PRACTICES ON COMPETITIVE ADVANTAGE In THE CASE OF MOHA SOFT DRINKS INDUSTRY

In Partial Fulfillment of the Requirements for the Award of Master of Arts Degree in Logistics & Supply chain Management

BY: TIGIST ADBARU

ADVISOR: Teklegiorgis Assefa (Asst. Prof.)

MAY, 2017
Addis Ababa, Ethiopia

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

ASSESSEMENT OF THE IMPACT OF SUPPLY CHAIN MANAGEMENT PRACTICES AND COMPETITIVE ADVANTAGE In THE CASE OF MOHA SOFT DRINKS INDUSTRY

By Tigist Adbaru

Approved by Board of Examiners:

Advisor	**Signature**	**date**
_____	_____	_____
Internal Examiner	**Signature**	**date**
_____	_____	_____
External Examiner	**Signature**	**date**
_____	_____	_____

DECLARATION

I, the undersigned, assert that, this research on the title "Assessment of the Impact of supply chain Management Practices on Competitive Advantage In the case of MOHA Soft Drinks Industry S.C" is my original work and has not been presented in any other university for fulfillment of a degree, and all resources used as a reference for the study have been properly acknowledged.

Declared by:

Name_____

Sign_____

Date_____

Confirmed by Advisor:

Name_____

Sign_____

Date_____

Acknowledgement

Firs and for most I would like to give my heartfelt Glory to the Almighty God for his Blessings and Protection throughout my journey.

My gratitude goes to my advisor Ato Tekle giorgis Assefa (Asst.Prof) for his support and kind guidance in the progression of the research work.

I would also appreciate Tigist Tefera and Etsegenet Kifle for their considerable contribution to the successful completion of this thesis.

TABLE OF CONTENT

List of Table and Figures

ACRONYMS/ABBREVATION

MOHA: - Mohammed Hussein Al-Amoudi

EFA: - Exploratory factor analysis

OMS: - Outsourcing and multi-suppliers

SCLP: - Strategic collaboration and lean practices

CLM: - Council of Logistics Management

SC: - Supply Chain

SCM: - Supply Chain Management

SRM: - Supplier Relationship Management

SCR: - Supplier and Customer Relationship

ILP: - Internal Lean Practice

SCMP: - Supply Chain Management Practice

SME: - Small and Medium Enterprises

PSA: - Product and Service Agreements

CRM: - Customer Relationship Management

Abstract

Today, more and more companies are succeeding not because they have the lowest priced product and not because they have the highest-quality or best-performing product, but because they are able to respond quickly to market needs and get the right product to the right customer at the right time. This shift toward speed has forced companies to ask what creates the level of speed that customers are demanding. When this question is examined, the answer for most companies lies to a large extent outside their own boundaries. The purpose of this research is to assess the level of supply chain practice, its impact and association with the company's competitive advantage. Supplier relationship, Customer relationship, Level of information sharing, quality of information and internal lean practice were identified among the dimensions of SCM practices. And also only service quality is taken as the dimension of competitive advantage. Self-administrated questionnaire was distributed to the sample of 112 Factory's employees at different level, 200 retailers, 22 distribution centers (depots) and 7 suppliers and out of which 92,161, 22 and 7 questionnaire respectively were returned. Carvalho's Sample Size Determination, simple random and convenient sampling technique were used. The response rate was 84%. The analyses involved statistical methods such as reliability tests and descriptive statistics to measure frequency distribution of response rate and chi square test. The findings show that the case company adopted some part of supply chain management practices well while some part at a lesser extent. Besides, the hypothesis test result indicated that there is significant evidence to conclude there is association between supply chain management practices and competitive advantage. Finally the researcher recommended that robust emphasis should be given for customer complaint handling service issue, the case company should improve its Customer and supplier relationship through proper information sharing, develop formal response procedure for customer service issues and monitor level of customer satisfaction and establish means to involve selected core materials suppliers in goal setting and measure their contribution for the company's profit.

Keywords: *Supply Chain Practice, Competitive Advantage and Service quality*

CHAPTER ONE: INTRODUCTION

This part provides the background information that establishes a framework for the research, so that readers can understand how it is related to other researches.

1.1. Background of the study,

In Ethiopia, Supply chain management gets academic attention in recent years but still many people, organizations, and professionals misunderstood the concept of supply chain. Many of them interpret it as another process of an organization, which deals with logistics or purchasing only; however SCM extends beyond that.
Different authors define SC and SCM in different ways:
A supply chain consists of various stages, which take part in conversion of raw materials in to final products and its delivery to the end customer. It not only includes suppliers and manufactures but also distributors, transporters, retailers and customers within each organization. It includes all the important functions i.e., order management, planning, shop-floor operations, inspections, packaging and dispatch, etc. Moreover, supply chain is an approach to regulate the flow of materials, information and finances (Gupta, Sashay and Mohan 2006).

A 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 products, and the distribution of these finished products to customers" (Ganeshan and Harrison, 1995).

The primary purpose of any supply chain is to satisfy customer needs and, in the process, generate profit for itself. The term supply chain conjures up images of product or supply moving from suppliers to manufacturers to distributors to retailers to customers along a chain. This is certainly part of the supply chain, but it is also important to visualize information, funds, and product flows along both directions of this chain (Chopra and Meindl, 2001).

Supply Chain Management is the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a

particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the Supply Chain as a whole (Mentzer, Dewitt, Keebler, Min, Nix Smith and Zacharia, 2001).

1.2. Background of MOHA Soft Drinks Industry S. C

MOHA soft drinks Industry S.C was established on May 15, 1996 acquiring Nifas Silk, Tekle Haimanot, Gondar, and Dessie plants from the Ethiopian Privatization Agency with paid capital of Birr 108,654,000. The Company currently has seven operating units including Summit, Bure, Hawassa and the recently inaugurated Mekele Plants. The major products of MOHA Soft Drinks Industry S.C. are: Pepsi Cola, Mirinda Orange, 7-Up, Mirinda Tonic, Mirinda Apple, Mirinda Pinaple (all Pepsi Brands), and Kool water (Kool carbonated and Kool none carbonated water)
MOHA holds 52% of the market share in soft drinks industry in the country. With an expansion and replacement of obsolete machinery, production capacity of the plants has increased substantially. It provided 2485 jobs for citizens out of which 1095 are new employment opportunities since acquisition. MOHA has been successfully implementing its social obligation by way of sponsoring different events and supporting initiatives.
The company is trying to expand its distribution to market in order to grow revenue and increase market share and customer satisfaction Hence, the main purpose of this research is, then, to assess the level of supply chain management practices and its relationship with competitive advantage of MOHA soft drinks industry Nifas silk factory. Currently the factory is distributing its products in Addis Ababa using depot agents with in 25 kilo meter intervals by delivering the products using its own trucks.
The result from this study will benefit the company in making and realizing an effective and efficient SC system to offer improved service to final customer while keeping lower cost and making higher profit by improving the traditional way that, partners involved across the supply chain acting independently in designing, developing and executing strategies.

1.3 Statement of the problem

Today, more and more companies are succeeding not because they have the lowest priced product and not because they have the highest-quality or best-performing product, but because they are able to respond quickly to market needs and get the right product to the right customer at the right time. This shift toward speed has forced companies to ask what creates the level of speed that customers are demanding. When this question is examined, the answer for most companies lies to a large extent outside their own boundaries. The most significant delays are created at the interface between the boundaries of different stages of a supply chain. Thus, managing these interfaces becomes key to providing quick response to customers (Chopra and Meindl, 2001).

The researcher observed customer complaint regarding service quality and also since supply chain is in its infant stage, the concept is misunderstood and related only with purchasing in the case company; therefore, initiated to undertake this study.

1.4 Research questions

First and foremost this study is designed to answer, what are the practices of SCM in MOHA soft drinks Nifas silk plant and its relationship with the company's competitive advantage.

More specifically the research tried to answer the following basic research questions:

1. How is the supply chain practice of MOHA in terms of supplier relationship?
2. How is the supply chain practice of MOHA in terms of customer relationship?

3. How is the supply chain practice of MOHA in terms Information Sharing Information Quality and Internal Lean Practice?
4. What are the practices of SCM in MOHA soft drinks Nifas silk plant and its relationship with the company's competitive advantage?

1.5. General Objective of the Study

The primary objective of this study is to assess SCM practices of Nifas Silk plant and its relationship with competitive advantage.

Specific Objective of the study:

1. To assess the SCM practices of the case factory in terms of supplier relationship management.
2. To assess SCM practice of the case factory in terms of Customer relationship management.
3. To assess SCM practice of the case factory in terms of the level of Information Sharing, Information Quality, and Internal Lean Practice.
4. To assess the relationship between supply chain management practices and Competitive advantage of Nifas silk factory.

1.6. Significance of the Study

It helps the company's higher officials and staffs to get to know the importance of supply chain management practice on improving its competitive advantage and customer satisfaction.

The result from this study will benefit the company in making and realizing an effective and efficient SC system to offer improved service to final customer; that will meaningfully increase company's competitive advantage in terms of customer satisfaction and economic utilization of its resources and increase profitability.

Besides, the findings and the recommendation can also be used as benchmark and direction to investigate and evaluate the supply chain practices of other sister plants.

Future studies can also examine the proposed relationships by bringing other dimensions of Supply chain management practice related to our countries similar organization context.

It can be the basis for educators or teaching institutions to consider when planning teaching related to the SCM.

It serves as a path to conduct further and more detail study in the area; since SCM is at the infant stage in Ethiopia, there are only limited researches conducted in similar area.

On the other hand the result of this study will give an understanding to anybody who has interest on Supply Chain Management, if he desires to undertake further study on this area.

1.7. Scope of the Study

A SCM practice is defined as a set of activities undertaken in an organization to promote effective management of its supply chain. And it comprises vast areas that include flow from suppliers to end users for the physical processes.

This study focused on supply chain practice dimensions such as Supplier relationship, customer relationship, information sharing, Quality of information and Internal lean practice and their relationship with the company's competitive advantage in terms of service quality. Furthermore, among the factories of MOHA Soft Drinks industry S.C, the focus of this study specifically relies only on Nifas Silk Factory. The purpose of this study is to assess the underlying dimensions of SCM practices and to empirically test a framework identifying the relationships among SCM practices, and Competitive advantage in MOHA Soft drinks industry Nifas silk plant.

1.8. Limitation of the Study

The research sample did not incorporate all the SC participants namely: the supplier's suppliers in the upstream and which may not represent the true picture of the population. Respondents may not give due consideration in answering the questions and inclined to give overly positive or negative responses to the study questions. On that date, respondents may have encountered an instance that caused them to respond overstatedly positive or negative to the questions asked on

the questionnaires. Because of time and budget scarcity convenience sampling is used to select customers; due to this reason the result may not represent the whole population.

Lack of awareness among the respondents about the field of the study and respondent's lack of interest to respond or incomplete response were also the encountered limitations.

1.9. Definition of Terms

Supply chain: - referred to as a set of companies involved in the upstream and downstream flows of products, services, finances, and information from a source to a customer (Mentzer et al., 2001).

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" (Lambert et al., 1998, p. 1).

Integration: is the process of combining or coordinating separate function processes, or producers and enabling them to interact in a seamless manner (Sunil, 2004).

Hypothesis:- A theoretical statement that has not yet been tested against data collected in a concrete situation, but which it is possible to test by providing clear evidence for support or r ejection(Walliman, 2006).

Informed consent: - Consent given by participants taking part in a research project based on having sufficient information about the purposes and nature of the research and the involvement required (Walliman, 2006).

Sample: - The small part of a whole (population) selected to show what the whole is like. There are two main types of sampling procedure – random and non-random (Walliman, 2006).

Variable: - The component of an indicator which can be measured (Walliman, 2006).

Purposive sampling: - is where the researcher selects what he/she thinks is a 'typical' sample based on specialist knowledge or selection criteria (Walliman, 2006).

1.10. Organization of the Study

This paper has five chapters; chapter one is an introduction part dealing with back ground of the study and company, the research problem, research question, objectives of the study, significance of the study, scope and finally limitation of the study and definition of terms. In chapter two related literature is reviewed; previous and current research in supply chain practices related to supplier relationship, customer relationship, level of information sharing, quality of information, internal lean practice and empirical reviews. Chapter three is about research methodology, chapter four includes further details of data presentation, analysis and discussion and finally findings conclusion and recommendation are included in chapter five.

CHAPTER TWO: LITERATURE REVIEW

2.1. Supply chain management practices.

The practice of SCM is refers to complete set of actions which are done in organizations towards to improve the effectiveness in the internal supply chain.
The objective of this section is to make a literature review of the issues relating to the supply chain practices and firm's competitive advantage, empirical review related to the topic of the study and theoretical framework. In Ethiopia, due to the enfant stage of supply chain, there is a shortage of literature regarding the use of SCM practices and Competitive advantage of an organization like the case company. However, different researchers other than Ethiopia, studied supply chain management practice and used different dimensions to measure the supply chain practice as discussed below:

2.1.1 Supplier Relationship

Supplier relationship management is often referred to in the literature as strategic supplier partnership (Gunasekaran, Patel, & Tirtiroglu, 2001).A strategic partnership emphasizes long-term relationship between trading partners and "promotes mutual planning and problem solving efforts". Strategic partnerships between organizations promote shared benefits and ongoing collaboration in key strategic areas like technology, products, and markets (Yoshino& Rangan, 1995).

A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving efforts (Gunasekaran et al., 2001). Such strategic partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more key strategic areas such as technology, products, and markets (Yoshino, And Rangan., 1995). Strategic partnerships with suppliers enable organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products. Suppliers participating early in the product-design process can offer more cost effective design choices, help select the best components and technologies, and help in design assessment (Tan, Kannan, and Handfield, 1998). Strategically aligned organizations can work closely together and eliminate wasteful time and effort (Balmier, 1996). An effective supplier partnership can be a critical component of a leading edge supply chain (Noble, (1997).

Supplier relationship management involves developing partnership relationships with key suppliers to reduce costs, innovate with new products and create value for both parties' bases on a mutual commitment to long term collaboration and shared success. Supplier relationship management has become a critical business process as a result of: competitive pressures; the need to achieve cost efficiency in order to be cost competitive; and Specifically, Supplier management efforts had yielded reduced costs for the buyer‘s final product or service. Also, the results showed that buyers perceived an improvement in the continuity of the relationship with their suppliers after the supplier relationship effort than before (Sichinsambwe, 2011).

Strategic plans are developed with key suppliers to support manufacturing flow management and product development and commercialization. Suppliers are categorized based on several dimensions such as their contribution and criticality to the organization. In companies where operations extend worldwide, sourcing should be managed on a global basis.

Long-term partnerships are developed with a small core group of suppliers. The desired outcome is a win-win relationship where both parties benefit. This is a change from the traditional bid and buy system to involving key suppliers early in the design cycle which can lead to dramatic reduction in product development cycle times. Having early supplier input reduces time by getting the required coordination between engineering, purchasing, and suppliers prior to design finalization. Buyers reported that supplier management efforts with a single supplier had led to significant improvement in incoming defects, percent on time delivery, order cycle times and percent orders received complete. Further, buyers were generally satisfied with the outcomes from their supplier development efforts. Specifically, supplier management efforts had yielded reduced costs for the buyer‘s final product or service. Also, the results showed that buyers perceived an improvement in the continuity of the relationship with their suppliers after the supplier relationship effort than before (Sichinsambwe, 2011).

2.1.2. Customer Relationship

It encompasses the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer (Tan et al., 1998).

Customer relationship recognized as an internal component of an organization's market strategy to increase sales and profits (Bommer, O'Neil. and Treat, 2001).
Focusing and maintaining the customer relationship will enable the organizations to be more responsive towards customers' needs and will result creating greater customer loyalty, repeat purchase and willing to pay premium prices for high quality product (Carr and Pearson, 1999).
Close customer relationship allow product differentiation from competitors, help sustain customer satisfaction and loyalty, and elevated the value provide to customer (Margaretta, 1998).

Committed relationships are the most sustainable advantage because of Close customer relationship allows an organization to differentiate its product from competitors, sustain customer loyalty, and dramatically extend the value it provides to its customers (Magretta, 1998).

Firms that integrate with customers including: planning, implementing, and evaluating a successful relationship between the provider and recipient of both upstream and downstream of the supply chain. Therefore, customer relationship management (CRM) is not only focused on inbound customer relationships but also on outbound customer relationships in SCM. Customer relations related to the company's ability to communicate to the delivery of appropriate products and services to customers locally and globally in the right time, right place, and appropriate of quantity and quality. Customer linkage especially sharing product information with customers, receiving customer orders, interact with customers to manage demand, after placing the order system, share the status of orders with customers on scheduling orders, and product delivery stage (Lee, et al, 2007).

Customer relationship management provides the structure for how the relationships with customers will be developed and maintained. Management identifies key customers and customer groups to be targeted as part of the firm's

business mission. The goal is to segment customers based on their value over time and increase customer loyalty by providing customized products and services.
Customer teams tailor Product and Service Agreements (PSA) to meet the needs of key accounts and for segments of other customers. The PSAs specify levels of performance. Customer teams work with key customers, improve processes and eliminate demand variability and non-value-added activities. Performance reports are designed to measure the profitability of individual customers as well as the financial impact on the customer Do (Lambert and Pohlen, 2001.)

2.1.3. Information Sharing

Information sharing is an important aspect in achieving seamless integration in a supply chain. Cross functional integration and inter organizational integration requires the visibility of information across the supply chain. Geiger and Dooley (1998) also believed that information is crucial and drives the entire supply chain system.

Spekman, Kamauff,r and Myhr, (1998), revealed by their study that, there is a reluctance to share key information among partners; many of these fears subside if partners share similar values and a common vision. Such information sharing heightens the alignment between partners such that effective supply chains share learning among partners rather than worry about knowledge expropriation.

Information sharing is necessary to reduce uncertainty and lower inventory levels. Many manufacturing organizations stressed that the willingness to share information must extend within the firm and across the supply chain (suppliers and buyers). Communication within the company is important to decide who the customer is and what the company's goals are and to make sure that these two match. In addition they try to suggest which information to be shared such as: Communicating the following types of information is essential for a successful relationship: product development (new products and improvements), costs, demand schedules (including point of sale data), material quantities, and production schedules. It is also crucial to get information about end-use consumers back through the supply chain to manufacturers.

Poor information sharing between partners in a supply chain will result in poor coordination that will lead to many serious problems such as, high inventory levels, in accurate forecast, low utilization and high production costs (Lee and Whang 2000).

Although some managers acknowledged the desirability of efficient information transfer among supply chain partners, and there are notable examples of information systems integration at selected interfaces, the initiatives required to integrate information systems of all supply chain partners are not yet discernible. Some managers remain unconvinced about the true value of such links and providing remote access to sensitive business information to suppliers and customers. Many fear potential loss of proprietary information and loss of control (Bagchi and Larsen 2003).

Sengupta, Heiser, Coandok, (2006) stated that as a company utilizes higher levels of information sharing relative to its competitors the operational performance will improve. The SHARE factor includes strategies such as sharing various information including forecasts, promotions and capacity levels across the supply chain. They also argued that, manufacturing company increases its level of hedging (Hedge), the company's operational performance metric improves. The Hedge factor includes strategies such as holding finished goods inventory, reserve capacity and multiple suppliers. Therefore, if a manufacturing organization increases its application of these types of practices, it's associated operational performance with respect to speed, delivery and quality will increase. In addition he stated that by emphasizing the level of importance on the supplier portion of the supply chains, manufacturing organizations will improve their financial performance.

2.1.4. Quality of Information

Information sharing means the information communicated between partners where the accuracy, adequacy, and timeliness refer to the quality of information.

Since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM (Feldmann and Muller, 2003). Effective use of relevant and timely information by all the functional elements in the supply chain is considered as a competitive factor and distinctive (Ahmadi, 2005).

Quality of information sharing includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged (Moberg, Cutler, Gross, and Speh 2002).

Information shared in a supply chain is of use only if it is relevant, accurate, timely, and reliable (Simatupang and Sridharan, 2002).

Divergent interests and opportunistic behavior of supply chain partners, and informational asymmetries across supply chain affect the quality of information (Feldmann and Müller, 2003). It has been suggested that organizations will deliberately distort information that can potentially reach not only their competitors, but also their own suppliers and customers (Mason and Towill, 1997). It appears that there is a built-in reluctance within organizations to give away more than minimal information (Berry, Towill, and Wadsley, 1994). Since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM (Feldmann and Müller, 2003). Organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion.

2.1.5. Internal lean practices

As cited in Blanchered, (1998) Lean involves removing waste, e.g. analogy with the human body: slimmed down, fit and healthy. Waste is defined as 'anything other than the minimum amount of equipment, materials, parts, space, and worker's time, which are absolutely essential to add value to the product' (Shoichiro Toyoda, Chairman, Toyota, 1992–1999).

Lean practices are represented by the elimination of waste, low inventory, small lot sizes and JIT delivery. One of the fundamental ideas in internal lean practices is

removed surplus (Hassanzadeh and Jafarian, 2010). Production of lean and timely is production system that its aims are to optimize processes and production process by reducing waste and other inefficient factors (White, 1999).

The term 'lean' is used because lean operations use less: human effort; space; capital investment; materials; time between the customer order and delivery. The basic goal is to get more done with less by: minimizing inventory at all stages of production; shortening cycle times from raw materials to finished goods; eliminating all sorts of waste. Types of waste are roughly defined as: overproduction; waiting; transportation; inefficient processing; inventory; unnecessary motion; product defects (Blanchered, 1998).

2.2. Competitive Advantage

In the changing world, competitive advantage emerges from the creation of supplier competencies to create customer value and achieve cost and/or differentiation advantages, resulting in market share and firm profitability (Barney, 1991)
It comprises capabilities that allow an organization to differentiate itself from its competitors and is an outcome of critical management decisions (Tracey, Vonderembse, and Lim, 1999). Thatte (2007) suggested that dimension of competitive advantage: price, quality, delivery dependability, time to market, and product innovation.

Competitive advantage includes set of capabilities and factors that always demonstrated better performance of company than competitors (Sadri and Lees, 2001).

As cited on Li et al., (2006) on the basis of prior literature, Koufteros et al., (1997) describe a research framework for competitive capabilities and define the following five dimensions: competitive pricing, premium pricing, value-to-customer quality, dependable delivery, and production innovation. The concept of competitive advantage is directly related to desired value of the customer (Mehri and Hosseini, 2004). Competitive advantage includes set of capabilities and factors that always demonstrated better performance of company than competitors (Sadri and Lees, 2001).

Competitive priorities, which are realized by operational performances, are the extent that an organization is able to create a state of defense against competitors and includes a feature that allows an organization to distinguish itself from its competitors (Li et al., 2006).

Ibrahim and Hamid, (2014) stated that effective supply chain management can provide a major source of competitive advantage. The goal of a supply chain manager must therefore be to link the end customers, the channels of distribution, the production processes and the procurement activity in such a way that customers' service expectations are exceeded and yet at a lower total cost than the competition.

For this study, Service quality is used as the dimensions of the competitive advantage constructs

2.2.1 Service quality

Service quality is considered an important tool for a firm's struggle to differentiate itself from its competitors (Ladhari, 2009).

Armistead (1990) split the dimensions into "firm" and "soft". The firm dimensions are time (including availability, waiting time and responsiveness), fault freeness (including physical items, information and advice) and flexibility (ability to recover from mistakes, to customize the service or add additional services). The soft dimensions are style (attitude of staff, accessibility of staff and ambience), steering (the degree to which customers feel in control of their own destiny) and safety (trust, security and confidentiality).

Walker, (1990) suggested that the key determinants are product reliability, a quality environment and delivery systems that work together with good personal service – staff attitude, knowledge and skills.

According to (Parasuraman et al., 1988), the five dimensions of service quality are: tangibility, reliability, responsiveness, assurance and empathy.

Tangibility

Since services are tangible, customers derive their perception of service quality by comparing the tangible associated with these services provided. It is the appearance of the physical facilities, equipment, personnel and communication materials.

Reliability

It is the ability to perform the promised service dependably and accurately. Reliability means that the company delivers on its promises-promises about delivery, service provision, problem resolutions and pricing. Customers want to do business with companies that keep their promises, particularly their promises about the service outcomes and core service attributes. All companies need to be aware of customer expectation of reliability. Firms that do not provide the core service that customers think they are buying fail their customers in the most direct way.

Responsiveness

It is the willingness to help customers and provide prompt service. This dimension emphasizes attentiveness and promptness in dealing with customer's requests, questions, complaints and problems. Responsiveness is communicated to customers by length of time they have to wait for assistance, answers to questions or attention to problems. Responsiveness also captures the notion of flexibility and ability to customize the service to customer needs.

Assurance

It means to inspire trust and confidence. Assurance is defined as employees' knowledge of courtesy and the ability of the firm and its employees to inspire trust and confidence. This dimension is likely to be particularly important for the services that the customers perceives as involving high rising and/or about which they feel uncertain about the ability to evaluate. Trust and confidence may be embodied in the person who links the customer to the company, for example, the marketing department. Thus, employees are aware of the importance to create

trust and confidence from the customers to gain competitive advantage and for customers' loyalty.

Empathy

It means to provide caring individualized attention the firm provides its customers. In some countries, it is essential to provide individual attention to show to the customer that the company does best to satisfy his needs. Empathy is an additional plus that the trust and confidence of the customers and at the same time increase the loyalty. In this competitive world, the customer's requirements are rising day after day and it is the companies' duties to their maximum to meet the demands of customers, else customers who do not receive individual attention will search elsewhere.

2.3. Empirical Review of Studies

Moslem (2013), conducted research on impact of supply chain management practices on competitive advantage in manufacturing companies of Khuzestan province (Iran) by using strategic partnerships with supplier, customer relationship, information sharing , Quality of information sharing and internal lean practices as independent variables affecting the competitive advantage. The result from this study indicates as there are relationships between SCM practices and competitive advantage.

Wijetunge, (2016)conducted research on the role of supply chain management practices in achieving organizational performance through competitive advantage in Sri Lankan SMEs and by considering Customer Relationship Strategic Partnerships with Suppliers, Level of Information Sharing, Quality of Information Sharing, and Internal Supply Chain Process (Postponement). In order to examine the relationship between SCM practices and competitive advantage, correlation analysis was used. Correlation between SCM Practices and Competitive Advantage found significant at 0.01 and it indicated positive relationship concluding that higher the SCM Practices higher the Competitive Advantage.

Lie et al (2006); identified supply chain management practices in form of five distinctive dimensions, including strategic supplier partnership, customer

relationship, level of information sharing, quality of information sharing and postponement, are selected for measuring SCM practice. The findings of this research support the view that SCM practices can have discernible impact on competitive advantage and organizational performance.

Yunas, Primiana, Cahyandito & Kaltum, (2016) studied on the title, New model of competitive advantage of Supply Chain management practices a case of Indonesian cacao manufacturing industry. Results of testing the relationship between constructs shows that there is a significant and positive relationship of supply chain management practice (SCMP) with a competitive advantage (CA)

Lenny et al. (2007) conducted study on the impact of supply chain management practices on performance of SMEs in Turkey. Based on exploratory factor analysis (EFA), researchers were grouped SCM practices in two factors: outsourcing and multi-suppliers (OMS), and strategic collaboration and lean practices (SCLP). The results indicate that both factors of SCLP and OMS have direct positive and significant impact on operational performance. In contrast, both SCLP and OMS do not have a significant and direct impact on SCM-related organizational performance. Also, as the direct relationship between the two performance-constructs was found significant, both factors of SCM practices have an indirect and significant positive effect on organizational performance through operational.

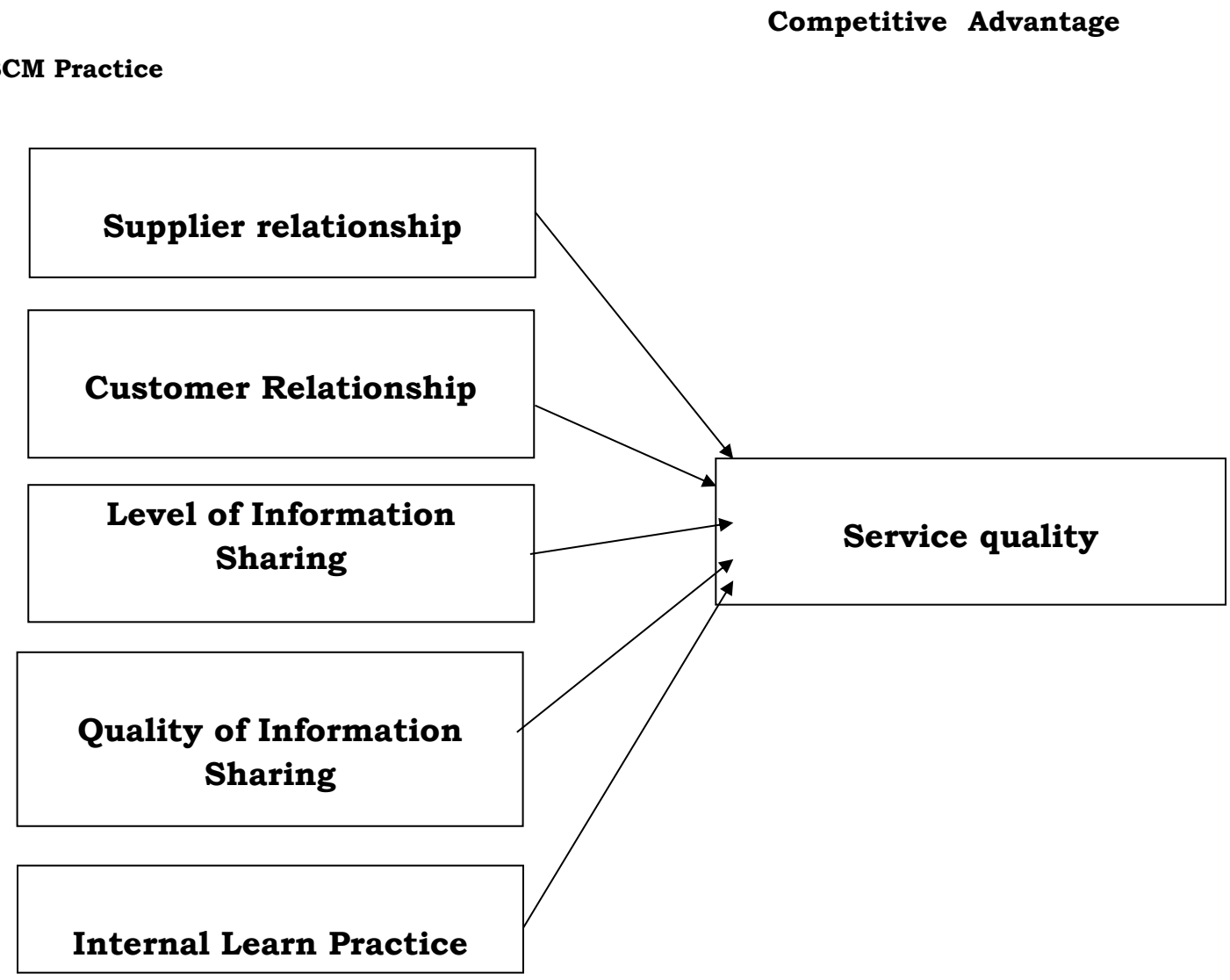
The same supply chain management practices those used by Lie et al 2006), were adopted for the assessment of supply chain management practice and firms competitive advantage in the case of MOHA Soft drinks industry Nifas silk plant.

Organization can have one or more of the following capabilities when compared to its competitors: lower prices, higher quality, higher dependability, and shorter delivery time. These capabilities will, in turn, enhance the organization's overall performance (Mentzer, Min and Zacharia, 2000).

2.5. Theoretical Frame Work

The conceptual frame work of the study explains the interrelationship among the Supply practice and Competitive advantage. And the framework proposes that SCM practices will have an impact on competitive advantage.

Figure 2.5. 1: Conceptual Framework



Source Li et al., (2006)

2.5.2. Hypotheses

The SCM framework developed in this study proposes that SCM practices have a direct impact on the competitive advantage of MOHA Nifas silk factory. As noted earlier, various SCM practices have an impact on various aspects of competitive advantage.

Therefore the following hypothesis is proposed:

H1: Supplier relationship management practices will be positively related to competitive advantage

H2. Customer relationship management practices will be positively related to competitive advantage

H3: Level of Information Sharing practices will be positively related to competitive advantage

H4: Quality of Information will be positively related to competitive advantage

H5: Internal Lean Practice will be positively related to competitive advantage

Having a competitive advantage generally suggests that Competitive advantage can lead to high levels of economic performance, customer satisfaction and loyalty, and relationship effectiveness. Brands with higher consumer loyalty face less competitive switching in their target segments thereby increasing sales and profitability (Moran, 1981). An organization offering high quality products can charge premium prices and thus increase its profit margin on sales and return on investment (Li et al., 2006).

CHAPTER THREE: Research Methodology

This Chapter refers to the methodologies that will be used in this study. Description of the study area, the particular research designs, sampling

techniques, sources of data and data collection procedure and tools, ethical consideration and data analysis are included.

3.1. Description of the Study Area

MOHA soft drinks industry has three factories found in Addis Ababa. NIfas silk factory is one of the three factories of MOHA soft drinks industry's factories, located at kirkos sub city in the southern part of Addis Ababa the area known by the name "Gotera". Similar to other business activities, Nifas silk factory makes every effort to make profit and to grow. The study is conducted in consultation with higher officials at different levels and staffs, using survey design with structured self-administered questionnaires.

3.2 Research Approach

In this study, quantitative approaches are employed. A set of scientific steps were used to achieve the objectives of the research, to answer the questions raised and test hypotheses.

Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. The final written report has a set structure consisting of introduction, literature and theory, methods, results, and discussion (Creswell, 2009).

A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From sample results, the researcher generalizes or makes claims about the population (Creswell, 2009). Quantitative approach is one in which the investigator primarily uses postpositive claims for developing knowledge, i.e., cause and effect relationship between known variables of interest or it employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data (Creswell, 2009). Quantitative hypotheses, on the other hand, are predictions the researcher makes about the expected relationships among variables. All hypotheses must be falsifiable. That is, hypotheses must be capable of being refuted based on the results of the study (Christensen, 2001).

Hypothesis may be defined as a logically conjectured relationship between two or more variables, expressed in the form of a testable statement. Relationship is proposed by using a strong logical argumentation. This logical relationship may be part of theoretical framework of the study. Ho is a null hypothesis that states that there is no relationship between the variables or relationship between the variables is zero is denoted as "Ho". The alternative (to the null) hypothesis states that there is a relationship between the variables under the study but also the relationship is perfect which is indicated by the number "1" and the alternative hypothesis is symbolically denoted as "H1"

3.3. Research Design

Explanatory approach is used in carrying out this study to understand the impact of SCM practices and the competitive advantage of MOHA soft drinks industry Nifas silk factory. The research focused on genuine information or sentiments depending on its purpose and it encompasses structured questionnaire to individuals, since objective of the study is to seek answers to specific questions from sufficient number of respondents.

3.4. Population and Sample

A researcher draws a sample from a larger pool of cases, or elements. A sampling element is the unit of analysis or case in a population (Newman, 2007). Random assignment involves assigning participants to groups within a research study in such a way that each participant has an equal probability of being assigned to any of the groups within the study (Kazdin, 1992).

In stratified sampling, a researcher first divides the population into sub populations (strata) on the basis of supplementary information. After dividing the population in to strata, the researcher draws a random sample from each sub population. He or she can sample randomly within strata using simple random sampling technique (Newman, 2007).

Sample size determination is an important element in any survey research, although it is a difficult one (Adams. et al., 2007).

There are different sample size determination techniques, for this paper the method developed by Carvalho (1984) is favored and directly referred as quoted on (Malhorta Narsh, K. 2007) as shown in the table below.

Table 3. 1: Carvalho's Sample Size Determination

Population Size	Small	Medium	Large
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1200	32	80	125
1201-3200	50	125	200
3201-10000	80	200	315
10001-35000	125	315	500
35001-150000	200	500	800

Source: (Carvalho, 1984)

The simple random sample is both the easiest random sample to understand and the one on which other types are modeled. In simple random sampling, a researcher develops an accurate sampling frame, selects elements from the sampling frame according to a mathematically random procedure, then locates the exact element that was selected for inclusion in the sample. After numbering all elements in a sampling frame a researcher uses a list of random numbers to decide which elements to select (Newman, 2007).

Simple random sampling and convenient sampling techniques is used to select the respondents in the company and from suppliers and customers respectively. The populations were managers at different level and staffs from different department in the case company, and also customers and suppliers. Respondents in the company were supervisors or managers in different functional areas because they are in charge for supply chain management in the company including, production managers and supervisor, purchasing and supply manager, marketing managers

and supervisors information system officers and staff members at different level in different department in the company while the factory workers were excluded.

In this research, as for the participants from inside the factory, population were sub divided in to different department within the company; then from the existing population the targets were identified and tried to select sample population using simple random sampling technique. However, as we can see in the table below based on Carvalho's Sample Size determination, the targeted population in each stratum was found less than the given range (i.e. the range 51-90) therefor all of them were taken as a census.

Table3. 2: Sample size

Departments	**Number of population**	**Targeted Population and Sample size**
Human Resource	155	5
Finance	34	30
Marketing	211	37
Procurement and stores	36	10
Quality control	24	12
Production	368	0
Technique	56	10
Vehicle maintenance	29	8
	913	**112**

Source: Factory's Human resource department

In relation to customers and suppliers, the respondents were customers, customers' customers (that means, distributors and retailers only) and suppliers were only suppliers of the company's core raw materials, and the supplier's

supplier are not included and also branch warehouse and customers and suppliers outside of Addis Ababa are not included.

In relation to customers there are 51 depots which distribute the products to retailers and around 9000 retailers available under Nifas silk factory's distribution zone (that means the market area in Addis Ababa is sub divided for the three factories of MOHA found in Addis Ababa). Due to budget and time scarcity convenient sampling was used to select retailers and depot. Among the total population, based on Carvalho's Sample Size determination, though it is considered medium, In order to make the study manageable 200 retailers were taken as a sample. Concerning the depots, total population is within the range of 51- 91 therefore 22 depots were taken as a sample and it is considered large. Besides, regarding the suppliers, as mentioned above, the study is focused only on the core raw materials suppliers found in Addis Ababa; therefor the existing seven suppliers were taken.

3.5. Sources of Data

Both primary and secondary data were the source of information for the study. The primary data from the targeted sample respondents and the secondary data from published material (books, company's profile, and booklets, manual) are collected.

3.6. Data Gathering Procedure

The major procedures that were undertaken are as follows:

After reviewing the related literatures and developing of statement of the problem Proper questionnaire were articulated. Based on the factory's internal procedure the questionnaires were given to the Human resource department to be distributed to the selected sample respondents. The purpose of the study is explained to the concerned body by letter and verbally in person, it is included briefly in the questionnaires also. Besides, the researcher described the purpose of the study to individual respondents in detail.

After the data is collected and organized, Analyzed using SPSS version 16 and also the statistical tools are aligned with the objectives of the research. And then data is interpreted.

3.7. Data Gathering Tools

A survey researcher asks people questions in a written questionnaire (mailed or handed to people) or during an interview then answer will be recorded using recorder or hand writing based on the respondent's consent. The researcher manipulates no situation or condition; he or she simply asks many people numerous questions in a short time period. Typically, he or she then summarizes answers to questions in percentages, tables, or graphs For primary data collection, self-administered close ended questionnaire in a 5 point likert scales is distributed to the respondents. The questionnaire is adopted from Li et al. (2006).

3.8. Methods of Data Analysis

It is an explanatory research in which quantitative data were collected. The acquired data were summarized and analyzed using descriptive statistics. The percentage distributions were computed. The results of the study also were piled up and prepared for presentation. As their name implies, descriptive statistics are used to describe the data collected in research studies and to accurately characterize the variables under observation within a specific sample. Descriptive analyses are frequently used to summarize a study sample prior to analyzing a study's primary hypotheses. Besides the relationship between independent variables and dependent variables are tested.

The process of data analysis involved several stages. The complete questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded (Keasworth & Harding, 1992).

3.9. Ethical Consideration

Ethics as applied to research generally refer to considerations to protect and respect the rights of participants and other parties associated with the activity (Reynolds, 1982).

As researchers anticipate data collection, they need to respect the participants and the sites for Research (Creswell, 2009).

Other ethical procedures during data collection involve gaining the agreement of individuals in authority (e.g., gatekeepers) to provide access to study participants at research sites. This often involves writing a letter that identifies the extent of time, the potential impact, and the outcomes of the research. Use of Internet responses gained through electronic interviews or surveys needs permission from participants (Creswell, 2009).

Considering the relevance of ethics in research work, the researcher considers ethical issues as much as possible. To this effect, letter from Addis Ababa University, school of commerce is submitted to the case company so that the research was conducted based on the consent of the company. In addition to that after getting accesses to the company the selection of participants is done based on their informed consent. The purpose of the study is to assess the impact of supply chain management practice on competitive advantage of the case company; and this is clearly explained to the participants and the concerned bodies. Respondents have the right to participate voluntarily, the right to ask questions including personal address of the researcher, the right to get the copy of the study, and the right to have their privacy respected; the right not to accept. The researcher has responsibility to protect participants from any risk related to the research. Furthermore, careful attentions were given for acknowledging all materials and sources of data used in this research.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents reliability and validity, the data analysis and interpretation which draws from the objectives of the study and also the acquired findings were analyzed more extensively.

4.1.1 Validity and Reliability Analysis

The most widely used measure known as Cornbrach's alpha is used to test reliability which assesses the consistency of entire scale. One way to try to ensure that measurement error is kept to a minimum is to determine properties of the measure that give us confidence that it is doing its job properly. Reliability is whether an instrument can be interpreted consistently across different situations (Field, 2009). The lower limit for Cornbrash's alpha is 0.70, although it may decrease to 0.60 in exploratory research (Hair et al., 2010). On the other hand validity focuses on what the test or measurement strategy measures and how well it does so (Anastasi & Urbina, 1997). Content validity was addressed through rigorous review by a group of academics to ensure the items reflected the intended variables. Construct validity is concerned with the theoretical relationship a variable appears to have with another variables as indicated by their respective measures (DeVellis, 2003).

Thoroughly reviewed literature and empirical review and the adopted questionnaire used by lie.et al. 2006 confirm that this study addressed validity.

Besides, the reliability of the items in the questionnaires were pre tested by 20 respondents who are not included in this study by Cronbach's alpha using SPSS version sixteen and found reliable since the results of the reliability analysis exceeded 0.70. In addition the reliability of the overall questionnaire's also done and the test result for each variables exceeded 0.70 hence, said to be reliable and summarized in Table 4.1 below.

Table 4.1: Reliability analysis

VARIABLES	NUMBER OF ITEMS	Cronbach's Alpha
SUPPLIER RELATIONSHIP MANAGEMENT	8	0.758
CUSTOMER RELATIONSHIP MANAGEMENT	9	0.867
LEVEL OF INFORMATION SHARING	7	0.874
LEVEL OF INFORMATION QUALITY	5	0.963
INTERNAL LEAN PRACTICE	2	0.796
COMPETITIVE ADVANTAGE	9	0.851

Source: Questionnaire Survey, 2017

4.1.2 Data collection and population studied

As explained in the previous chapters, the purpose of this research is then to assess the impact of supply chain management practices on competitive advantage in the case of MOHA soft drinks industry Nifas silk factory; This study evaluated whether the five dimensions of SCM practice (supplier relationship management, customer relationship management, level of information sharing, quality of information and Internal lean practice) have positive relationship with competitive advantage.

The research instrument was alienated into two parts. The first part was used to collect the demographic data of respondent (Educational Qualification, Job title, Years stayed at the factory are taken as demographic information concerning the respondents from the factory). And also type of business and years stayed being customer or supplier of the factory (for the respondents from supplier and customer).

The second part has two sections. The first section was used to collect information on the extent to which Supply chain management practices is implemented in the factory, the second section is related to competitive advantage.

In addition it is to be noted that questionnaire was adopted from Li et al, (2006) developed in five-point Likert type scales ranging from five to one; where 5

represents strongly agree, 4 agree, 3 Neutral, 2 disagree, and 1 strongly disagree. From the distributed questionnaires to 112 employees of the factory at different level, 200 retailers, 22 depots and 7 suppliers; out of which 92,161, 22 and 7 questionnaire respectively were returned.

Descriptive statistics frequency distribution is used to measure the response rate and Chi square statistical analysis used to test the degree of association between the independent and dependent variables. Hence, the result detail is described separately in the following tables below.

4.2 Demographic characteristics of the respondents'

4.2.1 Respondents' level of education(the company's employees)

Master degree holders represented only 5.35% of the respondents. Majority of the respondents have first degree represented 48.21% of the respondent. Diploma holders represented 26.8% of the respondents and finally Certificate holders take the minority of the respondents that is only 1.8%. The implication of these proportions is that the collected data had portion in making the findings more useful since the majority of respondents have educational level above first degree.

Table 4. 2: The Frequency distribution of respondents' level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	certificate	2	1.8	2.2	2.2
	College diploma	30	26.8	33.3	35.6
	First degree	54	48.21	58.9	94.4
	Second degree and above	6	5.35	5.6	100
	Total	92	82.16	100	
Missing	System	20	17.84		
Total		112	100		

Source: Questionnaire Survey, 2017

4.2.2 Respondents' number of years stayed in the Factory

As depicted in the table 4.2 below, 46.4 % of the respondents had worked for over ten years, 18.75% of the respondents worked six to ten years, 12.5% of the respondents had worked two to five years while 4.5% had worked for less than two years. Majority of respondents stayed working in the factory for over ten years; having experience in their present positions is a connotation they are competent to answer the questions.

Table 4.3: Frequency distribution of respondents' number of years stayed in the Factory

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<2	5	4.5	5.5	5.5
	2 - 5	14	12.5	15.4	20.9
	6 - 10	21	18.75	22	42.9
	>10	52	46.4	57.1	100
	Total	92	82.15	100	
Missing	System	20	17.85		
Total		112	100		

Source: Questionnaire Survey, 2017

4.2.3 Respondents' Position in the Factory

In relations to the position of respondents in the factory, 8 respondents which accounts 7.1% were managers, 19 respondents were supervisors which accounts17% while other positions 65 respondents which contributed 58.04% of the total respondents. Others refers to position comprised of senior officers, foreman and below.

Table 4.4: Frequency distribution of respondents' job title

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MANAGER	8	7.1	8.9	8.9
	SUPERVISOR	19	17	21.1	30
	OTHERS	65	58.04	70	100
	Total	92	82.14	100	
Missing	System	20	17.86		
Total		112	100		

Source: Questionnaire Survey, 2017

4.2.4 Frequency distribution regarding suppliers and customers

The respondents were 22 depots (9.6%), 10 (4.34 %) kiosk, 30(13%) Hotels, 8 (3.5%) Supermarket, 113 (49.13%) Others and 7(3.04%) were Suppliers. Others here refer to small shops. It can be implicit that the mix of respondents makes the response unfailing.

Table 4.5 Frequency distribution of Type of Business they involved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DEPOT	22	9.6	11.6	11.6
	KIOSK	10	4.34	5.3	16.9
	HOTEL	30	13	15.9	32.8
	SUPERMARKET	8	3.5	4.2	37
	OTHERS	113	49.13	59.3	96.3
	SUPPLIER	7	3.04	3.7	100
	Total	190	82.61	100	
Missing	System	40	17.39		
Total		230	100		

Source: Questionnaire Survey, 2017

4.2.5 Respondents Years stayed as customers or suppliers of the factory

As shown in the table 4.5 below, 8 (3.48%) of the respondents had been worked with the factory below two years, 37 (16.09) of the respondents worked with the factory between two to five years, 71 (30.87%) of the respondents worked with the factory for six to ten years, and 70 (30.43%) worked for over ten years. The duration of the respondents working with the factory appeared has an impact on their response since they know the trend of the practice.

Table 4.6 Years stayed as customers or suppliers of the factory

		Frequency	Percent	Valid Percent
Valid	<2	8	3.48	4.3
	2-5	37	16.09	19.89
	6-10	71	30.87	38.17
	>10	70	30.43	37.63
	Total	186	80.87	100
Missing	System	44	19.13	
Total		230	100	

Source: Questionnaire Survey, 2017

4.3 Descriptive Analysis

4.3.1 Level Supply Chain Management Practices Implementation

The collected data using 5-point Likert type response are summarized. It is to be noted that the questionnaire is prepared in Amharic for supplier and customers. Customers were not responded for all supplier relationship management related question likewise suppliers also not responded for all customer relationship management related questions. Hence customer's response is not included in the analysis of supplier relationship related question and with the same scenario supplier's response is not included in the analysis of the response of customers relationship related question. The frequency distribution of the response is shown in the tables below.

Table 4.7 Percentage distribution of responses related to Supplier relationship management

VARIABLES	Strongly	Strongly	N

	disagree/disagree		agree/agree		
	Frequency	Percentage	Frequency	Percentage	
Quality number one for supplier selection	10	10.1	89	89.9	99
Solve problem jointly with supplier	60	60.61	39	39.39	99
Continuous quality improvement	26	26.26	73	73.74	99
Include Supplier in goal setting	63	63.64	36	36.36	99
Measure supplier's contribution for company profit	66	66.67	33	33.33	99
Document relationship with supplier through product service agreement	7	7.07	92.93	92.93	99

Source: Questionnaire Survey, 2017

4.3.1.1 Analysis of Supplier Relationship Practice

Table 4.7 above depicts that seven essential supplier relationship management elements were used to examine the degree of the case company's position towards supply chain management practice utilized. As mentioned above 183 customers Note responded for all supplier relation management related questions. Therefore, the response of 7 suppliers and 92 factory's employees (in total 99 respondents' are taken to summarize the result. Hence, 89.89% of them agreed that the factory uses Quality as number one criteria for supplier selection, 10.1% disagree. 60.61% of the respondents disagreed the factory solve problems jointly with supplier and 39.39% of them agreed. 73.74% of the respondents agreed that the factory have continuous quality improvement program that include key supplier and 26.26% of respondents disagree. 63.64% of them disagreed that the factory includes suppliers in its goal setting, and 36.36% agreed. 66.67% of respondents disagreed that the factory regularly measure supplier's contribution to the factories profitability while 33.33% agreed. Finally for the question document the relationship with suppliers through product service agreement (PSA) 92.92% of the respondents responded that they agreed and only 7.08% of them disagreed.

Table 4.8 Percentage distribution of responses of Customer relation management

VARIABLES	strongly disagree/disagree		strongly agree/agree		N
	Frequency	Percentage	Frequency	Percentage	
Frequently interact with customer	95	34.55	180	65.45	275
Frequently measure and evaluate customer satisfaction	191	69.45	84	30.55	275
Frequently determine future customer	93	33.82	182	66.18	275
Facilitate customers' ability to seek assistance from the company	193	70.18	82	29.82	275
Periodically evaluate the importance of relationship with customer	194	70.55	81	29.45	275
Formally-developed response procedure for customer service issue	193	70.18	82	29.82	275
Responding to customer service issues prior to the customer being impacted	180	65.45	95	34.55	275
Provide the right quantity of product for customer	104	37.82	171	62.18	275
Customers are satisfied with the quality of service delivered	161	58.55	114	41.45	275

Source: Questionnaire Survey, 2017

4.3.1.2 Analysis of customer Relationship Practice

Table 4.7 above depicts that nine essential customer relationship management elements were used to examine the degree of the case company's position towards supply chain management practice in terms of CRM utilized. As mentioned above suppliers are not responded for all CRM related question. Therefore out of 282 the existing 7 suppliers excluded for this analysis therefor the response of only 275 respondents' is taken for this analysis. 65.45% of respondents agreed that the company frequently interact with customers, and only 34.55% disagreed. 69.45% of respondents disagreed the factory frequently measure and evaluate customer satisfaction and 30.55% of them agree. 66.18% of the respondents agreed that the factory frequently determine future customer, 33.81% of them disagreed. 70.18% of the respondent disagreed that the factory facilitates customers' ability to seek assistant and 29.82% of them agreed. 70.55%of the respondents disagreed that periodically evaluates the importance of its relationship with its customer and 29.45% of them agreed. 70.18% of the respondents disagreed that there is formally developed response procedure for customer service issue, and 29.82 of them agreed. Responding to customer service issues prior to the customer being

impacted 65.45% of the respondents disagreed and 34.55% of them agreed. 62.18% of respondents agreed that the factory provide the right quantity of product for the customer, 37.82% of the respondents disagreed. Customers are satisfied with the quality of service delivered 58.55% of respondents' disagreed and 41.45%of them agreed.

Table 4.9 Percentage distribution of responses on Level of information sharing

Variables	Strongly disagree/disagree		Strongly agree/agree		N
	Frequency	Percentage	Frequency	Percentage	
We inform trading partners in advance of changing needs.	132	46.81	150	53.19	282
Our trading partners keep us fully informed about issues that affect our business.	155	54.96	127	45.04	282
Our trading partners share business knowledge of core business processes with us	144	51.06	138	48.94	282
We and our trading partners exchange information that helps establishment of business planning.	173	61.35	109	38.65	282
Exchange of information with our partners (formal or informally) is frequent.	118	41.84	164	58.16	282
We and our trading partners keep each other informed about events or changes that may affect the other partner	175	62.06	107	37.94	282

Source: Questionnaire Survey, 2017

4.3.1.3 Analysis of Level of Information Sharing

Table 4.9 above depicts the response rate of Level of information sharing used to examine the degree of the case company's position towards supply chain management practice utilized.

Responses are taken for the question, 53.19% of respondents agreed the factory inform trading partners in advance of changing need, and 46.81% disagreed.54.96 respondents disagreed that trading partners keep the firm fully informed about issues that affect its business and 45.04 of them agreed. 51.06% of respondents disagreed that trading partners share business knowledge of core business processes for the factory and 48.94% of them agreed. 61.35% of the respondents disagreed that the factory and its trading partners exchange information that helps establishment of business planning and 38.65% of them agreed.

58.16% of respondents agreed that exchange of information with partners (formally or informally) is frequent and 41.84% of the respondents disagreed. 62.06% of the respondents disagreed that the firm and its trading partners keep each other informed about events or changes that may affect the other partners and 37.94% of them agreed.

Table 4.10 Percentage distribution of responses on Quality of Information

Variables	Strongly disagree/disagree		Strongly agree/agree		N
	Frequency	Percentage	Frequency	Percentage	
Information exchange between our trading partners and us is timely.	96	34.04	186	65.96	282
Information exchange between our trading partners and us is accurate	83	29.43	199	70.57	282
Information exchange between our trading partners and us is complete.	83	29.43	199	70.57	282
Information exchange between our trading partners and us is adequate	160	56.74	122	43.26	282
Information exchange between our trading partners and us is reliable.	81	28.72	201	71.28	282

Source: Questionnaire Survey, 2017

4.3.1.4 Analysis of Level of Information Quality

Table 4.10 demonstrates the five components of level information quality. 34.04% of the respondents disagreed that information exchange between the factories and trading partners is timely and 65.96% of them agreed. 70.27% of the respondents agreed that information exchange between trading partners and factory is accurate and 29.73% of them disagreed. 70.57% of the respondents agreed that information exchange between our trading partners and the firm is complete and 29.43% of them disagreed. 43.26% of respondents agreed that information exchange between trading partners and the factory is adequate and 43.26% of them disagreed. 71.28% of respondents agreed that information exchange between trading partner and the factory is reliable and 28.72% of them are disagreed.

Table 4.11 Percentage distribution of responses of Internal Lean Practice

VARIABLES	Strongly disagree/disagree	Strongly agree/agree	N

	Frequenc y	Percentage	Frequency	Percentage	
Our firm reduces process set-up time	64	22.70	218	77.30	282
Has continuous quality improvement	59	20.92	223	79.08	282

Source: Questionnaire Survey, 2017

4.3.1.5 Analysis of Internal Lean Practice

Table 4.11 above depicts the two components of internal lean practice.77.30% of the respondents agreed that the firm reduces process set-up time and 22.70% of them disagreed. 79.08% of the respondents agreed that the company has continuous quality improvement program and 20.92% disagreed.

Table 4.12 Percentage distribution of responses on competitive advantage

VARIABLES	Strongly disagree/ disagree		Strongly agree/agree		N
	Frequenc y	Percentage	Frequenc y	Percen tage	
Deliver the kind of products needed (required product mix)	177	62.77	105	37.23	282
Deliver customer order on time	57	20.21	225	79.79	282
Provide dependable delivery	55	19.50	227	80.50	282
Time to solve customer complaints is short	192	68.09	90	31.91	282
Customer order processing time is short	279	47.64	144	52.36	282

Source: Questionnaire Survey, 2017

4.3.1.6 Analysis of the Level of Competitive Advantage

The level of competitive advantage was also assessed and the response rate is depicted on Table 4.11 above. The dimension of competitive advantage used in this study is service quality. 62.77% of respondents disagreed that the company deliver the kind of products needed (required product mix) and the rest 37.23% agreed, 79.79% of the respondents agreed that the company delivers customer order on time and 20.21% of them were disagreed, 80.5% of respondents agreed that the

company provides dependable delivery and 19.50% of them disagreed, 68.09% of the respondents disagreed that time to solve customer complaints is short and the rest 31.91% agreed, and finally 52.36% of the respondents agreed that customer order processing time is short and 47.64% of them disagreed.

4.3.2 Chie square test Analysis between Construct of SCM Practices and Competitive advantage

SCM practices were used as independent variable and competitive advantage as dependent variable for the purpose of testing the hypothesis (to test relationship between the SCM practices and competitive advantage). And cross tabulation, specifically Pearson chi-square statistics is employed.

Fisher, 1922; Pearson, 1900 described, if we want to see whether there's a relationship between two categorical variables we can use the Pearson's chi-square test. This is an extremely elegant statistics based on the simple idea of comparing the frequencies you observe in certain categories to the frequencies you might expect to get in those categories by chance.

If the significance value is small enough (conventionally Sig. must be less than 0.05) then we reject the hypothesis that the variables are independent and gain confidence in the hypothesis that they are in some way related. Values less than 0.05 indicate good fit, values as high as 0.08 represent reasonable errors of approximation in the population (Browne and Cudeck, 1993), values ranging from 0.08 to 0.10 indicate mediocre fit, and those greater than 0.10 indicate poor fit (MacCallum et al., 1996).

Table 4.13 Chi square test result between the dimensions of supply chain practice and competitive advantage

		Value	df	Asymp. Sig. (2-sided)	
SRMP * CA	Pearson Chi-Square	4.431E2[a]	304	0.000	a. 330 cells (97.1%) have expected count less than 5. The minimum expected count is .00.
	Likelihood Ratio	285.729	304	0.767	
	Linear-by-Linear Association	20.085	1	0.000	
	N of Valid Cases	282			
CRM * CA	Pearson Chi-Square	6.181E2[a]	390	0.000	a. 422 cells (97.7%) have expected count less than 5. The minimum expected count is .00.
	Likelihood Ratio	379.382	390	0.64	
	Linear-by-Linear Association	64.113	1	0.000	
	N of Valid Cases	273			
LIS * CA	Pearson Chi-Square	4.431E2[a]	304	0.000	a. 330 cells (97.1%) have expected count less than 5. The minimum expected count is .00.
	Likelihood Ratio	285.729	304	0.767	
	Linear-by-Linear Association	20.085	1	0.000	
	N of Valid Cases	282			
QI * CA	Pearson Chi-Square	5.158E2[a]	256	0.000	a. 275 cells (95.2%) have expected count less than 5. The minimum expected count is .00.
	Likelihood Ratio	245.264	256	0.674	
	Linear-by-Linear Association	52.124	1	0.000	
	N of Valid Cases	282			
ILP * CA	Pearson Chi-Square	235.5556	96	0.000	a. 100 cells (84.0%) have expected count less than 5. The minimum expected count is .00.
	Likelihood Ratio	187.905	96	0.000	
	Linear-by-Linear Association	55.44395	1	0.000	
	N of Valid Cases	283			

Source: Questionnaire Survey, 2017

4.3.3 Analysis of the relationship between Construct of SCM Practices and Competitive advantage

Table 4.13 above shows the test result of relationship between the dimensions of supply chain practices (Supplier Relationship, Customer Relationship, Level of Information Sharing, Information Quality and Internal Lean practices) and competitive advantage. The analysis of the relationship between each variable and CA is as follows:

The result of chi square tests between Supplier relationship Management and competitive advantage show that Asymp. Sig Value = .000,

The result of chi square tests between Customer relationship Management and competitive advantage show that Asymp. Sig Value = .000,

The result of chi square tests between Level of information sharing and competitive advantage show that Asymp. Sig Value = .000,

The result of chi square tests between Quality of information sharing and competitive advantage show that Asymp. Sig Value = .000,

The result of chi square tests between Internal Lean practice and competitive advantage show that Asymp. Sig Value = .000,

The above Chi square is calculated comparing the actual frequencies observed in the research sample with that would be expected to occur by chance alone. Due to the large difference between the observed verses the expected frequencies a large value for Chi square is gained and it in turn yield probability associated with it. As shown above the test result of each the five variables with competitive advantage have Sig Values 0.00. According to the general convention, probability the probability less than .05 tales that there is significant evidence to conclude that there is relationship between the two variables. Hence it can be inferred there is significant evidence that to conclude there is relationship between Supply chain practice and competitive advantage.

CHAPTER FIVE: SUMMARY OF KEY FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Summary

The purpose of this study was to assess the case company's position towards implementing supply chain management practice and how this affects the competitive advantage of the factory.

The following are the major findings obtained from the data analysis.

In relation to Supplier relationship management, using quality as number one criteria for supplier selection, continuous quality improvement program and documenting the relationship with suppliers through product service agreement (PSA) appears that majority of respondents agreed implemented well. Despite, it is noted that measuring supplier's contribution for profit, involving major suppliers in goal setting activity; are an important best practice had been employed only to a lesser extent.

Concerning customer relationship management, frequently interacting with customers, frequently determining future customer, providing the right quantity of product for the customer, are practices seemed implemented well. In spite of that, formally developed response procedure for customer service issues, periodically evaluating the importance of relationship with customers, responding to customer service issues prior to the customer being impacted and customer satisfaction by the quality of service delivered are practices appeared not implemented in wide-ranging.

And in relation to information sharing, informing trading partners in advance of changing need, frequently exchanging of information with partners (formally or informally) , trading partners share business knowledge of core business processes for the factory can be pointed as practices implemented. While keeping informed each other with trading partners about events or changes that may affect the other partner, exchange information with trading partners that helps establishment of business planning appears at lesser extent.

Quality of information and internal lean practices are found to be sound except that information sharing is not adequate

Furthermore, Deliver the kind of products needed (required product mix) and Time to solve customer complaints are components of Competitive Advantage those majority of respondents agreed that they are a lower level

According to the hypothesis tested the test result regarding the relationship between SCM practices and competitive advantage, there is significant evidence that Supply chain management practice and Competitive advantage has relationship since their Sig values of the test result of each variables with competitive advantage is <0.05.

Conclusion

The resulting conclusions are made from the above findings and the analysis. It can be concluded that the firm better implemented part of SCM best practices and some practices to a lesser extent. This results a negative impact on some part of the firms competitive advantage.

From the elements of supplier relationship practices keeping the wide-ranging implemented elements, the company needs to give due consideration for the items those still yet needs to be entirely applied; to mention them, measuring supplier's contribution for firms profit and involving major suppliers in goal setting activity are an important practices need improvement

Concerning customer relationship management, formally developed response procedure for customer service issues, periodically evaluating the importance of relationship with customers, responding to customer service issues prior to the customer being impacted are those practices implemented at a lesser extent and also customer satisfaction by the quality of service delivered appears to be at lower level. Therefore the factory should give strong emphasis for such practices in order to gain customer loyalty and retain its competitive advantage in the competitive environment.

And in relation to information sharing, keeping informed each other with trading partners about events or changes that may affect the other partner, exchange

information with trading partners that helps establishment of business planning are some of the best practices need enhancement.

Deliver the kind of products needed (required product mix) and Time to solve customer complaints are components of delivery dependability under competitive advantage that are at lesser level. This may be improved by enhancing the customer's relationship management such as proper customer complaint handling and frequently measuring customer satisfaction level. It can be concluded that poorly implemented supply chain practice has an adverse impact on competitive advantage

On the other hand, Browne and Cudeck, (1993) Values less than 0.05 indicate good fit; MacCallum et al., (1996) suggested values ranging from 0.08 to 0.10 indicate mediocre fit, and those greater than 0.10 indicate poor fit.
Therefore, based on the test result of the hypothesis, there is significant evidence that Supply chain management practice and Competitive advantage have relationship since their Sig values are <0.05. Generally the results of this study appear to indicate that Supplier relationship management (SRM), Customer Relationship Management (CRM), Level of Information Sharing (LIS), Quality of Information (QI) and Internal Lean Practices (ILP) have positive impact on Competitive Advantage.

Finally as described in the Empirical review above the obtained test result is supported by Wijetunge, (2016) correlation between SCM Practices and Competitive Advantage found significant at 0.01 and it indicated positive relationship concluding that higher the SCM Practices higher the Competitive Advantage. And Lie et al (2006); SCM practices can have discernible impact on competitive advantage and organizational performance. And also Moslem, (2013) concluded that there is relationship between SCM practice and competitive advantage.

5.2 Recommendation

Based on the obtained findings and the conclusion acquired, the following recommendation is proposed.

- To build long-term relationships with customers and improving customer satisfaction robust emphasis should be given for customer complaint handling service issue by dealing with their question, problem and complaints attentively and giving them prompt solution.
- According to Geiger and Dooley (1998) information is crucial and drives the entire supply chain system. Therefore, the case company should improve its Customer and supplier relationship through proper sharing of timely, accurate and relevant information such as the sale, demand and production forecasts, inventory levels, delivery schedules.
- Close customer relationship allow product differentiation from competitors, help sustain customer satisfaction and loyalty, (Margaretta, 1998). Therefore, developing formal response procedure for customer service issues and monitor level of Customer satisfaction by giving due consideration specifically to end users/consumer company's products that builds brand loyalty and it in turn increase competitive advantage and keep grow the market share of the company. Hence, Brands with higher consumer loyalty face less competitive switching in their target segments thereby increasing sales and profitability (Moran, 1981).
- Establish means to involve selected core materials suppliers in goal setting and measure their contribution for the company's profit by developing win-win relationship where both parties benefit with a small core group of suppliers, change from the traditional bid and buy system. This can help suppliers to make bulk purchase with assurance that all the materials needed by the buyer and benefited from transportation and wholesale price then buyer can also be benefited from lesser purchase price and provide more competitive price for the end customer then keep profit increased.

REFERENCES

Kazdin, A. E. (1992) *Research design in clinical psychology* , 2nd edition, Boston: Allyn & Bacon.

Ahmadi, H. (2005) 'Supply Chain Management', *Tehiran,Iiran Industrial Research Center*.

Anastasi, A. & Urbina, S. (1997) *Psychological testing*, 7th edition, Englewood Cliffs, NJ: Prentice Hall.

Armistead, C.G. (1990) ' "Service operations strategy: framework for matching the service', *International Journal of Service Industry Management*, vol. 1(2) , pp. 6-17.

Bagchi, P.K., and T.S. Larsen, (2003) *Challenges of Integration in Supply Chain Networks an European Case*.

Barney, J. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*, vol. 17(1) 99-120.

Bayode O.B., Ph. D.; Rotimi A. G., and Joseph A. B., (2016) 'Supply Chain Management Practic and Market Performanfce: Evidence from Selected Major marketers of Petrolum Products in Nigeria.', *The pasfic Journal of Science and Technology*, vol. 17, no. 1.

Bayraktar, Tatoglu and Zaim, (2007) 'The impact of Supply chain Management Practices on Performancesof SMEs Industrial Management and Data Systems', *International Journal*, vol. 107 (1).

Berry, D., Towill,D.R., and Wadsley,N., (1999) 'The BPR SCOPE concept in leveraging improved supply chain performance', *Business process Management Journal*, vol. 5 254.

Bommer, M., O'Neil, B. and Treat, S. (2001) 'Strategic Assessment of the Supply chain interface: Beverage industry case study ', *Journal of physica distribution and Logisics Management*, vol. 31 (1).

Carr A. S. and Pearson J. N., (1999) 'Strategically managed buyer-seller relationship and performance outcomes', *Journal of operation management*, vol. 17(5), pp. 497-519.

Chopra, Sunil and Mendi, (2001) *Supply Chain Management, Strategy, planning and Opertion*, New Jersey: Prentice Hall.

Christensen, L.B. (2001) *Experimental Methodology*, 8th edition, Boston: Allyn & Bacon.

Christopher, M. (1992) *Logistics and Supply chain Management*, 2nd edition, London: Pitman Publishing.

Christopher, M. (1998) *Logistics and Supply Chain management* , 2nd edition, Great Britain: Financial Time Prentice Hall.

Cravalho, J. (1984) 'Archive Application of Mathimatical Sampling', *Recrd Management quarterly*.

Creswell, J.W. (2009) *Research Design: Qualitative and Quantitative Approach*, 3rd edition, London UK: Sage Publications.

Field, A.P. (2009) *Discovering statistics using SPSS (and sex and drugs and rock' n' roll)*, 3rd edition, London: Sage Publications.

Feldmann M., and MulerS, (2003) 'An Incentive scheame for true information providing in supply chains'', *International Journal OMEGA*, vol. 31(2), pp. 63-73.

Fisher, R.A. (1922) 'interpretation of chi square from contingency tables, and the calculation of P.', *Journal of the Royal Statistical Society*, vol. 85, pp. 87–94.

Forester, B.&. (2010) *Essential Guide to operations Management Concepts and Case Notes*, United Kingdom: John wiley & sons Ltd Southern Gate, Chichester,West Sussex, PO19 8SQ.

Ganeshan, R, and Terry P. Harrison, (1995) *An Introduction to Supply chain Management*, penn: Department of Management Sciences and Information Systems, 303 Beam Business Building, Penn State University, University park,PA.

Geiger, C. M. and F.J. Dooley (1998) *Supply chain Management: issue and Practice for small and rRural Manufacturers, the Upper Great Plains*, Fargo North Dakota: Transportation Instituite North Dakota State university.

Gunasekaran A., Patel C. and Tirtiroglu E., (2001) 'Performance measures and metrics in a supply chain environment.', *International Journal of Operations and production Management*, vol. 21(1/2), pp. 71-87.

Hair, J. F., Black, B., Babin, B., Anderson, R. E., and Tatham, R. L. (2010) *Multivariate Data Analysis*, 7th edition, Prentice Hall.

Hassanzadeh, A. and Jafarian, A., (2010) *Whip effect in supply chains new managers*, 1st edition, Tehiran, Iran.

Holomberg, S., (2000) 'A systems perespective on supply chain measurements ', *International Journal of Physical Distribution and Logistics Management;* , vol. 30(10), pp. 847-68.

Ibrahim S.B and Hamid A.A, (2014) 'Supply chain Management Practice and supply chain performance effectiveness ', *International Journal of Science and Research (IJSR)*, vol. 3 , no. 8.

Koufteros XA, Vnderemkbse MA. and Doll WJ., (1997) 'Competitive capabilities:measurement and relationships Proceedings", *Decision Science Institute,*1067 68 4(4) pp.1-13

Ladhari, R. (2009) 'A review of twenty years of SERVQUAL research,', *Internationa lJournal of Quality and Service Sciences*, vol. 1(2), pp. 172-198.

Lambert, D. M. Pohlen, T. L., (2001) 'Sipply chain metrics', *Internationa Journal of Logistics Management*, vol. 112(1), pp. 1-9.

Lee Chang Won, IK- Whan G. known and Dennis Severance (2007) 'Relationship between supply chain performance and degree of linkage among supplier,internal integration, an customer, Supply Chain Management', *An International Journal of Management Science*, vol. 43(4), pp. 546-58.

Lenny Koh S.C., Mehmet D., Erkan B., Ekrem T. and Selim Z., (2007) 'The impact of supply chain management practices on performance of SMEs'', *Industrial Management and Data System*, vol. 107(10), pp. 103-124.

Li Suhong, Bhanu Ragu-Nathan, T.S. Ragu-Nathan, S. Subba Rao (2006) '„The impact of supply chain management practices on competitive advantage and organizational', *Omega International Journal of Management Science*, vol. 34.

Mehri, A. and Khodadad Hosseini, S.H. (2005) '„Competitive Advantage Model Design for the', *Journal of Humanities*, vol. 9(2), pp. 189-213.

Mentzer, J. T., DeWitt, W., Kleeber, J.S., Min, S., Nix, N.W., Smith, C. D., & Zacharia, Z. G., (2001) 'Defining supply chain management', *Journal of Business Logistics*, vol. 22(2)2, pp. 1-25.

Moberg C. R., Cutler, B. D., Gross, A. and Speh, T. W., (2002) ''Identifying antecedents of information exchange within supply chains", *International Journal of Physica lDistribution and Logistics Management,* vol. 32(9), pp. 755–70.

Noble D., (1997) ''Purchasing and supplier management as a future competitive edge', *Logistic Focus,* vol. 5(5), pp. 23-7.

Sadri, G and Lees, B., (2001) 'Developing Corporate Culture as a Competitive', *Journal of Management Development*, vol. 20 (10, pp. 853 - 859.

Sahay, B.S., Gupta, J. N. D. and Mohan R. (2006) '"Managing supply chains for competitiveness: the Indian scenario", Supply Chain Management', *An International Journal,* vol. Vol. 11 No. 1, pp. 15-24.

Sengupta, K., .D. R. Heiser, L.S. Cook, (2006) 'Manufacturing and Service Supply Chain Performance, A Comparative Analysis', *The Journal of Supply Chain Management.*

Sichinsambwe, Chanada M., (2011) 'Effectiveness and efficiency of knowledge transfer in supplier development: key antecedents and buyer-supplier outcomes', *Doctoral dissertation) Retrieved from Dissertations and Thesis database (csu1315200802).*

Simatupang, T.M. and Sridharan, R., (2002) '"The Collaborative Supply Chain",', *International Journal of Logistics Management,* vol. 13(1), pp. 15-30.

Tan, K. C., Kannan VR, and Handfield RB.,, (1999) 'Supply Chain Management. Supplier Performance', *Internal Journal of Purchasing and Materials Management*, vol. 34(2), pp. 2-9.

Tan, K. C., Kannan VR, and Handfield RB., (1998) 'Supply chain management: supplier performance and firm performance', *International Journal of Purchasing and Materials Management;*, vol. 34(3), pp. 2–9.

Tracy, M., Vonderembse MA. and Lim JS. (2005) 'The Impact of Supply Chain Management Applicability on Business Performance', *An International Journal Of SCM* , vol. 10(3), pp. 179-191.

Balsmeier, P.W. and Voisin W., (1996) 'Supply chain Management a time based Strategy', vol. 38(5) 247.

Walker, D. (1990) *Customer First: A Strategy for Quality Service,* Gower, Aldershot.

White, R.E., Pearson, J.N. and Wilson, J.R. (. (1993) 'JIT manufacturing: a survey of implementations in small and large US manufacturers', *Management Science*, vol. 45(1), pp. 1-15.

Wijetung, (2016) 'The role of supply chain management practices in achieving organizational performance through competitive advantage', Proceedings of 54th ISERD International Conferenc eSingapore, 17th-18th November 2016, ISBN: 978-93-86291-37-0.

Yoshino M. and Rangan S., (1995) *"Strategic Alliances: An Entrepreneurial Approach To Globalization",* Boston, MA: Harvard Business School Press.

Yunas, Primiana, Cahyandito & Kaltum, (2016) 'New model of competitive advantage of Supply Chain management practices a case of Indonesian cacao manufacturing industry', *international journal of economics, Commerce and Management United Kingdom*, vol. IV, no. 9.

ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF COMMERCE
MASTERS OF LOGISTICS AND SUPPLYCHAIN MANAGEMENT
QUESTIONNAIRE

The purpose of this questionnaire is to collect data on the supply chain management practices and firm competitive advantage in the case of MOHA Soft drinks industry Nifas silk plant. The study is purely for academic purpose and thus not affects you in any case. So, your, frank and timely response is vital for the success of the study. Therefore, I kindly request you to respond to each items of the question very carefully.

General Instructions

- There is no need of writing your name
- Where answer options are available please tick (√) in the appropriate box for part I and part II.

Contact Address

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Mobile: 09-11-41-63-12 or e-mail: engidata@yahoo.com)
Thank you for scarifying your precious time in advance!

PART I: Demographic Information

1. Educational Qualification:

Grade 12 completed ☐ Certificate ☐ College diploma ☐

First Degree ☐ Second Degree and above ☐ Others ☐

2. Job title

CEO/President /Vice President ☐ Director ☐ Manager ☐ Supervisor ☐

Other_____

3. Years stayed at the Factory:

Under 2 ☐ Years 2–5 ☐ Years 6–10 years ☐ Over 10 years ☐

Part II: Instruments for supply chain management practices, Competitive Advantage

Section one: supply chain management practices

With regard to SCM practices of your firm, please thick the appropriate box parallel to the number to indicate the extent to which you agree or disagree with each statement. The item scales are five-point Likert type scales with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree, 6 = not applicable.

Strategic supplier partnership (SSP)

	Strategic supplier partnership (SSP)	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Not applicable**
1	We consider quality as our number one criterion in selecting suppliers.						
2	We regularly solve problems jointly with our suppliers.						
3	We have continuous improvement programs that include our key suppliers						
4	We include our key suppliers in our planning and goal-setting activities						
5	Our firm regularly, measures our supplier contributions to our profitability.						
6	Our firm documents our relationship with suppliers through formal PSA						

	Customer relationship (CR):	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Not applicable**
1	We frequently interact with customers to set reliability, responsiveness, and other standards for us.						
2	We frequently measure and evaluate customer satisfaction.						
3	We frequently determine future customer						
4	We facilitate customers' ability to seek assistance from us.						
5	Our company periodically evaluates the importance of its relationship with its customers						
6	Our customer service representatives respond to customer service issues with formally-developed response procedure						
7	The factory has mechanisms in place for responding to customer service issues prior to the customer being impacted						
8	Your organization provide the right quantity of product for the customer						
9	your customers are satisfied with the quality of product and service your company delivered to them						

Level of information Sharing	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**Not applicable**

1	We inform trading partners in advance of changing needs.						
3	Our trading partners keep us fully informed about issues that affect our business.						
4	Our trading partners share business knowledge of core business processes with us						
5	We and our trading partners exchange information that helps establishment of business planning.						
6	Exchange of information with our partners (formal or informally) is frequent.						
7	We and our trading partners keep each other informed about events or changes that may affect the other partners						

	Level of information quality (IQ)	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**applicable**
1	Information exchange between our trading partners and us is timely.						
2	Information exchange between our trading partners and us is accurate.						
3	Information exchange between our trading partners and us is complete.						
4	Information exchange between our trading partners and us is adequate						
5	Information exchange between our trading partners and us is reliable.						

	Internal Lean Price	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**	**applicable**
1	Our firm reduces process set-up time (time required to prepare or refit equipment/workstation for production)						
2	Our firm has continuous quality improvement programs						

Section two: Competitive advantage

Competitive advantage is the extent to which an organization is able to create a defensible position over its competitors.

Please indicate the extent to which you agree or disagree with each statement with regard to the competitive advantage of your firm.

The scale below utilizes a five-point Likert type scale with response~ ranging from:

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree, 6 = NOT APPLICABLE.

How did your business perform over the last three years relative to their major competitors on each of the operational performance criteria?

Service Quality							
An organization is capable of providing on time the type and volume of product required by customer(s).		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Not applicable
1	We deliver the kind of products needed.(required product mix)						
2	We deliver customer order on time.						
3	We provide dependable delivery.						
4	Time to solve customer complaints is short.						
5	Customer order processing time is short.						

አዲስ አበባ ዩኒቨርስቲ

ኮሌጅ አፍ ቢዝነስ ኤንድ ኢኮኖሚክስ

በክል አፍ ኮሜርስ

የለጂስቲክስ እና የአቅርቦት ሰንሰለት ሰራ አሚር የሚተርስ

ዲግሪ ሚሐ ግብር ማዐይቅ

የዚህ ማዐይቅ ዓላማ በሞሐ ለስላሳ ማዞች ኢንዲስትሪ ንፋስ ስልክ ፋብሪካ ያለወን የለጂስቲክስ እና የአቅርቦት ወንስለት ሃራ አሚር የአሰራር ዘይዎችና የድርጅቱ የተወዳዳሪነት ዕድል በተሚከተ ሚጃ ማብሰብ ነው፡ ጥናቱ በብቸኝነት ለትምህርታዊ ዓላማ የሚወል ሲሆን፣ በማንኛውም ረገድ በእርስዎ ላይ የሚጥረው ምንም ዓይነት ተፅዕኖ የለም፡ በማኑም እርስዎ በግልፅነትና በወቅቱ የሚጠት ምላሽ ለጥናቱ ስለeኬታማነት ከፍተሃ አስተዋፅኦ ይኖረዋል፡፡ በማኑም በዚህ ማዐይቅ ላይ ለወፈሩት ለእያንዳንዱ ጥያቄዎች በከፍተኛ ጥንቃቄ ምላሽ እንዲሰጡ በአቅበሮት እጠይቃለሁ፡፡

አጠቃላይ መመሪያዎች

- ስምዎን ማፍ አስፈላጊነት አይኖረወም፡
- በክፍል I እና II ላይ ለመመለስ የሚፈልጉትን የመለስ አሚጭ በሚገኙበት ጊዜ እባክዎን በትክክለኛው xጥን ወስጥ የ (√) ምልክት ያድርጉ፡፡

የግንኙነት አድራሻ

ጥናቱን በተመለከተ ማንኛወም ዓይነት ጥያቄ ቢ*ርዎ ለእርስዋ እንደሚመዎ በሞባይል ቁጥር 0911416312 ወይም በኢሜል engidata@yahoo.com ሊያገኙ ይችላሉ፡፡

ወድ ጊዜዎን ማዋዕት ስላደረጉ በቅድሚ ላማሳግንዎ እወዳለሁ፡፡

ክፍል I አጠቃላይ ነባራዊ ሚጃ

1. የስራዎ ዓይነት

ዶፓ ☐ ኪዎስክ ☐ ሆቴል ☐ ሱፐር ሚኬት ☐

አቅራቢ ☐ ሌሎች ☐

2. የፋብሪካው ደንበኛ በመን የቆዩበት የጊዜ ርዝመት

ከ2 ዓመት በታች ☐ ከ2-5 ዓመታት ☐ ከ6-10 ዓመታት ☐

ከ10 ዓመታት በላይ ☐

ክፍል II የአቅርቦት ሰንሰለት የአሰራር ዘዴዎች የተወዳደሪነት እድሎች

ንዑስ ክፍል አንድ፡ – የአቅርቦት ሰንሰለት ስራ አሚር የአሰራር ዘዴዎች

የድርጅቱን የአቅርቦት ሰንሰለት ስራ አሚር የአሰራር ዘዴዎች በተመለከተ ለቀረቡ ሚከይቆች ምን ያህል እንደሚስማሙ ወይም እንደሚስማሙ ለማየት በቁጥሩ ፊት ለፊት ባለው አግባብነት ያለው ሳጥን ወስጥ ምልክት ያድርጉ::

ማሰሰቢያ፡ – አቅራቢዎች ከደንበኛ ጋር ያለ ግንኙነት እና የተወዳዳሪነት እድሎች አስመልክቶ የቀረቡ ጥያቄዎችን መመለስ አይጠበቅላቸውም እንዲሁም ደንበኞች ከአቅራቢዎች ጋር ያለ ግንኙነትን አስመልክቶ የቀረቡ ጥያቄዎችን መመለስ እይጠበቅባቸውም

የመዝኛ ነጥቦች 5 ሲሆኑ፣ እነዚህም የሚከተሉት ናቸው፡ – 1= በጣም አልስማማም፡ 2= አልስማማም፡ 3= ተአቅቦ፣ 4= እስማማሁ፣ 5= በጣም እስማማሁ፣ 6= ተፈፃሚ እንዲደረግ የሚጠየቅ

ከአቅራቢዎች ጋር ያለ ግንኙነት

ከአቅራቢዎች ጋር ያለ ግንኙነት		በጣም አልስማማም	አልስስማማም	ተአቅቦ	እስማማሁ	በጣም እስማማሁ	ተፈፃሚ እንÇ=ደረግ የሚጠየቅ
1	ów]‴< አቅራቢዎችን በማሚጥ እረገድ ጥራትን በአንደኛ ደረጃ መከፈርትነት ይጠቀሜል ብለን እናምናለን ::						
2	የሚያጋጥመንን ችግሮች በመደበኝነት ከአቅራቢዎቻችን ጋር በጋራ እንፈታቸዋልን::						
3	ቁልፉ አቅራቢዎቻችንን የሚሳትፉ ቀጣይነት ያላቸው የማሻሻያ ሞረሐ ግብሮች አሉን::						
4	በዕቅድ አመጣጥና ግብ የሚቀመጥ ተግባራት ቁልፍ አቅራቢዎቻችንን እናሳትፋለን::						
5	አቅራቢዎቻችን Ków]‴< ለትርፉማ ƒ የሚደርጉትን አስተዋፅኦ ድርጅታችን በመደበኝነት ይገመግሜል::						
6	በመደበኛ ምርትና የአገልግሎት ስምማት (Product and Service Agreement) አማካኝነት ድርጅታችን ከአቅራቢዎቹ ጋር ያለዉን ግንኙነቶች በሰነድ ማከረጃ ይይዛል::						
ከደንበኞች ጋር ያለ ግንኙነት		በጣም አልስማማም	አልስስማማም	ተአቅቦ	እስማማሁ	በጣም እስማማሁ	ተፈፃሚ እንÇ=ደረግ የሚጠየቅ

1	አስተማማኝነት፣ ፈጣን ምላሽንና ሌሎች መሰረታዊ ጉዳዮችን ለሚጋገጥ በሚደበኝነትና በተከታታይነት ከደንበኞቻችን ጋር አብረን እንሰራለን፡፡						
2	የደንበኞችን እርካታ በሚደበኝነት እየገመገምን እንመዘናለን፡፡						
3	በሚደበኝነት የወደፊት ደንበኞቻችንን እንወስናለን፡፡						
4	ደንበኞች ከእኛ ዘንድ ድጋፍ ሊያገኙበት የሚችሉበትን ሁኔታ እናመቻቻለን፡፡						
5	ድርጅታችን ከደንበኞቹ ጋር ያሉትን ግንኙነቶች አስፈላጊነት በየወቅቱ ይገመግማል፡፡						
7	ፋብሪካው ደንበኞች ላይ ጉዳት ወይም ተፅዕኖ ከሚፈጠሩ በፊት ለደንበኞች አገልግሎት ጉዳዮች ምላሽ የሚሰጥበት የአሰራር ዘዴ ዘርግቷል፡፡						
8	ድርጅታችን ለደንበኞቹ ተፈላጊወን የምርት መጠን ያቀርባል፡፡						
9	ድርጅታችን የሚቀርባቸው ምርቶችና አገልግሎቶች የጥራት ደረጃ ደንበኞቻችን ደስተኞች ናቸው፡፡						

	ሚጃን የመለዋወጥ ሁኔታ	በጣም አልስማማም	አልስስማማም	ተአቅቦ	እስማማለሁ	በጣም እስማማለሁ	ተፈፃሚ እንዲደረግ የሚጠየቅ
1	የሚፈረጉ አስፈላጊ ለውጦችን በሚመለከት ለንግድ አጋሮቻችን በቅድሚያ ሚጃ እንሰጣለን፡፡						
3	ስራችን ላይ ተፅዕኖ ሊፈጥሩ የሚችሉ ጉዳዮችን በተመለከተ የንግድ አጋሮቻችን በሚደበኝነት የተሟላ ሚጃ ይሰጠናል፡፡						
4	የንግድ አጋሮቻችን ወሳኝ የስራ ጉዳዮችን የሚመለከቱ ተሞክሮዎች ከእኛ ጋር ይለዋወጣሉ፡፡						
5	እኛና የንግድ አጋሮቻችን የስራ ዕቅድ ለማመጣጠን የሚያስፈልጉንን ሚጃዎች እንለዋወጣለን፡፡						
6	በየጊዜው (በተከታታይነት) ከንግድ አጋሮቻችን ጋር ሚደበኛ በሆነ ወይም ሚደበኛ ባልሆነ መንገድ የሚጃ ልወወጥ እናደርጋለን፡፡						
7	ሌሎች አጋሮቻችን ላይ ተፅዕኖ ሊፈጥሩ የሚችሉ						

	ከስተቶችን ወይም ለወጦችን በሚሟላከት እኛና የንግድ አጋሮቻችን እርስ በእርሳችን ሚጃ እንለዋወጣለን፡፡						

	ሚጃን የጥራት ደረጃ	በጣም አልስማማም	አልስስማማም	ተአቅቦ	እስማማለሁ	በጣም እስማማለሁ	ተፈፃሚ እንዲደረግ የሜጠየቅ
1	በእኛ እና በንግድ አጋሮቻችን መካከል የሜረግ የሚጃ ልወወጥ ወቅታዊነቱን የጠበቀ ነው፡፡						
2	በእኛ እና በንግድ አጎሮችን መካከል የሜረገው የሚጃ ልወወጥ ትክክለኛነት ያለው ነው፡፡						
3	በእኛ እና በንግድ አጋሮቻችን መካከል የሜረግ የሚጃ ልወወጥ ምኳኅነት ያለው ነው፡፡						
4	በእኛ እና በንግድ አጋሮቻችን መካከል የሜረግ የሚጃ ልወወጥ በበቂ ሁኔታ የሜከናወን ነው፡፡						
5	በእኛ እና በንግድ አጋሮቻችን መካከል የሜረግ የሚጃ ልወወጥ ተአሚነት ያለው ነው፡፡						
	ወሳጣዊ የአሰራር ሁኔታዎች	በጣም አልስማማም	አልስስማማም	ተአቅቦ	እስማማለሁ	በጣም እስማማለሁ	ተፈፃሚ እንዲደረግ የሜጠየቅ
1	ድርጅታችን የስራ ሂደቶች የሚከፍቀቁባቸውን ጊዜዎች እንዲቀንሱ ያደርጋል (መሣሪያዎችን/የምት ከፍልን ለማዘጋጀት ወይም በድጋሚ ለማሟላት)						
2	ድርጅታችን በመደበኝነትና ቀጣይነት ባለው መንገድ የሚከናውኑ የጥራት ማሻሻያ ሚሐ ግብሮች አሉት፡፡						

<u>ንዑስ ክፍለ ሀለት፡ – የተወዳዳሪነት ዕድሎች</u>

የተወዳዳሪነት ዕድል አንድ ድርጅት በተወዳዳሪዎቹ ላይ ብልጫ የሚሰድበት ሁኔታ ደረጃ የሜሳይ ነው፡፡

እባክዎን እያንዳንዱ ድርጅቱን የሚሟላከቱ የተወዳዳሪነት ዕድልን አስሚልከቶ በተጠየቁ ጥያቄዎች ላይ የሚማማት ወይም ያለማማማት ደረጃዎን ይጥቀሱ፡፡

ከዚህ በታች የተዘረዘሩት ማኪያዎች አማኪƒ ነጥቦችን የያዙ ሲሆን፣ እነዚህም የሚከተK<ት ናቸው፡ – 1= በጣም አልስማማም 2= አልስማማም 3= ተአቅቦ፣ 4= እስማማለሁ፣ 5= በጣም እስማማለሁ፣ 6= ተፈፃሚ እንዲደረግ የሚጠየቅ

በእያንዳንዱ የስራ አፈፃፀም ማስፈርት መሠረት ከዋና ዋና ተፎካካሪዎቹ አንፃር ሲታይ ድርጅቱ ላለፉት ሦስት ዓመታት የነበረው የስራ አፈፃፀም ምን ይመስላል?

የአቅርቦት አስተማማኝነት		በከፍተኛ ደረጃ ቀንሷል	ቀንሷል	ከዚህ ቀደም ከነበረው ጋር ተመሳሰይ	ጨምሯል	በከፍተኛ ሁኔታ ጨምሯል	ተፈፃሚ እንዲደረግ የሚጠየቅ
አንድ ድርጅት ለደንበኞቹ የሚጠየቀወን የምርት ዓይነትና ብዛት በወቅቱ ሊያቀርብ ይችላል፡፡							
1	የሚፈለጉትን ምርቶች ዓይነት ወይም ስብጥር አቅርቦት እናደርጋለን፡፡						
2	የደንበኞች" ትዕዛዝ በወቅቱ እናቀርባለን፡፡						
3	የአቅርቦት አስራራችን አስተማማኝነƒ ያለው ነው፡፡						
4	የደንበኞችን ቅሬታ በአጭር ጊዜ ወስጥት እንፈታለን፡፡						
5	የደንበኞች ትዕዞዝ ሂደት በአጭር ጊዜ ¨<ስጥ ይጠናቀቃል፡፡						