show wide geographic, economic, social, and
historical differences. They come from English- and French-speaking Africa and have ties of varying strengths with European, African, and Indian pharmaceutical suppliers. Their conclusion and recommendations were: to strengthen pharmaceutical distribution networks by leveraging the private supply and distribution channels of other sectors, strengthen regulatory authorities for medicines. In all three countries, the quality of medicines available in the private market is affected by poor government processes for pharmacy inspection and quality testing. Use local private supply and distribution channels better, in terms of professional standards.

Sant (2011) studies distribution channel coordination in green supply chain management. The study focused in the area of green supply chain management with a view to enable business organizations to maximize returns in an environment friendly manner through innovative distribution channel strategies. Specifically the objectives of study are as follows: To lay down the conceptual foundation of the general area of Green Supply Chain Management, To review and analyze the major successful case studies in the broad area of Green Supply Chain Management and To identify the sources and reasons of distribution channel conflicts in both supply chain management and Green Supply Chain management. The methodology adopted in the study was exploratory, descriptive and analytical in nature. The finding of the study are; the company should have to optimize strategies for the supply chain players through optimization techniques, perform numerical analysis and develop a decision support system for different scenarios listed in objectives and they must emphasize the quality standards of the supply chain management department. The study recommended to adopt and utilize the advanced online software will add value to green supply chain management as well as distribution channels management.

2.7 Literature review gap
The literature review related to my study have some gaps which needs to give attention and some of the gaps are as follows: The previous researcher had failed to come up with theory that guide their study some of them they come up with but unfortunately those where not the suitable theories to their studies, the other aspects which many of them had failed is that they don’t conceptualize their conceptual frame work.
Also some of them, they did not clearly show the research design to follow; whether to follow qualitative or quantitative at the statement of the research design. The main gap that researcher
intended to fill is that content gap which means Most of these studies were not conducted in Somalia.
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction
This chapter presented the methods and procedures that were used in sample selection, data collection, analysis and presentation. It includes; research design, sampling techniques, data collection methods, study population, sampling procedure and sample size, data analysis methods, ethical consideration and anticipated limitations of the study.

3.1 Research Design
This study was employed correlation research design, along with case study since the study focused on Coca-Cola Company in Mogadishu Somalia. The researcher intended to provide a questionnaire to examine the relationship between distribution channels and supply chain management of Coca-Cola Company in Mogadishu Somalia.

3.2 Population
The study was carried out in Yaqshid district, Mogadishu Somalia with focus on Coca-Cola Company in Somalia which has total population of 225 workers (Coca-Cola report, 2016). The target population of the study was categorized into three which is top management, middle management and front line staff of Coca-Cola Company in Mogadishu Somalia.

3.3 Sample Size
A subset of this population was selected for this research out of the total target population of 225 respondents, only 144 respondents were considered for the study. These include male and female, all available adults at all levels of work positions. This number was arrived at empirically by use of the Slovene’s Formula

\[ n = \frac{N}{1 + N(e^2)} \]

Where \( N \) = total population
\( n \) = sample size
\( e \) = level of significance (asymptotic) 0.05

so \[ n = \frac{225}{1 + 225(0.05^2)} = 144 \]
The minimum sample size was 144 respondents. The researcher used 144 respondents and they were distributed as follows:

Table 3.1: Population and Sample Size Summary

<table>
<thead>
<tr>
<th>Sections</th>
<th>Population (Frequency)</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>37</td>
<td>26</td>
</tr>
<tr>
<td>Middle management</td>
<td>98</td>
<td>68</td>
</tr>
<tr>
<td>Front line staff</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>225</strong></td>
<td><strong>144</strong></td>
</tr>
</tbody>
</table>

Source: Azhab, 2015

3.4 Sampling Procedure
The study applied Stratified sampling technique where the target population was divided into three categories based on the position in the company, then the study used simple random sampling technique to pick the sample respondents from those categories and each member had an equal chance to participate in the study as a respondent.

3.5 Sources of data
The study made use of primary data. The researcher went to the field and distributed structured questionnaire directly to the respondents in order to get the relevant data for the study.

3.5.1 Primary Data
Primary data was obtained through by using questionnaires, and the reason researcher chosen was since questionnaire is easy to interpret and edited for the purpose of making final decisions. They also raised relevant information to the study because the respondents were basically guided by the questionnaires.
3.6 Research Instruments

3.6.1 Questionnaire tool

Under this, close ended questionnaire was used to collect data. Questions were asked and a list of valid responses was presented to the respondent for selection (Gibson, 2015). They were designed in a way that made them easy and understandable not to consume most of the respondents’ time. The answering options on a Likert’s scale, ranging from 1= strongly disagree to 5 = strongly agree were used to make the questionnaire easy to fill.

3.7 Validity

Krishnaswamyet (2009) contend that validity is the degree to which the sample of test items represents the content the test is designed to measure. Content validity, which is employed by this study, is a measure of the degree to which data collected using an instrument such as a questionnaire represents a specific domain or content of a particular concept.

Krishnaswamyet (2009) argue that the usual procedure in assessing the content validity of a measure is to use a professional or an expert in a particular field. To establish the validity of the research instrument, opinions of experts in the field of study, especially the research supervisor, should be sought this would result to the revision and modification of the research instrument thereby enhancing the overall validity of this study. According to Amin (2005) the validity index calculated using the formula below ought to be above 0.7 or 70% otherwise the instrument would be declared as not valid. Validity was obtained by using content validity index formula shown below:

\[
CVI = \frac{\text{Number of Questions declared valid}}{\text{total number of questions}}
\]

Equation: Content Validity Index Formula

Out of the 36 questions in the questionnaire, 32 were declared valid thereby leaving this ratio at 0.88 as calculated below. This meant that the validity of the instrument was confirmed since it was higher than 0.7.

\[
\frac{32}{36} = 0.88
\]
3.8 Reliability

Reliability refers to the consistency and stability with which an instrument measures and supplies consistent results (Muganda & Mugenda, 2003). These authors note that this aspect can be assessed using the test-retest reliability method. Hence reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. In an effort to test the reliability of the research instrument, a pilot group of five individuals from the target population was selected. The pilot study gives a chance for pre-testing of the research instrument so as to establish the clarity of the instrument’s items to the respondents and thereby enhance the instrument’s validity and reliability. The pilot study also provided a chance to become familiar with the research and its administration procedures as well as the chance to identify items that required modification (Druckler, 1998).

Cronbach’s alpha was also used to determine the reliability of the instruments. A Cronbach’s alpha value of 0.70 and above was considered to be the criteria for demonstrating internal consistency of new scale and established scales respectively (Amin, 2005). The table below shows the reliability test results obtained from SPSS.

Table 3.2: reliability test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>outsourcing</td>
<td>0.793</td>
<td>10</td>
</tr>
<tr>
<td>Distribution center</td>
<td>0.844</td>
<td>8</td>
</tr>
<tr>
<td>Warehousing</td>
<td>0.784</td>
<td>8</td>
</tr>
<tr>
<td>Supply chain</td>
<td>0.815</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>0.809</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>
3.9 Data Collection Procedures

An introduction letter was obtained from the College of Higher Degrees and Research (CHDR) for the researcher to solicit approval to conduct the study from Coca-Cola Company in Mogadishu. When approved, the researcher secured a list of the qualified respondents from target population and select through simple random sampling from this list to arrive at the minimum sample size. On their return, the researcher edited and entered the questionnaire responses into the SPSS software for further processing and analysis.

4.0 Data Analysis and Presentation Procedures

Data analysis in this study was done with the help of Statistical Package for Social Sciences software package. This package helped in establishment of findings through means, frequencies and percentages and other parameters. Demographic characteristics of respondents was analyzed through frequencies and percentages. Pearson’s correlation coefficient was used to determine the relationship between distribution channels and supply chain management of Coca-Cola Company in Mogadishu Somalia, it also used test the hypothesis (H0) of the study.

Table 3.1 Mean interpretation guide

<table>
<thead>
<tr>
<th>Mean interval</th>
<th>Mode of response</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 - 1.75</td>
<td>Very Low</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1.76 - 2.50</td>
<td>Low</td>
<td>Disagree</td>
</tr>
<tr>
<td>2.6 - 3.25</td>
<td>High</td>
<td>Agree</td>
</tr>
<tr>
<td>3.26 - 4.00</td>
<td>Very high</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

4.1 Ethical Considerations

To ensure confidentiality of the information provided by the respondents and to ascertain the practice of ethics in this study, first the researcher got permission request from the concerned officials of the companies to conduct a study on the company.

The researcher also ensured that there were no respondents threatened or coerced to participate the study and the researcher arranged an orientation session to inform and persuade the respondents the aim of the study and why their participations are needed. To ensure the credibility of the authors quoted were fully recognized through citation and referencing.

3.10 Limitations of the Study

The following were the limitations of the study that threatened to compromise the validity of the findings.

Intervening or confounding variables were beyond the researcher’s control such as honesty of the respondents and personal bias. To minimize such conditions, the researcher requested the respondents to be as honest as possible and to be impartial/ unbiased when providing answers to the questionnaires.

The research environment had uncontrolled settings which may have had influence on data gathered such as comments from other respondents, anxiety, stress, motivation on the part of the respondents while on the process of answering the questionnaires

Languages barrier: Some of the respondents did not properly understand the English language and so the researcher hired a translator from English to local languages. Some respondents proved hesitant to fill in and return the questionnaires as they were meant to be self-administered.

Some of the questionnaires given to the respondents for answering were not returned. This problem was countered by distributing out more than enough questionnaires. This was done to ensure that the minimal sample size was maintained.
CHAPTER FOUR

Data Presentation, Analysis and Discussion of Findings

4.0 Introduction

This chapter contains presentation, analysis and interpretation of data collected from the respondent. The data has been analyzed and presented according to the respective research objectives and questions of the study. Each research question is presented independently with its interpretation. In the presentation of findings, tables and figures were constructed using frequencies and percentages to describe and analyze the findings, in addition to that, correlation tables were also used to draw meaningful conclusions.

4.1 Demographic characteristics of the respondents

This section describes the characteristics and the nature of respondents according to gender, age, marital status, level of education and work experience. Data was collected using question one to four, Linkert scale.

Table 4.1: Gender of respondents

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>96</td>
<td>66.2</td>
<td>66.7</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>33.8</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data

From table 4.1 above, the findings indicate that 66.2% of the respondents were male and 33.8% of the respondents were female. This implies that male respondents are more than female. This indicates that Coca-Cola Company recruited more male than female employees.
Table 4.2: age of respondents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>45</td>
<td>31.0</td>
</tr>
<tr>
<td>31-40</td>
<td>69</td>
<td>47.6</td>
</tr>
<tr>
<td>Valid</td>
<td>22</td>
<td>15.2</td>
</tr>
<tr>
<td>41-50</td>
<td>8</td>
<td>5.5</td>
</tr>
<tr>
<td>51-60</td>
<td>8</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data

Table 4.2 above shows that the majority of respondents age bracket lies in between 31-40 which is (60%) of the respondents, followed by (45%) which lies in between 20-30, and 22% of the respondents are in the age bracket of 41-50 and the minority of the respondents lies in between 51-60. This implies that the Coca-Cola Company’s staff is dominated youth staff.

Table 4.3: education level of respondents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>41</td>
<td>28.3</td>
</tr>
<tr>
<td>Degree</td>
<td>68</td>
<td>46.9</td>
</tr>
<tr>
<td>Valid</td>
<td>33</td>
<td>22.8</td>
</tr>
<tr>
<td>Master</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>PHD</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: primary data

Table 4.3 above shows that 28.3% have diploma certificates, 46.9% have degree, 22.8% of the respondents have Master degree and 1.4% of the respondents have PhD. This indicates that the majority of the respondents have achieved degree followed by diploma holders and the minority
has achieved PhD as shown the statistics the respondents have dominated graduate level of education which is diploma and bachelor.

Table 4.4: marital status of respondents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>37</td>
<td>25.5</td>
</tr>
<tr>
<td>Married</td>
<td>74</td>
<td>51.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>22</td>
<td>15.2</td>
</tr>
<tr>
<td>Widowed</td>
<td>11</td>
<td>7.6</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: primary data

Table 4.4 shows that marital status of the respondents is dominated by married (51%), followed by single which is (25.5) of the respondents and (15.9) are divorced and the minority is widowed which is only (7.6%) of the respondents. The findings imply that results were taken from responsible people who are mature and reliable.

Table 4.5: experience of respondents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1 year</td>
<td>35</td>
<td>24.1</td>
</tr>
<tr>
<td>between 1-3 years</td>
<td>48</td>
<td>33.1</td>
</tr>
<tr>
<td>between 3-5 years</td>
<td>36</td>
<td>24.8</td>
</tr>
<tr>
<td>over 5 years</td>
<td>25</td>
<td>17.2</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: primary data

Table 4.5 presents the period in which participants have been working for this particular company 48 (33.0%) of respondents have been working Coca-Cola between one to three years. 36(24.8 %) of respondents have worked for the company for 3 to 5 years, 35(24%) of the respondents have been working for the company for less than a year, while 25 (17.2 %) of respondents were working for 5 years and above. Therefore, the study found out that the majority of the working have been
working for 1-3 years. This indicates that there is high labor turn over and the company lost a lot of chance to keep their staffs.

4.2.1 Descriptive analysis of outsourcing and supply chain management

The first objective of the study is to establish the relationship between outsourcing and supply chain management of Coca-Cola Company Mogadishu Somalia. Under this objective ten sub questions that are relevant to the objective have been asked to the respondent. It was measured by each question with the scale of 1: 4 one to four, where 4 = strongly agree, 3 = agree 2 = disagree, 1 = strongly disagree. Their responses were analyzed using SPSS’s summary statistics which shows the means and standard deviations. As indicated in tables. The following numerical values and interpretations were used.

<table>
<thead>
<tr>
<th>Mean interval</th>
<th>Mode of response</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 - 1.75</td>
<td>very low</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1.76 - 2.50</td>
<td>low</td>
<td>Disagree</td>
</tr>
<tr>
<td>2.6 - 3.25</td>
<td>high</td>
<td>agree</td>
</tr>
<tr>
<td>3.26 - 4.00</td>
<td>Very high</td>
<td>strongly agree</td>
</tr>
</tbody>
</table>
Table 4.6 Descriptive statistics on outsourcing

<table>
<thead>
<tr>
<th>Outsourcing</th>
<th>MEAN</th>
<th>STD DEVIATION</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola outsourced the entire supply chain operations</td>
<td>1.63</td>
<td>1.029</td>
<td>Very low</td>
</tr>
<tr>
<td>Lack of internal experts is what forced Coca-Cola to outsource</td>
<td>2.72</td>
<td>1.325</td>
<td>high</td>
</tr>
<tr>
<td>Our company outsourced to enhance customer service</td>
<td>1.70</td>
<td>.730</td>
<td>very low</td>
</tr>
<tr>
<td>To reduce the operational costs our company must outsource</td>
<td>1.97</td>
<td>1.057</td>
<td>low</td>
</tr>
<tr>
<td>our company to outsources because of outsource requires less capital</td>
<td>1.95</td>
<td>.934</td>
<td>low</td>
</tr>
<tr>
<td>Coca-Cola outsourced in order to utilize the experience of others</td>
<td>2.01</td>
<td>.972</td>
<td>low</td>
</tr>
<tr>
<td>Our company outsourced to gain competitive advantage</td>
<td>1.97</td>
<td>1.017</td>
<td>low</td>
</tr>
<tr>
<td>Coca-Cola outsourced to improve the quality standards</td>
<td>2.43</td>
<td>1.095</td>
<td>low</td>
</tr>
<tr>
<td>Outsourcing Demotivate the employees of the organization</td>
<td>2.81</td>
<td>1.202</td>
<td>high</td>
</tr>
<tr>
<td>Coca-Cola outsourced to improve the performance of supply chain</td>
<td>2.00</td>
<td>.996</td>
<td>low</td>
</tr>
<tr>
<td>Average</td>
<td>2.13</td>
<td>1.036</td>
<td>low</td>
</tr>
</tbody>
</table>

Source: primary data
The study findings on effect of outsourcing on supply chain in Coca-Cola company in Mogadishu Somalia. The responses were based on questions whose responses were obtained and shown below.

The respondents have asked whether “Coca-Cola outsourced the entire supply chain operations” and their responses disagreed with the mean of 1.63 and standard deviation of 1.029 which falls under very low category. This implies that Coca-Cola Company does not outsource their entire supply chain operations or in other words they the company itself manages their supply chain management rather than delegating it to third party.

The respondents were also asked “lack of internal experts is what forced Coca-Cola to outsource” their responses had a mean of 2.72 and standard deviation of 1.325 which can be interpreted into high or the majority had agreed with the statement. This means that Coca-Cola have little internal experts which can handle their supply chain so that is what forced them to outsource or use external experts to smoothly run their supply chain.

The third question that has been asked to the respondents was “Our company outsourced to enhance customer service” their responses have a mean of 1.70 and standard deviation of 0.730 which lies under very low category. This indicates that majority of the respondents strongly disagreed with the statement and implies that Coca-Cola Company does not outsource to enhance their customer service.

The fourth question of the first objective that have been asked to the respondents was “To reduce the operational costs our company must outsource” their responses have a mean of 1.97 with standard deviation of 1.057 which lies under low category and it indicates that the majority of the respondents disagreed with the statement and implies that outsourcing has zero contribution for the reduction of operation costs in Coca-Cola company.

The fifth question asked to the respondents was “our company outsources because of outsource requires less capital” their responses have a mean of 1.95 with standard deviation 0.934 lies under low category and indicates that the majority of the respondents disagreed with the statement. This implies that outsourcing requires a lot of capital to invest and it’s not cheap as the statement shows.
The sixth question that have been asked to the respondents was "Coca-Cola outsourced in order to utilize the experience of others" their responses have a mean of 2.01 with standard deviation of 0.972 and lies under low category and indicates that the majority of the respondents have disagreed with the statement. This implies that Coca-Cola does not outsource for the intention of utilize the experience of other.

Seventh question of first objective asked by the respondents was "Our Company outsourced to gain competitive advantage" their responses have a mean of 1.97 with standard deviation of 1.017 which can be interpreted into very low and indicates that the majority of the respondents strongly disagreed with the statement. This implies that Coca-Cola Company does not outsource in order to gain competitive advantage.

Eighth question asked to the respondent was" Coca-Cola outsourced to improve the quality standards" their responses have a mean of 2.43 with standard deviation of 1.095 which lies under category of low and indicates the majority of the respondents disagreed with the statement. This shows that Coca-Cola does not outsource to improve their quality standards.

Ninth question of the first objective asked to the respondent was "Outsourcing demotivate the employees of the organizations" their responses have a mean of 2.81 with standard deviation of 1.202 which lies under high category and shows that the majority of the respondents agreed with the statement. This implies that outsourcing demotivates the employees or it reduces the morality and motivation of the employees in the organization.

The tenth which is the last question asked to respondents was "Coca-Cola outsourced to improve the performance of supply chain" their response of the question has a mean of 2.00 with standard deviation of 0.996 which lies under low category according to interpretation table and shows that the majority of the respondents disagreed with the statement. This implies that Coca-Cola Company do not outsource to improve their performance of supply chain.

The implication of these findings is that Coca-Cola Company does not outsource their supply chain rather the company itself handles their supply chain operations and the overall mean of objective one is 2.13 which lies under low category.
4.2.2 Descriptive analysis of distribution centers and supply chain management

The second objective required analysis of the relationship between distribution centers and supply chain management. This objective was fulfilled by examining various aspects of supply chain encompassed in this study. It was necessary to examine the descriptive statistics on distribution depots. This analysis entailed two main descriptive statistical tools which are means and standard deviations followed by their interpretation guide. The table below shows the results obtained from this analysis.
Table 4.7 descriptive statistics on distribution centers

<table>
<thead>
<tr>
<th>Distribution</th>
<th>MEAN</th>
<th>STD DEVIATION</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution centers are the most important task of distributing the products</td>
<td>3.05</td>
<td>1.242</td>
<td>high</td>
</tr>
<tr>
<td>Distribution centers reduces the lead time (time in between demand &amp; supply)</td>
<td>2.45</td>
<td>1.325</td>
<td>low</td>
</tr>
<tr>
<td>The efficiency of the company's distributions depends its distribution centers</td>
<td>3.46</td>
<td>0.892</td>
<td>high</td>
</tr>
<tr>
<td>Distribution centers helps the companies to reduce customer complaints</td>
<td>2.36</td>
<td>1.232</td>
<td>low</td>
</tr>
<tr>
<td>To enhance the safety of the products distribution center are needed</td>
<td>3.15</td>
<td>0.942</td>
<td>high</td>
</tr>
<tr>
<td>Distribution centers matches the demand and supply of the products</td>
<td>2.66</td>
<td>1.405</td>
<td>high</td>
</tr>
<tr>
<td>Distribution centers enhance the accessibility of the target market</td>
<td>3.82</td>
<td>0.387</td>
<td>very high</td>
</tr>
<tr>
<td>Distribution center increases the performance of the companies</td>
<td>3.90</td>
<td>0.307</td>
<td>very high</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>3.10</strong></td>
<td><strong>0.957</strong></td>
<td><strong>high</strong></td>
</tr>
</tbody>
</table>

Source: primary data

The findings on effect of distribution depots on supply chain in Coca-Cola Company in Mogadishu Somalia and their implication responses are attained and shown below.

The respondents were asked "Distribution centers are the most important task of distributing the products" their responses have a mean of 3.05 with standard deviation of 1.242 which is high according to mean interpretation guide. This indicates that the majority of the respondents agreed
with the statement, and it implies that distribution centers are the heart and critical element of distributing the products to the customers.

Second question that was asked to the respondents was “Distribution centers reduces the lead time (time in between demand & supply)” the mean of their responses is 2.45 with standard deviation of 1.25, which can be interpreted as low according to mean interpreter guide and indicates that the majority of the respondents disagreed with the statement. This implies that distribution centers do not reduce the lead time or the time between the demand of the product and its supply time.

Third question asked to the respondent was “The efficiency of the company’s distributions depends it’s distribution centers” the mean of their responses was 3.46, with standard deviation of 0.892, which is High according to interpreter guide and it implies that the majority of the respondents strongly agreed with the statement. This means that the efficiency of distribution for the company depends on its distribution centers.

The fourth question of second objective asked to the respondent was “Distribution centers helps the companies to reduce customer complaints” the mean of their responses is 2.36 with standard deviation of 1.232 which lies under low category according to interpretation guide, and it implies that the majority of the respondents disagreed with the statement, therefore distribution centers does not help the companies to reduce their customer complaints.

The fifth question asked to the respondents was “To enhance the safety of the products distribution center are needed” the mean of their responses was 3.15 with standard deviation of 0.942, which is high and this indicates that the majority of the respondents agreed with the statement. This implies that to enhance the safety of the products distribution center are needed.

The sixth question of the second objective is “Distribution centers match the demand and supply of the products” the mean of the responses is 2.66 followed by standard deviation of 1.405 which is low, and the majority of the respondents disagreed with the statement. This implies that distribution centers do not match the demand and the supply of the product.

The seventh question asked to the respondent was “Distribution centers enhance the accessibility of the target market” the mean of the responses is 3.82 with standard deviation of 0.387 which is very high according to interpretation guide and the majority of the respondents strongly agreed.
with the statement. This implies that distribution centers enhance the accessibility of the target market of the companies.

The last question of the second objective that has been asked to the respondents was “Distribution center increases the performance of the companies” their responses have a mean of 3.90 with standard deviation of 0.307, which is very high according to interpreter guide and the majority of the respondents strongly agreed with the statement. This implies that distribution center increases the performance of the companies.

The implication of these findings in second objective is that distribution center has a positive impact on supply chain management since the overall mean of the objective was 3.10 which fall under high category according to mean interpreter guide.

4.2.3 Descriptive analysis of warehousing and supply chain management

The third objective of the study is analysis of the relationship between warehousing and supply chain management. This objective was fulfilled by examining its effect on the various aspects of supply chain encompassed in this study. It was necessary to examine the descriptive statistics on distribution depots. This analysis entailed two main descriptive statistical tools which are means and standard deviations followed by their interpretation guide. The table below shows the results obtained from this analysis.
Table 4.8 Descriptive Statistics on Warehousing

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Warehouses improves the efficiency of distribution costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high</td>
<td>144</td>
<td>3.76</td>
<td>.427</td>
<td>3.76</td>
</tr>
<tr>
<td>Very high</td>
<td>144</td>
<td>3.37</td>
<td>.930</td>
<td>3.37</td>
</tr>
<tr>
<td>Low</td>
<td>144</td>
<td>1.87</td>
<td>1.009</td>
<td>1.87</td>
</tr>
<tr>
<td>Low</td>
<td>144</td>
<td>2.65</td>
<td>1.498</td>
<td>2.65</td>
</tr>
<tr>
<td>Low</td>
<td>144</td>
<td>1.90</td>
<td>.995</td>
<td>1.90</td>
</tr>
<tr>
<td>High</td>
<td>144</td>
<td>2.80</td>
<td>1.162</td>
<td>2.80</td>
</tr>
<tr>
<td>Very high</td>
<td>144</td>
<td>3.86</td>
<td>.347</td>
<td>3.86</td>
</tr>
<tr>
<td>Very high</td>
<td>144</td>
<td>3.87</td>
<td>.340</td>
<td>3.87</td>
</tr>
<tr>
<td>High</td>
<td>144</td>
<td>3.01</td>
<td>0.8385</td>
<td>3.01</td>
</tr>
</tbody>
</table>

Source: primary data

The findings on effect of distribution depots on supply chain in Coca-Cola Company in Mogadishu Somalia and their implication are attained and shown below.
The respondents were asked “Warehouses improves the efficiency of distribution costs” their responses have a mean of 3.76 with standard deviation of 0.427 which is high according to mean interpretation guide. This indicates that the majority of respondents agreed with the statement, and it implies that Warehouses improves the efficiency of distribution costs.

Second question that was asked to the respondents was “Warehouses contributes the smoothly running of the operations)” the mean of their responses is 3.37 with standard deviation of 0.930, which can be interpreted as very high according to mean interpreter guide and indicates that the majority of the respondent were strongly agreed the statement and this implies that Warehouses contributes the smoothly running of the operations.

The third question that was asked to the respondents was “In order to utilize the limited space companies needs warehousing ‘the mean of their responses is 1.87 with standard deviation of 1.009, which can be interpreted as low according to mean interpreter guide. This indicates that the majority of the respondents disagreed with the statement. This implies that there is no need the company for warehouses in order to utilize their limited spaces.

The fourth question asked to the respondents was “Warehouses plays an important role for reverse logistics” the mean of their responses is 2.65 with standard deviation of 1.009, which can be interpreted as high according to mean interpreter guide. This indicates that the majority of the respondents agreed with the statement and it implies that Warehouses plays an important role for reverse logistics.

The fifth question asked to respondents were “Warehouses helps the anticipating of the customer future demands” their responses have a mean of 1.90 and standard deviation of 0.995 which can be interpreted as low. This indicates that majority of the respondents disagreed with the statement. This implies that Warehouses do not help the anticipating of the customer future demands.

The Sixth question asked to the respondents was “To ensure the safety of products warehouses are needed” the majority of the respondents agreed with the statement. Their response a mean was 2.80 followed by 1.162 of standard deviation and it lies under high category according to mean interpretation, it implies that warehouses are needed to ensure the safety of product.

The seventh question was asked to the respondents and it is “Warehouses can help the inventory control” the mean of the responses is 3.86 with standard deviation of 0.347, which lies under the
category of very high according to the interpretation guide, and it implies that the majority of the respondents strongly agreed. This indicates that warehouses can help the inventory control.

Last question of third objective asked to respondents was “Warehouses improve the performance of the distribution channels” the mean of the responses is 3.87 with standard deviation of 0.340 which lies under very high category. This indicates that the majority of the respondents strongly agreed with the statement. This implies that warehouses improve the performance of the distribution channels.

4.3 Descriptive analysis the dependent variable (supply chain management)

The dependent variable of the study was supply chain management of Coca-Cola company Mogadishu-Somalia. This intention was to examine how a distribution channel affects the supply chain management. Before this is determined, there is a need to first examine the descriptive statistics of supply chain management. The statistical measured used were means, standard deviations and their interpretations. The table below shows the results that were obtained from the responses offered during the data collection phase of the study.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a close partnership between the company and its suppliers</td>
<td>144</td>
<td>3.22</td>
<td>.978</td>
<td>High</td>
</tr>
<tr>
<td>There is an independent supply chain management department with its full budget</td>
<td>144</td>
<td>2.10</td>
<td>1.153</td>
<td>Low</td>
</tr>
<tr>
<td>The company has strategic plan for managing the supply chain</td>
<td>144</td>
<td>1.96</td>
<td>1.144</td>
<td>Very low</td>
</tr>
<tr>
<td>Statement</td>
<td>N</td>
<td>Mean (sd)</td>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>-----------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Company utilizes the online soft wares to efficiently manage the supply chain</td>
<td>144</td>
<td>3.85 (.579)</td>
<td>Very high</td>
<td></td>
</tr>
<tr>
<td>There is better communication among the members of the supply chain department</td>
<td>144</td>
<td>1.97 (.978)</td>
<td>Very low</td>
<td></td>
</tr>
<tr>
<td>There are sub-contracts to external experts for the complex concernment on supply chain operations</td>
<td>144</td>
<td>3.90 (.484)</td>
<td>Very high</td>
<td></td>
</tr>
<tr>
<td>The major budget of the company goes to the procurement department of the company</td>
<td>144</td>
<td>2.90 (1.149)</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Coca-Cola outsources to ensure the quality of the supply chain management</td>
<td>144</td>
<td>3.83 (.626)</td>
<td>Very high</td>
<td></td>
</tr>
<tr>
<td>Coca-Cola supply chain management matches the international quality standards of managing supply chain</td>
<td>144</td>
<td>3.18 (.890)</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>The supply chain department ensures the maximum customer satisfaction</td>
<td>144</td>
<td>1.87 (.977)</td>
<td>Very low</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>2.87</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

Source: primary data

The study findings on supply chain management of Coca-Cola Company in Mogadishu Somalia. The responses were based on questions whose responses are attained and shown below.
The first question asked to the respondents was “There is a close partnership between the company and its suppliers” their responses have a mean of 3.22 with standard deviation of 0.978, which is high according to mean interpretation guide, this indicates that majority of the respondents agreed with the statement. This implies that Coca-Cola Company in Mogadishu-Somalia has a close partnership or strong relationship with their suppliers.

The second question asked to respondents was “There is an independent supply chain management department with its full budget” the respondents have disagreed with the statement with a mean of 2.10 and standard deviation of 1.153, which lies under low category according to mean interpretation guide. This implies that department of supply chain management of Coca-Cola company is not a separate department with its own budget but it rather works with or under the other departments of the company.

The third question asked to respondents was “The company has strategic plan for managing the supply chain” the respondents strong disagreed the statement with a mean of 1.96 and standard deviation of 1.144, which is very low according to interpretation guide. This indicates that the company has no strategic plan of managing their supply chain rather they do emphasize their current supply chain operations.

Fourth question asked to respondents was “Company utilizes the online software to efficiently manage the supply chain”, the majority of the respondents strongly agreed with the statement with a mean of 3.85 and standard deviation of 0.579, which is very high according to mean interpretation guide. This implies that Coca-Cola company uses online software to efficiently manage their supply chain activities.

Fifth question was “There is better communication among the members of the supply chain department” the mean of the respondents was 1.97 with standard deviation of 0.978 which is low according to mean interpretation guide. This means that the majority of the respondents disagreed with the statement. This suggests that the communication among the member of supply chain department is not better, in other word, there is a communication barriers among the member of supply chain department of Coca-Cola company in Mogadishu Somalia.

The sixth question asked to the respondents was “There are sub-contracts to external experts for the complex concernment on supply chain operations” the majority of the respondents strongly agreed with the statement with a mean of 3.90 with standard deviation of 0.484, which is very high.
according to mean interpretation guide. This implies that Coca-Cola company sub-contract to external experts for the complex concernment of supply chain operations in other word the company outsource to third part contractors for the complex operations of supply chain department.

The seventh question asked to respondents was “The major budget of the company goes to procurement department of the company” the majority of the respondent disagreed the statement with a mean of 2.90 and standard deviation of 1.149, which mean low according to mean interpretation guide, and this implies that the procurement department of Coca-Cola company does not receive the majority of the budget for the company but it they rather prefer to allocate the budget based on the need and volume of operation of the department rather than spending the entire budget of the company to only procurement department.

The eighth question asked to respondents was “Coca-Cola outsources to ensure the quality of the supply chain management” their respondents have a mean of 3.83 with standard deviation of 0.628, which is very high according to mean interpretation guide. This indicates that majority of the respondents strongly agreed with the statement and it suggests that Coca-Cola company outsources to ensure the quality of their supply chain management.

The ninth question asked to respondents was “Coca-Cola supply chain management matches the international quality standards of managing supply chain” the mean of the responses was 3.18 with standard deviation of 0.890, which lies under high category according to mean interpretation guide and the majority of the respondent agreed with the statement and it implies that Coca-Cola’s supply chain match the international quality standards of managing supply chain.

The last but not the least question asked to respondent was “The supply chain department ensures the maximum customer satisfaction” their responses had a mean of 1.87 with standard deviation of 0.977 which is low according to mean interpretation guide and indicates that the majority of respondents disagreed with the statement and this implies that the company’s supply chain does not ensure the maximum level of customer satisfaction.

The overall mean of the supply chain management (dependent variable) is 2.87 is low according to mean interpretation guide and it indicates that the majority of the respondents disagree. This implies that Coca-Cola company in Mogadishu-Somalia are currently facing inefficiency supply
chain management, in other words Coca-Cola have a poor supply chain management according to
the statistics mentioned above.

4.4 Analysis of relationships between the independent variable and dependent variables
This section presents analyzes of the relationship between the independent variables where each
objective compared the dependent variable. The data was analyzed using Pearson correlation
coefficient. Correlation between the constructs of the Independent and the dependent variable
were calculated using IBM SPSS statistical tool as shown below:

The relationship between outsourcing and supply chain management.
Table 4.10 Relationship between outsourcing and supply chain management,

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Outsourcing</th>
<th>Supply chain management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.365**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.039</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>144</td>
<td>144</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data, 2016

A bivariate Pearson linear correlation analysis shows a weak positive relationship between
outsourcing and supply chain management of Coca-Cola Company, Mogadishu, Somalia. (r =
0.365) between at 0.039 level of significance. The positive sign of correlation indicates that there
is a direct weak relationship between outsourcing and supply chain management. Since the point of
significance 0.039 which is less than the level of significance of 0.05, the researcher argues that
there is relationship between the variable. This means that outsourcing has a relationship with
supply chain management.
According to Drury (2008) outsourcing have a significant relationship with supply chain management, in addition to that he argues that outsourcing provides a consultative support which basically delivers significant value to the entire supply chain of the company; in addition to that outsourcing is a Drive unit cost savings and continuous improvements for cyclical categories that have limited internal resources and expertise.

### 4.4.2 Hypothesis 1 Testing

Here the variables tested were outsourcing and supply chain management. It was found that the outsourcing had a relationship with supply chain at a Pearson correlations coefficient of 0.365. The relationship was significant as the significance level was found to be at 0.039. This validates the findings.

Furthermore in testing the hypothesis, the null hypothesis was rejected due to the significance level and the value of the Pearson correlation found as explained above. This meant that the study produced enough evidence to support the fact that there was a significant relationship between outsourcing and supply chain management of Coca-Cola Company in Mogadishu, Somalia. This implies that the researcher accept the alternative hypothesis which stated that there was a significant relationship between outsourcing and supply chain and reject the null hypothesis.

To Assess The Relationship Between Distribution Centers And Supply Chain Management

**Table 4.11** Showing the responses on the relationship between distribution depots on supply chain management.

<table>
<thead>
<tr>
<th></th>
<th>Supply chain management</th>
<th>distribution depots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply chain management</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>144</td>
</tr>
<tr>
<td><strong>distribution centers</strong></td>
<td>Pearson Correlation</td>
<td>.628**</td>
</tr>
</tbody>
</table>
A bivariate Pearson linear correlation was used and the analysis showed a strong positive relationship between distribution depots and supply chain management of Coca-Cola company in Mogadishu, Somalia ($r = 0.628$) between at 0.020 level of significance. The positive sign of correlation indicates that there is a direct relationship between the variables, since the point of significance 0.020 which is less than the level of significance of 0.05. This provides support that there is a relationship between distribution depots and supply chain management. This also implies that distribution depots have a positive contribution to wellbeing of supply chain management of Coca-Cola Company in Mogadishu Somalia.

Hansen and Van der Stede (2004) found a similar evidence in their study. They document that distribution centers have a significant relationship with supply chain and also argue that distribution depots or distribution centers acts as a cross-docking and consolidation facility by playing to a vital role for the delivering of the physical products to the consumer’s outdoor step, they also mentioned that distribution depots are important for the reverse logistics where by the companies recollects the defected product from the consumer for recycling and reworking.

**Hypothesis 2 Testing**

Here the variables tested were only two which are distribution channels and supply chain management. It was found that variables have a relationship with a computed of a Pearson correlations coefficient of 0.628. The relationship was significant as the significance level was found to be at 0.020. This validates the findings.

Furthermore in testing the hypothesis, the null hypothesis was rejected due to the significance level and the value of the Pearson’s correlation found as explained above. This implies that the study will reject the null hypothesis, and insist that there is relationship between distribution channels and supply chain management.
To Find Out The Relationship Between Warehousing And Supply Chain Management

Table 4.12 showing the relationship between warehousing and supply chain management.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Supply chain management</th>
<th>Warehousing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chain management</td>
<td>Pearson Correlation 1</td>
<td>.756**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 144</td>
<td>144</td>
</tr>
<tr>
<td>Warehousing</td>
<td>Pearson Correlation .756**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 144</td>
<td>144</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data, 2016

A bivariate Pearson linear correlation analysis was also used and the result showed a strong positive relationship between warehousing and supply chain management in Mogadishu, Somalia \((r = 0.756)\) at 0.000 level of significance. The above correlation figure indicates that there is a direct relationship between warehousing and supply chain management in Mogadishu, Somalia. Since the point of significance 0.000 is less than the level of significance of 0.05. The researcher concludes that there is strong positive relationship between independents and dependent variable. This implies that warehousing have an impact which is positive and it contributes towards the success of supply chain management, or in other word, the wellbeing of supply chain of Coca-Cola Company depends on how they handle their warehousing activities.

According peter (2011) mentioned that warehousing and supply chain management have a significant relationship, regardless the industry what common in business is that every company’s success depends on having effective and comprehensive logistic management strategies and warehousing is the first priority. In addition to that the ability to maintain supply chain is centered on warehouse management system. As supply chain increasingly become complex, the visibility offered warehousing management activities allows firms to maintain control of their inventory.
One thing both the studies in common is that warehousing is the key part of supply chain and primary aim to control the movement of the product for the companies.

**Hypothesis 3 Testing**

Here the variables tested were only two which are warehousing and supply chain management. It was found that variables have a relationship with a computed of a Pearson correlations coefficient of 0.756. The relationship was significant as the significance level was found to be at 0.000. This validates the findings.

Furthermore in testing the hypothesis, the null hypothesis was rejected due to the significance level and the value of the Pearson's correlation found as explained above. This implies that the study will reject the null hypothesis, and insist that there is relationship between warehousing and supply chain management.
CHAPTER FIVE

SUMMARY OF FINDINGS AND RECOMMENDATIONS OF THE STUDY

5.0 Introduction

This study focused on the effect of outsourcing on supply chain management of Coca-Cola Company in Mogadishu-Somalia. The study was primarily concerned with examining the effects of outsourcing, distribution depots and warehousing on supply chain management. The chapter also presents the conclusions and recommendations based on the objective of the study and research questions.

5.1 Summary of the findings

5.1.1 The relationship between outsourcing and supply chain management of Coca-Cola companies in Mogadishu-Somalia

The study found that outsourcing effects and have a less impact on supply chain management, even though Coca-Cola company do handle their supply chain rather delegating to third party for the management of their supply chain operations. The analysis entailed two main descriptive statistical tools which are means and standard deviations followed by their interpretation guide.

The possibility of a relationship between outsourcing and supply chain management was analyzed using bivariate analysis. The result from the analyses was weak but positive relationship between outsourcing and supply chain management with result of \((r= 0.365)\) and 0.39 of level of significance. The positive sign of correlation indicates that there is a direct but weak positive relationship between outsourcing and supply chain management.

5.1.2 The relationship between distribution centers and supply chain management of Coca-Cola companies in Mogadishu-Somalia

Based on the analysis had made in the study show that distribution depots have a major impact on the success of the supply chain management of Coca-Cola company since the overall mean of the objective was 3.10 which is high according the mean interpretation, the majority respondents were agreed that Coca-Cola company put the first priority on the distribution depots where they put in
place several distribution center to easily access and delivery the products timely to their
destination which have a positive impact on distribution channels and supply chain management as
general.

On the bases of correlation made in the study shows there is a relationship between distribution
depots and supply chain management, the result from the analyses was strong positive relationship
between distribution depots and supply chain management with result of \( r = 0.628^{**} \) and .020 of
level of significance. This implies that distribution depots have a positive contribution to wellbeing
of supply chain management of Coca-Cola Company in Mogadishu Somalia.

5.1.2 The relationship between warehousing and supply chain management of Coca-Cola
companies in Mogadishu-Somalia

On the bases of the analysis the study discovered that warehousing facilities play a vital role in the
overall supply chain process, it’s the fundamental activities that enables the companies to achieve
both efficiency and effectiveness in supply chain management by providing some essential
perspectives for both the current challenges and future opportunities as well.

The mean of the responses is 3.87 with standard deviation of 0.340 which lies under very high
category, it indicates that the majority of the respondents agreed with the statements they
responded to and this implies that Coca-Cola company have better managed their warehousing
facilities which reflects the wellbeing of their supply chain management.

The possibility of a relationship between warehousing and supply chain management was analyzed
using bivariate analysis. The result from the analyses was positive relationship between
warehousing and supply chain management with result of \( r = 0.756 \) at 0.000 level of significance,
the positive sign of correlation indicates that there is a direct positive relationship between the two
variables.
5.2 Conclusions

The study was undertaken to examine the relationship between distribution channels and supply chain management of Coca-Cola Company in Mogadishu, Somalia. In evaluating their relationship three objectives were formulated, analyzed and discussed. The first was outsourcing and supply chain, the second was distribution channels and supply chain and the third was warehousing and supply chain management. All the three objectives have a relationship with dependent variable. The study concluded that both the variables distribution channels and supply chain management of Coca-Cola in Mogadishu-Somalia have a relationship.

5.3 Recommendations

The study suggests that there is a room for improvement in Coca-Cola company supply chain management, based on the facts the study discovered about Coca-Cola company supply chain and their distribution channels here are some recommendations for the company:

- The researcher recommended that Coca-Cola Company must consider outsourcing as an important factor on their supply chain. They perform their competitive edges and let the third parties to perform on behalf of them what the company cannot perform well.
- They also take into account that distribution center plays an important role in their supply chain, so that the company must come up a comprehensive plan to increase the performance of distribution centers.
- The company must aware that warehousing contributes the wellbeing of their supply chain management, so they must have invested advanced technology of warehouse management.
- The company should focus on establishing and improving relationship with their suppliers, this may add value to their supply chain management by helping to reduce the inventory holding, improving the order fulfillment rate and enhance the availability of the product at the point of purchase.
- Purchasing department needs to implement just in time (JIT) method to reduce the holding cost as well as reducing the lead time to maximize the consumer’s satisfaction.
- The company must also enhance the competence and skills of the participants of the supply chain management so as to ensure the performance of the supply chain.
Coca-Cola must perform their core competence and outsource the other activities; the company should have to perform what they can perform better and the rest delegate to third part contractors which are professional for the performing of such activities.

Building a responsive supply chain by utilize online software e.g social networks by creating an effective communication to the customer enhancing their awareness towards the products company offers.

Continuous improvement, an ongoing process is required for the company to pursue supply chain and distribution channels excellence. Never stop pushing for the next level of excellence.

5.3 Further researchers

I. This study was emphasized the supply chain in perspective of the private sector, the potential research suggest to examine distribution channels and supply chain in public sector

II. It’s recommendable also to study E- supply chain management and their contributions towards the company’s performance

III. Another research area that could be interesting to further studying is to compare the tradition ways and modern supply chain ways of management
References


Appendix i: Research Questionnaire

Demographic characteristics of the respondents

Gender
Male ☐ Female ☐

Age range
20-30 ☐
31-40 ☐
41-50 ☐
51-60 ☐

Highest academic education attained
Diploma ☐
Degree ☐
master ☐
PHD ☐

Others, specify………………………………………..

Marital status
Single ☐ Married ☐
Divorced ☐ Widowed ☐

For how long have you worked WITH YOUR ORGANISATION?
Less than 1 year ☐ Between 1-3 yrs ☐
Between 3-5 yrs ☐ Over 5 yrs ☐
Use the following key


Section (A): The independent variable (the distribution channels)

<table>
<thead>
<tr>
<th>Outsourcing</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola outsourced the entire supply chain operations</td>
<td></td>
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<tr>
<td>Lack of internal experts is what forced Coca-Cola to outsource</td>
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<tr>
<td>Our company outsourced to enhance customer service</td>
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<tr>
<td>To reduce the operational costs our company must outsource</td>
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<tr>
<td>our company to outsources because of outsource requires less capital</td>
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<tr>
<td>Coca-Cola outsourced in order to utilize the experience of others</td>
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<tr>
<td>Our company outsourced to gain competitive advantage</td>
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<tr>
<td>Coca-cola outsourced to improve the quality standards</td>
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<tr>
<td>Outsourcing Demotivate the companies employee</td>
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<tr>
<td>Coca-Cola outsourced to improve the performance of supply chain</td>
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<table>
<thead>
<tr>
<th>Distribution centers</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution center provide is central pillar of distributing the products</td>
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<tr>
<td>Distribution centers reduces the lead time(time in between demand &amp; supply)</td>
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<tr>
<td>The efficiency of the company’s distributions depends it’s distribution centers</td>
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<tr>
<td>Distribution centers helps the companies to reduce customer complaints</td>
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<tr>
<td>To enhance the safety of the products distribution center are needed</td>
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<tr>
<td>Distribution centers matches the demand and supply of the products</td>
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<tr>
<td>Distribution centers enhance the accessibility of the target market</td>
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</tbody>
</table>
### Warehousing

<table>
<thead>
<tr>
<th>Warehousing</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouses improves the efficiency of distribution costs</td>
<td></td>
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<tr>
<td>Warehouses contributes the smoothly running of the operations</td>
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<tr>
<td>In order to utilize the limited space companies needs warehousing</td>
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<tr>
<td>Warehouses plays an important role for reverse logistics</td>
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<tr>
<td>Warehouses helps the anticipating of the customer future demands</td>
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<tr>
<td>To ensure the safety of products warehouses are needed</td>
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<tr>
<td>Warehouses can help the inventory control</td>
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<tr>
<td>Warehouses improve the performance of the distribution channels</td>
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<tr>
<td>Distribution center increases the performance of the companies</td>
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</tbody>
</table>

### Section (B): The dependent variable (supply chain management)

<table>
<thead>
<tr>
<th>Supply chain</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a close partnership between the company and its suppliers</td>
<td></td>
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<tr>
<td>There is an independent supply chain management department with its full budget</td>
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<tr>
<td>The company has strategic plan for managing the supply chain</td>
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<tr>
<td>Company utilizes the online soft wares to efficiently manage the supply chain</td>
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<tr>
<td>There is better communication among the members of the supply chain department</td>
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<tr>
<td>There are sub-contracts to external experts for the complex concernment on supply chain operations</td>
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</tr>
<tr>
<td>The major budget of the company goes to supply chain department</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Coca-Cola outsources to ensure the quality of the supply chain management</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca-Cola supply chain management matches the international quality</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
standards of managing supply chain

The supply chain department ensures the maximum customer satisfaction

Appendix iv: Research Budget

<table>
<thead>
<tr>
<th>Items</th>
<th>QTY</th>
<th>UNIT COST</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationery</td>
<td></td>
<td>100,000/=</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td></td>
<td>150,000/=</td>
<td></td>
</tr>
<tr>
<td>Preparing questionnaires</td>
<td></td>
<td>100,000/=</td>
<td></td>
</tr>
<tr>
<td>Data collection and analysis</td>
<td></td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>Editing data, printing and binding</td>
<td>4</td>
<td>20,000</td>
<td>80,000/=</td>
</tr>
<tr>
<td>Airtime</td>
<td></td>
<td>30,000</td>
<td>30,000/=</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td>10,000</td>
<td>10,000/=</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>900,000/=</strong></td>
</tr>
</tbody>
</table>
## Appendix v: Time frame and Activities

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>January to February 2016</td>
<td>Pilot Study</td>
</tr>
<tr>
<td>March 2016</td>
<td>Draft of proposal</td>
</tr>
<tr>
<td>Late March 2016</td>
<td>Submission of draft Proposal</td>
</tr>
<tr>
<td>Early April 2016</td>
<td>Proposal Hearing</td>
</tr>
<tr>
<td>May 2016</td>
<td>Adjustment of proposal After hearing</td>
</tr>
<tr>
<td>June 2016</td>
<td>Submission of adjusted proposal to Dep’t</td>
</tr>
<tr>
<td>Mid June 2016</td>
<td>Approval of Finalized proposal</td>
</tr>
<tr>
<td>Late June 2016</td>
<td>Data collection</td>
</tr>
<tr>
<td>July 2016</td>
<td>Data analysis</td>
</tr>
<tr>
<td>Late July 2016</td>
<td>Review and finalizing and printing copies.</td>
</tr>
<tr>
<td>Early August 2016</td>
<td>Viva Voice</td>
</tr>
<tr>
<td>Mid August 2016</td>
<td>Adjustment of research report and submission of Final research</td>
</tr>
</tbody>
</table>