ASSESSMENT OF SUPPLY CHAIN MANAGEMENT PRACTICES: THE CASE OF EAST AFRICA BOTTLING S.C.

By

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DECLARATION

I, the undersigned, declare that this research is my original work, prepared under the guidance of Matiwos Ensermu (PhD). All sources of materials used for this research have been duly acknowledged, the researcher further confirm that the research has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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CERTIFICATE

This thesis has been submitted to Addis Ababa University, School of Commerce for examination with my approval as university advisor.

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Abstract

This study was conducted with an objective of identifying relationship between supply chain management and organizational performance of East Africa Bottling Company. It conceptualized and developed five dimensions of supply chain management practices: strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing, and internal lean practices and tests the relationships between supply chain management practices and organizational performance. This study used both descriptive and explanatory research designs. Purposive, stratified and random sampling methods were used. Data were collected from primary sources through questionnaire and semi-structured interviews and analyzed through both descriptive and inferential methods. The descriptive analysis was conducted by using mean and standard deviation. On the other hand, inferential analysis was conducted by using Pearson correlation method and ordinary least square multiple regressions method. The result indicated that supply chain management has significant effect on organizational performance. Strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practices have significant positive relationship with organizational performance. Based on the findings it is recommended that management of the company has to improve supply chain management practices of the company.

Keyword: Supply chain management practices, organizational performance

CHAPTER ONE

INTRODUCTION

This chapter is about introduction of the study that includes background of the study, statement of the problem, objective of the study, significance of the study, and scope of the study.

1.1. Background of the study

In today's competitive business there is an increased focus on delivering value to the customer. The focus of attention of most of businesses is providing products and services that are more valuable compared to its competitors. Concurrent to the focus on customer value, the marketplace in which businesses operate today is widely recognized as being complex and turbulent (Christopher & Towill, 2002); Goldman, Nagel, & Preiss, 2005). The growth of supply chain aims to improve profitability, customer response and ability to deliver value to the customers and also to improve the interconnection and interdependence among firms. Due to globalization and communication technology improvements, this days customers demand is increasing; for instance demanding lower prices, faster delivery, higher quality products or services and increase the variety of items. According to Christopher & Towill, (2002), the end customer in the marketplace today determined by the success or failure of supply chains management practices. They stated that getting the right product, at the right price, at the right time to the customer is not only improved competitive success but also the key to survival.

Tan, Lyman & Wisner (2002) have defined supply chain management practices as a set of activities undertaken in an organization to promote effective management of its supply chain and identified six aspects of supply chain management practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity and JIT capability. According to Muhammad (2004) this variable refers to several activities or practices related to operational function of firms. It is used to measure the supply chain management adoption and its level of practices. Related practices are divided into six dimensions namely strategic supplier partnership, customer relations practices, information sharing, information quality, lean system and

postponement. A number of literatures show many different perspectives of supply chain management practices (Tan, Kannan, & Handfield, 2008; Li, Bhanu, Ragu-Nathan, & Subba, 2006). These different writers' perspectives suggested a multi dimensionality of supply chain management that covers set of activities and processes from upstream, firm's internal operations to downstream of the supply chain. Supply chain management involves a design of a seamless value adding processes across boundaries of an organization so that it will be able to meet real need of the customer (Fawcett, Ellram, & Ogden, 2007). The design and implementation impose a lot of complex problems and challenges in the process of execution of supply chain management. These major problems must be first well identified in order to proactively come up with problem solving mechanisms.

Most supply chain management related problems mainly occur from uncertainties and an inability to co-ordinate several activities and partners (Kevin, Prakash, & Singh, 2006). Fawcett, Ellram, & Ogden(2007) identified top ten barriers to supply chain management these are: inadequate information sharing, poor/conflicting measurements, inconsistent operating goals, organizational culture or structure, resistance to change- lack of trust, poor alliance management practices, lack of supply chain vision, lack of managerial commitment, constrained resources, no employee dedication/ empowerment.

Recently, many firms have shown great interest in supply chain management because they finally realized can no longer compete effectively in isolation of their suppliers or other entities in the supply chain since better management of the supply chain improve customer delivery and at the same time reduce overall costs. From his research findings Christopher (1998) found out that currently businesses no longer compete as solely autonomous entities, but rather as supply chain.

Therefore effective management of supply chains is seen as a must strategy for the survival of any company for purpose of staying competitive in the local market as well as in the global market. This involves managing the marketing link to the supply chain and linking supply chain strategies to the overall company strategy. This has far been made possible by the developments of latest communication technologies in information and communication technology (ICT) such as use of electronic data interchange (EDI) and the internet that enable frequent and quick exchange of huge amounts of information for

coordination purposes from end-consumer demand to the upstream stages of the supply chain (Lummus and Vokurka, 1999; Van de Vorst, 2004; Van de Vorst *et al*., 2007; Basnet*et al*., 2000).

It is vital to present and assess the East Africa Bottling Share Company (EABSC) supply chain performance starting from acquiring the required inputs from suppliers till the product reaches the final consumers. Hence, the purpose of this study is to find out the level of implementation of supply chain management practices and its relationship with organizational performance in the case of East Africa Bottling Share Company.

1.2. Statement of the problem

Sustainable competitiveness of goods and services in an increasingly crowded market places and enhancing organizational performance and overall supply chain performance have resulted in increased attention of managers, consultants and business owners towards proper supply chain management in business organizations (Tan et al, 2008).

Due to the number of rival companies expanding both locally and globally, companies not only have to re-establish themselves to produce higher-quality products and services, decrease waste and are able to respond to the market but also to handle their supply chain management efficiently. Organizations are facing different kinds of challenges in their effort of competing in today's dynamic global markets. To remain competitive, organizations must recognize the importance of supply chain practices that improve not only their own organizational performance, but also coordinate with their supply chain partners to improve their joint performance.

Yet, despite the significant advances in research and practices, many organizations continue to struggle to understand the complex issues associated with the coordinated planning and supply activities amongst the members of their supply networks (Lori *et al.*, 2011).

Much of the current empirical studies in SCM focused on their either upstream or downstream side of the supply chain or certain aspect of the SCM. Handfield (2002) identified role of relationship with supplier in improving supplier responsiveness and Paulrajet, al. (2006) analyzed the antecedence and consequences of buyer-supplier

relationship. Alvarado &Kotzab (2011), focus on the downstream linkages between manufacturers and retailers.

A few recent studies have considered both the upstream and downstream sides of the supply chain simultaneously and explore the relationships between supplier management practices, customer relations practices and operational performance. Tan (2008) explore the relationships between supplier management practices, customer relations practices and operational performance; Frohlich& Westbrook (2011) investigated the effects of supplier-customer integration on organizational performance; Gyaneshwar (2012) identified operational performance through SCM Practices and Moslem (2013) analyzed the impact of supply chain management practices on competitive advantage. However, the relationship of SCM with performances could not be regarded as conclusive (Cousins *et al.*, 2006).

The importance of adopting supply chain management in organizations further explained by Choy (2002) where in his research at multinational manufacturers, has concluded by saying supply chain management practices contribute 50% to the profitability and performance of any organization. Therefore, organizations have to understand the concepts and the practices of SCM for the intention of achieving competitiveness as well as for increasing profits (Qayyum*et al*., 2013).

Despite this fact, according to a preliminary study conducted by the researcher, EABSC has some gaps in the implementation of SCM practices which can be expressed in terms of customer complaints.

The researcher had hardly found any previous studies which were specifically conducted to examine the practical implementation of SCM practices as well as their impact on the organizational performance in EABSC from perspectives of strategic supplier partnership, customer relationships, level and quality of information sharing, and internal lean practices that incorporated the upstream and downstream players.

This study intended to answer some basic research questions related to SCM practices in EABSC by assessing the understanding and the extent of practical implementation SCM practices as well as their effect on the overall organizational performance.

Therefore, the researcher needed to study commonly advocated SCM practices used in previous researches Li *(*2005), Li., (2006), Lori, (2011) that include strategic supplier partnership, customer relationship, Level and quality of Information sharing and lean practices on organizational performance in EABSC.

1.3. Basic research questions

The study will primarily aim to answer the following research questions;

- To what extent EABSC implements the SCM practices?
- What is the relationship between strategic supplier partnership and organizational performance?
- What is the relationship between customer relationship management and organizational performance?
- What is the relationship between level information sharing and organizational performance?
- What is the relationship between quality of information sharing and organizational performance?
- What is the relationship between internal lean practice and organizational performance?

1.4. Objectives of study

1.4.1. General objective of the study

The general objective of the study is assessing the implementation of supply chain management practice and its effect on organizational performance of East Africa Bottling Share Company.

1.4.2. Specific objective

Specific objectives of this study will be:

- To assess the level of practical implementation of strategic supplier partnership and its effect on organizational performance;
- To analyse the level of practical implementation of customer relationship management and its effect on organizational performance;

- To examine the practical implementation of level of information sharing and its effect on organizational performance;
- To explain the practical implementation of quality of information sharing and its effect on organizational performance; and
- To evaluate the practical implementation of internal lean practice and its effect on organizational performance.

1.5. Significances of the study

The findings of the study would be significant in different ways: The results of the study could pin point where problems lie and initiate pertinent individuals to take some corrective action. Study will help the decision makers of the company to understand the current and anticipated factors that may affect its supply chain operation performance. Finally, the research is expected to benefit other researchers in highlighting further research on similar marketing problems.

1.6 Limitations of the study

This study will try to identify the relationship between supply chain management and organizational performance. To reach at better generalization, the researcher used main participants in the supply chain. Regarding the strategic suppliers, the researcher used only local suppliers because of inability to reach the foreign suppliers. To analyze the result the researcher mainly used primary data although the result is supported by secondary data. Geographically this study is limited to only Addis Ababa. Although the company has different plants out of Addis Ababa, this study failed to include practices in other part of the country.

1.7. Scope of the Study

The study addresses the supply chain management practice in the case of East Africa Bottling Share Company. Geographically, the study is delimited in East Africa Bottling Share Company found in Addis Ababa plant. This study used both secondary and primary data. Primary data was collected through questionnaire and interview. For the purpose of generalizability this study used respondents from employees & Managers of EABSC, strategic suppliers and distribution agents. The researcher used supply chain management

dimensions of strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practices. Based on the preliminary study postponement is not included in the study because of in applicability of the dimension.

1.8. Organization of the paper

This project paper is organized into five chapters: Chapter one contains the introduction part dealing with back ground of the study, the research problem, objectives of the study, scope and significance of the study and limitation of the study. The second chapter discusses the literature review about the subject matter. In chapter three the research methodologies were presented. Chapter four presents results and discussion of the study and finally, chapter five presents the summary of major findings, conclusion and forwarded suggestions.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This part of the study address relevant theoretical framework, empirical review and conceptual issues related to the topic of the study. It includes historical development, concepts and definition such as supply chain management, SCM practices, challenges and organizational performance by focusing on previous research in this area and present reviewed literature relevant to this study.

2.1. Theoretical Literature Review

2.1.1Resource-Based View Theory

According to Barney (1991) and Peteraf, (1993) the Resource-Based View (RBV) theory states that firms are heterogeneous and achieve competitive advantage due to rare, valuable, inimitable and not substitutable resources and capabilities. The original approach of the RBV focused on the internal resources owned by a firm was broadened to consider the relationship as a source of competitive advantage and improvement of performance. This gave rise to the Relational View (RV) theory.

2.1.2 Relational View Theory

According to Dyer & Singh (1998) andHolcomb & Hitt (2007) RV considers relationships as potential sources of superior performance. It identifies four different sources of relational rents: investments in relation specific assets, substantial knowledge exchange, complementary and rare resources, and lower transaction costs. All these sources are influenced by more effective governance mechanisms based on informal safeguards, such as trust and reputation. As in the RBV perspective, the relational resources and capabilities should be rare, valuable, and hard to imitate or to substitute in order to provide sustainable competitive advantage.

Generally, the relation and impact of SCM on organizational performance can be better understood if it is interpreted by using the relational view. Information sharing maps directly into accurate and timeliness knowledge exchange. Long-term relationships with suppliers and customers can help to reduce transaction costs through the development of

trust and reputation (Cooper, Lambert, & Janus, 2007); (Mentzer, 2001) and Li *et al.*, 2006). It also can contribute to developing knowledge exchange and assure investments in specific assets. Therefore, the researcher will conduct the study based on relational view theory.

2.1.2. Drivers of Supply Chain Development and main initiatives

In today's global economy, companies face increasing pressure to reduce costs while maintaining production and quality levels to deliver results to the customers.Handfield, (2002) summarized the basic drivers for SC development as: Ever-increasing customer demand in terms of product and service cost, quality, delivery, technology, and cycle time brought by global competition. Companies all over the world are pursuing supply chain as the latest methodology to reduce costs, increase customer satisfaction, better utilize assets, and build new revenues. In order to achieve these goals, companies must successfully overcome a numbers of challenges/ problems (Makweba& Xu, 2009). The consequence of this development is that companies are putting more and more efforts into developing new ways to increase competitiveness on the market in terms of more efficient and effective supply chain management.

Handfield (2002) summarizes divers into:

1. Ever-increasing customer demand in terms of product and services cost, quality, delivery and technology as well as cycle time brought about by global competition.
2. The emergence and greater acceptance of higher order cooperative inter- organizational relationships.
3. The information revolution.

The consequence of this development is that companies are putting more and more efforts into developing new way to increase competitiveness on the market in terms of more efficient and effective supply chain management.

Supply chain management has generally the following goals (Blanchard, 2007):

- Articulate exactly what a company's supply chain looks like and what it encompasses.
- Identify specific bottlenecks that are slowing down the movement of information, goods, and services.

- Put the right processes in place, right products delivered to the right place at the right time.
- Empower the right people so they can accomplish all of the above.

2.1.3. Concepts of Supply Chain Management

The traditional understanding of supply chain management is to leverage the supply chain to achieve the lowest initial purchase prices while assuring supply. Typical characteristics include: multiple partners; partner evaluations based on purchase price; cost-based information bases; arm's-length negotiations; formal short-term contracts; and centralized purchasing. Operating under these conditions encourages fierce competition among suppliers, often requiring playing one supplier against the others, and uses rewards or punishment based on performance. The fundamental assumption in this environment is that trading partners are interchangeable and that they will take advantage if they become too important. In addition, there is a belief that maximum competition, under the discipline of a free market, promotes a healthy and vigorous supply base which is predicated on the "survival of the fittest" (Robert, 2013).

The term SCM was first used in the 1980s and as such is a relatively new discipline within management theory with tools and concepts still being developed. According to Tan *et al.* (2002) in last few years the concept of SCM has received increasing attention from academicians, consultants, and business managers alike. Furthermore, Li *et al.* (2006) identify as many organizations have begun to recognize that SCM is the key to building sustainable competitive edge for their products and/or services in an increasingly crowded marketplace. As Burgess *et al.* (2006) and Harland et al. (2006) describe, the academic debate over the last 20 or more years contributed to develop the SCM understanding and its relevance to firm strategy.

However, the concept of SCM has been considered from different points of view in different bodies of literature such as purchasing and supply management, logistics and transportation, operations management, marketing, organizational theory, and management information systems (Croom*et al*., 2000). Various theories have offered various insights on specific

aspects or perspectives of SCM, such as industrial organization and associated transaction cost analysis (Ellram, 1990), resource-based theory and its extension relational view theory (Rugtusanatham, 2003), competitive strategy (Porter, 1985), and social–political perspective (Stem and Reve, 1980). In addition those academic debates over the last years also produced a fragmented literature, lacking commonly accepted frameworks and clear constructs, undermining knowledge advancement (Burgess *et al.*, 2006; and Harland *et al*. 2006).

Even though different things contribute for differences on the concepts of SCM, different researchers tried to describe the concepts of SCM as follows. Ellram and Cooper (1990) identify SCM as an integrating philosophy to manage the total flow of a distribution channel from supplier to the ultimate customer. Whereas Robinson and Kalakota (2000) view the supply chain quite simply as a "process umbrella" under which products are developed and delivered to customers. From a structural viewpoint, they argue, the supply chain refers to the complex network of relationships that organizations maintain with trading partners to source, manufacture and deliver products. As Li *et al.* (2006) described, SCM is a concept which its goal is to integrate both information and material flows seamlessly across the supply chain as an effective competitive weapon. Li *et al.* (2006) also stated that SCM applies to show the collaborative relationships of members of different echelons of the supply chain and refers to common and agreed practices performed jointly by two or more organizations. In addition, according to Arawati (2011), SCM includes managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customer.

Generally, the SCM concept used in the research assumes that firms set up alliances with members of the same chain (i.e., upward stream, supplier, and downward stream, customer) to improve its organizational performance revealed by superior business and organizational performance of all chain members.

2.1.4. Definitions of supply Chain Management

Tan, *et al.* (2002) defines SCM as the simultaneous integration of customer requirements, internal requirements and upstream supplier performance. Council of Logistics Management (CLM) defines SCM as the systemic, strategic coordination of the traditional business

functions and tactics across these businesses functions within a particular organization and across businesses within the supply chain for the purposes of improving the long-term performance of the individual organizations and the supply chain as a whole. SCM has been defined to explicitly recognize the strategic nature of coordination between trading partners and to explain the dual purpose of SCM: to improve the performance of an individual organization, and to improve the performance of the whole supply chain (Li *et al*., 2006).

Supply chain by Christopher (1998) defined as a network of various organizations involved both through upstream and downstream linkages in different kinds of activities and processes. Meanwhile, Adebayo (2012) summed up the many definitions of SCM by various authors and researchers as 'the task of integrating organizational units along a supply chain and coordinating materials, information and financial flows in order to fulfill (ultimate) customer demands with the aim of improving competitiveness of the supply chain as a whole'. Thus, in the end produce value whether in the form of products or services to the end user.

The key elements of supply chain and its management from these definitions are therefore, the upstream parties, the downstream parties and the integration of all the organizations involved, together with the internal function of an organization itself. The upstream parties, as being described by Handfield and Nichols (1999) consists of an organization's functions, processes and network of suppliers while the downstream function on the other hand concerns the distribution channels, processes and functions where the product passes through to the end customer. Where external downstream and upstream functions are concerned, the managers involved in each upstream and downstream supplier and functions are responsible in making sure that the deliveries of products and services are done as scheduled to their destinations. If there are cases where delays are inevitable, the managers are to ensure that the impact of the delays to the supply chain and the value it carries will be minimal.

In general, regarding the definition of SCM, the researcher conceptualize it as the strategic coordination of the traditional business functions (i.e., coordinating the firm/organization with the supplier and customer) and the tactics across these businesses functions within a particular organization and across businesses within the supply chain for the purposes of

improving short-term and long-term performance of the individual organizations and the supply chain as a whole.

2.1.5 Supply chain integration

The integration of supply chains has been described as attempting to elevate the linkages within each component of the chain, (to facilitate) better decision making and to get all the pieces of the chain to interact in a more efficient way and create supply chain visibilityand identify bottlenecks. Supply chain integration is a close alignment and coordination within a supply chain, often with the use of shared management information systems. The close interrelationship between the level of supply chain management practices and competition capability may have a more significant effect on performance improvement. The information revolution increased levels of global competition creating a more demanding customer and demand driven markets and the emergence of new types of inter-organizational relationships force companies to strengthen their supply chain integration (Kim, 2006).

Operating an integrated SC requires continuous information flow. However, in many companies, management has reached the conclusion that optimizing the product flows cannot be accomplished without implementing a process approach to the business. The Supply chain integration include customer integration, internal integration, material and service supplier integration, technology and planning integration, measurement integration and Relationship integration. Supply chain integration involves collaborative work between buyers and suppliers, joint product development, common systems and shared information. A number of researchers have also found that higher levels of integration generally lead to better performance (Gimenez& Ventura, 2005and Stock & Boyer, 2005).

Different authors describe the three principal elements of an integrated supply chain model as being information systems (management of information and financial flows), inventory management (management of product and material flows), and supply chain relationships (management of relationships between trading partners). The basis of integration can, therefore, be characterized by cooperation, collaboration, information

sharing, trust, partnerships, shared technology, and a fundamental shift away from managing individual functional processes, to managing integrated chains of processes. The extent of integration can begin with product design and incorporate all steps leading to the ultimate sale of the item. Some authors also include all activities throughout the useful life of the product including service, reverse logistics, and recycling (Ballou H. Ronald, 2000).

2.1.6. Supply Chain Management Practices

SCM practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. SCM practices are multidimensional which affect the performance of partners in the supply chain. These SCM practices were seen and discussed by different researchers from different perspectives. Donlon (1996) describes the latest evolution of SCM practices, which include supplier partnership, outsourcing, cycle time compression, continuous process flow, and information technology sharing. SCM practices are multidimensional which affect the performance of partners in the supply chain. Tan *et al*. (1998) use purchasing, quality, and customer relations to represent SCM practices, in their empirical study. Alvarado and Kotzab (2001) include in their list of SCM practices concentration on core competencies, use of inter-organizational systems such as elimination of excess inventory levels by postponing customization toward the end of the supply chain. Tan *et al*. (2002) identify six aspects of SCM practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity, and just in time capability. According to Muhammad (2004) this variable refers to several activities or practices related to organizational function of firms. It is used to measure the SCM adoption and its level practices. Related practices are divided into six dimensions namely strategic supplier partnership, customer relations practices, information sharing, information quality, lean system and postponement.

Chen and Paulraj (2004) presented SCM framework/practice that encompassed three dimensions: supply network structure, characterized by strong linkages between members, low levels of vertical integration, non-power based relationships; long-term relationships, managed with effective communication, cross functional teams, and early supplier

involvement in crucial projects, planning processes; and logistics integration. Min and Mentzer (2004) identify the practices of SCM as including agreed vision and goals, information sharing, risk and award sharing, cooperation, process integration, long-term relationship and agreed supply chain leadership.

Arawati (2011) identify SCM dimensions as its encompasses: Strategic Supplier Partnership, developing trust and collaboration among supply chain partners as well as customers; Lean Production, is associated with continuous pursuit of improving the processes, a philosophy of eliminating all non-value adding activities and reducing waste within an organization; Postponement Concept, Postponement involves the process of delaying final product configuration until the actual order requirement is specified by the customer. Keeping products in semi-finished would allow more flexibility and customization in completing the final products and also enables a company to respond more quickly to market demand and New Technology and Innovation, New technology and innovation refers to the application of the latest scientific or engineering discoveries to the design of operations and production processes in SCM .Thus the literature reveals SCM practices from a variety of different perspectives with a common goal of ultimately improving organizational performance.

In reviewing and consolidating the literature, five dimensions, including strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice, are selected for measuring SCM practice. The five constructs cover upstream (strategic supplier partnership) and downstream (customer relationship) sides of a supply chain, information flow across a supply chain (level of information sharing and quality of information sharing), and internal lean practice (waste minimization). It should be pointed out that even though the above dimensions capture the major aspects of SCM practice, they cannot be considered complete. Other factors, such as geographical proximity, structural aspect (Tan *et al.,* 2002), cross-functional teams, logistics integration (Chen and Pauraj, 2004), agreed vision and goals, and agreed supply chain leadership (Min and Mentzer, 2004) are also identified in the literature. Though these factors are of great interest, they are not included due to the concerns regarding the length of

the survey and the parsimony of measurement instruments. The study, therefore, proposes SCM practices as a multi-dimensional concept.

2.1.6.1. Strategic Supplier Partnership

It is defined as the long term relationship between the organization and its suppliers. It is designed to leverage the strategic and organizational capabilities of individual participating organizations to help them achieve significant ongoing benefits (Stuart, 1997; Balsmeier and Voisin, 1996; Monczka. 1998; Sheridan, 1998, Noble, 1997). A Strategic partnership emphasizes direct relationship and long-term and encourages mutual planning and efforts to resolve problem. Supplier and organizations can work together more closely and eliminate useless time and effort. Effective partnerships with suppliers can be critical factor to guide supply chain management (Li *et.al,* 2006). Sandikiglu and zehir, (2010) also stated that in strategic supplier partnership, suppliers play more direct role in an organization's quality performance.

Through close bonded relationships, supply chain partners are more willing to share risks and reward and be able to maintain the relationship over a longer period of time (Lascelles and Dale, 1989; Landros and Moncza, 1989). It is designed to leverage the strategic and organizational capabilities of individual participating organizations to help them achieve significant ongoing benefits (Noble, 1997 and Sheridan, 1998). 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 core raw materials, 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 *et al.,* 2002). Strategically aligned organizations can work closely together and eliminate wasteful time and effort (Balsmeier and Voisin, 1996). An effective supplier partnership can be a critical component of a leading edge supply chain (Noble, 1997). The main objective of strategic partnerships with suppliers is increasing the

functional capability desired supplier (Rosenzweig, 2003). Therefore, strategically managed long-term relationship with supplier has positive impact on a firm's supplier performance (Cooper and Ellram, 1993).

2.1.6.2. 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 satisfaction (Claycomb et al. 1999, and Tan *et al.* 1998).

Noble (1997) and Tan et al. (1998) consider customer relationship management as an important component of SCM practices. As pointed out by Day (2000), committed relationships are the most sustainable advantage because of their essential barriers to competition. 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).

Customer relationship management is an important component of supply chain management practices (Noble, 1997). The growth of mass customization and personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival (Wines, 1996). 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).

As discussed in Niknia (2007), the main customer relationship goals are identifying new business opportunities, reduce missed opportunities, reducing customer defection, creating customer loyalty, improve customer service, improve organization appearance, reduce costs, and increase revenue. For this research purpose, customer relationship is conceptualized from the literature review and practicability in Ethiopia as the way of building long-term relation with customers through creating customer loyalty, reducing defect products,

improving customer services, reducing price/cost, managing customer complaints and working on improving customer satisfaction.

2.1.6.3. Level of Information sharing

Information sharing has two aspects: quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies (Moberg . 2002; Monckza . 1998). Level (quantity aspect) of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner (Mockza et al1998).

Information sharing refers to ability of enterprises to share knowledge and information with supply chain partners with effective and efficient manner. Information sharing in interactive system of supply chain includes information between direct partners and all network of supply chain. For effective and efficient use by partners is needed sharing information. The level of information sharing is closely linked with accountability and efficiency (Rahmanseresht and Afsar, 2008).

Furthermore, Alireza et al. (2011) stated integration and coordination across supply chain can be well provided through information sharing. Lalonde (1998) considers sharing of information as one of five building blocks that characterize a solid supply chain relationship. According to Stein and Sweat (1998), supply chain partners who exchange information regularly are able to work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker.

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). Failures can occur in case of information delays, shortage or distortion across the supply chain (Power, 2005). In this study supply chain information sharing is associated with the amount of information shared among supply chain partners in downstream and upstream side of the supply chain and also the information intensity. In this study, information sharing in supply chain is conceptualized as the extent of sharing business knowledge formally or informally with supply chain partners. Also it is associated with the amount of information shared

among supply chain partners in downstream and upstream side of the supply chain and also the information intensity.

2.1.6.4. Quality of Information Sharing

Quality of information sharing includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged (Moberg, 2002; Monckza. 2002). While information sharing is important, the significance of its impact on SCM depends on what information is shared, when and how it is shared, and with whom (Chizzo, 1998; Holmberg, 2000).It appears that there is a built in reluctance within organizations to give away more than minimal information (Berry et al. 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 Muller, 2003).

Based on Li *et al.* (2005), organization needs to review their information as a strategic asset and ensure that the information flows with minimum delay and distortion. In addition, Li *et al.* (2005) also notes that information shared must be accurate so that the best SCM solution will be obtain. 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).

While information sharing is important, the significance of its impact on SCM depends on information by all functional elements within the supply chain as a key competitive and distinguishing factor. The empirical findings of Child house and Towill (2003) reveal that simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain. Providing and transforms raw material to a product or service and delivers it to the customer is activities that is done in the supply chain. Overall planning of supply and demand, raw material procurement, production planning, inventory control, warehousing, distribution of products and management of information is activities in the supply chain.

Hence manufacturing organization in the supply chain should be able to consider inventory demand and according to the number products in stock identified a fraction number the

product and do production planning. The work of Tan *et al*. (1998), in which most of the indicators of information quality is adopted, does not incorporate completeness as the indicators of information quality which is the key for quality of information in reality of the case organization.

Therefore, for the purpose of the study, information quality is conceptualized as accuracy, timeliness, adequacy, information exchanged reliability and completeness.

2.1.6.5. Internal Lean Practices

Another supply chain management practices is the use of internal lean practices. Internal lean practices refer to consume less system resources uses with the same speed mass production and offers greater variety to customers. In other way James and Jones (2003) internal lean practices as Lean production associated with continuous pursuit of improving the processes, a philosophy of eliminating all non-value adding activities and reducing waste within an organization.

One of the fundamental ideas in internal lean practices is removed surplus (Hassanzadeh and Jafarian, 2010). The most famous of internal lean practices can be mentioned timely and lean produce. 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, 1993).Internal lean practices understanding for the study is waste elimination regarding to setup time, continuous improvement and just in time.

2.1.7. Performance Impact of Supply Chain Management Practice

Previous studies suggest that effective SCM practices have a direct impact on the overall financial and marketing performance of an organization (Shin. 2000; Prasad and Tata 2000). Indeed, SCM practices is expected to increase an organization's market share, return on investment and improve overall competitive positions. For instance, Tan et al. (1998) asserted that customer relations and purchasing practices impact the effectiveness of SCM strategy and lead to financial and market performance. Froehlich and Westbrook (2001) on the other hand suggested that companies with broader supply chain integrations with

suppliers and customers showed the largest performance improvement in business achievements.

2.1.8. Organizational Performance

Organizational performance refers to how well an organization meets its financial goals and market criteria (Li *et al*. 2006; Koh, Demirbag, Bayraktar, Tatoglu&Zaim, 2007). In general, organizational performance can be measured from both financial and non-financial criteria (Demirbag, Koh, Tatoglu&Zaim, 2006). The measures of financial goals include profit, return on investment, sales growth, business performance, and organization effectiveness (Venkatraman &Ramanujam, 1986). On the other hand, the measures of non-financial criteria are innovation performance and market share (Demirbag et al. 2006), quality improvement, innovativeness and resource planning (York and Miree, 2004). Organizational performance is also being studied from the perspective of SCM organizational performance which includes increased sales, organization-wide coordination and supply chain integration (Koh., 2007; Petrovic-Lazarevic, Sohal & Baihaiqi, 2007). Organizational and organizational performance dimensions may also include innovation and R&D performance (Prajogo&Sohal, 2003; Singh & Smith, 2004).

Many empirical studies have examined the relationship between supply chain management (SCM) and organizational performance (Lee, Lee &Schniederjans, 2011; Zacharia, Nix &Lusch, 2009; Chong, Chan, Ooi& Sim, 2010; Wong & Wong, 2011). The relevant items adapted to measure organizational performance includes higher sales, higher accuracy in costing, and improved coordination between departments, improved coordination with suppliers, and improved coordination with customers (Koh et al., 2007). Some other measures that are related to organizational financial performance may include return on investment, market share, and profit margin on sales, growth of return on investment, growth of sales, and growth of market share to measure organizational performance (Wong & Wong, 2011). Petrovic Lazarevic et al. (2007) use measures such as lead time, inventory turnover, product return, sales level, cost reduction and meeting customers' requirements to measure the organizational performance.

In line with the above literature, the same items will be adopted to measure organizational performance in this study. Market share, return on investment, the growth of market share,

the growth of sales, growth in return on investment, and profit margin on sales adapted as organizational performance measures in this study.

2.1. 9. Challenges of Supply Chain Management

Most SCM related-problems mainly occur from uncertainties and an inability to co-ordinate several activities and partners (Turban, 2000). Fawcett, (2001) identified top ten barriers to supply chain management these are: inadequate information sharing, poor/conflicting measurements, inconsistent operating goals, in organizational culture or structure, resistance to change- lack of trust, poor alliance management practices, lack of supply chain vision (understanding), lack of managerial commitment, constrained resources, no employee dedication/ empowerment.

Currently, companies are striving for lower cost so that they will be competitive in the market while they have to maintain their service level. The key factor to offering the features that the customers want at the level of service they are willing to pay for is to minimize the lead time. One approach suggested to solve this problem is synchronized material movement where all parts of the supply chain have access to the information at the same time (Waters, 2003).

2.1.9.1. Uncertainty

SCM basically comprises of suppliers, manufacturers and customers. Manufacturers usually enter into a very complex relationship with suppliers in a supply chain that involves numerous sources of uncertainty. Generally Davis, (1993) identified three major sources of uncertainty: manufacturing, demand and supply uncertainty:

1. Manufacturing uncertainty: Machine breakdowns that lead to the postponement of production, poor process design that causes a bottleneck in production or produces product of poor quality, are the manufacturing variables accounting for the late delivery and reduction in customer satisfaction.

2. Demand uncertainty: Irregular orders from inconsistent customers may easily mislead manufacturers to make wrong forecasts, which cause excess inventory or insufficient supply.

3. Supply uncertainty: Normally, suppliers fail to commit to promised dates, possibly due to poor material quality, machine breakdowns or deficiency in natural resources and so forth.

Wilding, (1998) states one key issue known to impact on the effectiveness of a supply chain is that of uncertainty. The major source of supply chain uncertainty is the demand forecast, which may be influenced by several factors such as competition, prices, technological development, customers' general confidence, and more.
Other uncertainties exist in delivery times which depend on many factors ranging from machine failures to road conditions and traffic jams that may interfere with shipments.

Levi, (2003) states some factors interfere to uncertainty, they emphasized the challenge of matching supply and demand, the impact of inventory and forecast, and finally factors except those embrace demand as a source of uncertainty; including delivery lead times, manufacturing yields, transportation times, component availability, and so on can also have significant supply chain impact.

2.1.9.2. Bullwhip Effect

Another barrier that different companies have been facing in their supply chain is bullwhip effect. The Bullwhip Effect is an observed phenomenon in forecast-driven distribution channels. The concept has its roots in Forrester's Industrial Dynamics (1961) and thus it is also known as the Forrester Effect. This phenomenon has been observed across most industries resulting in increased cost and poorer service.

Hau (2004), concluded as, one of the most common problem that hamper the smooth functioning of SCM is the so-called bullwhip effect which is resulted from inaccurate or distorted information flows. The bullwhip effect has been viewed as one of the forces that paralyze supply chains.
The major Consequences of bullwhip effects are:
- Inefficient production or excessive inventory.
- Necessity to have capacity far exceeding average demand.
- High transportation costs.
- Poor customer service due to stock outs.

2.2. Empirical Research Studies

According Shah *et al*. (2002), much of the current theoretical/ empirical research in SCM focuses on only the upstream or downstream side of the supply chain, or certain aspects/perspectives of SCM. However, there are certain previous researchers have devoted deal of attention to the relationship of supply chain management practice (s) and certain aspects of overall organizational performance from different perspective/dimensions or overall supply chain. Some of these researches finding are discussed as follows:

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 was indicates as there is relationships between SCM practices and competitive advantage.

Supply Chain Management, Product Quality and Business Performance in case of Malaysian manufacturing companies conducted by Arawati (2011) and the study specifically investigates relationships between SCM, product quality and business performance and these associations are analyzed and the result demonstrates that SCM dimensions namely ‘lean production’, ‘new- technology and innovation’, ‘strategic supplier partnership’ and ‘postponement concept’ appear to be of primary importance and exhibit significant effects on product quality and business performance.

Alireza, Anahita, Mohammad, Seyed & Pejman (2011)conducted study on Malaysia Electronic Industry to present a model for supply chain performance by employing supply chain design, supply chain information sharing, and flexibility and delivery components as independent variables influencing supply chain performance. The results from this study depicted that supply chain design influences supply chain performance through delivery and information sharing. Furthermore, information sharing and delivery have a direct influence on supply chain performance. The findings also showed that flexibility influences supply chain performance through delivery. Information sharing

affects supply chain performance directly and has also an indirect impact on supply chain performance through flexibility. This study elaborates the significant effect of the design of the supply chain on its performance while considering the impact of information sharing.

Lenny, Mehmet, Erkan, Ekrem, & Selim (2007) conducted study on the impact of supply chain management practices on performance of SMEs in Turkey. Based on exploratory factor analysis (EFA), researchers 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 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 organizational performance.

Priscila & Luiz (2011) examined the influence of supply Chain Management measurement on Organizational Performance by using information sharing, long term relations, cooperation and process integration as SCM measurements influencing organizational performance in case of Brazilian companies. The empirical results of this study provided evidence of a positive impact of SCM measurements on organizational performance.

Adebayo & Toyin (2012) identified impact of SCM Practices on SCM Performance in Nigeria Today. The SCM practices considered in the study were strategic supplier partnership, customer relations practices, information sharing, information quality and postponement. The study thus identified that SCM practices has significant and positive impacts on SCM performance.

Flynn, Huo, & Zhao (2010) assessed the impact of supply chain integration on both organizational and business performance by using supplier integration, customer integration, and internal integration as dimensions of supply chain integration. They found that internal integration directly relates to both business and organizational performance and that customer integration directly relate to organizational performance.

The integration of supplier and customer were related to organizational performance. Internal and external integration influence each other along with performance.

2.3. Identified Literature Gaps

Generally, from above literature reviews it can be easily understandable that the work on supply chain management practices and its influences on different perspectives of the organization and overall supply chain partners are increasing. But there is a lack of previous studies concerning SCM practices implementation and how it impacts the organisational performance in Ethiopian food processing and beverage firms. The researcher had hardly found such studies in the literature.

Therefore, this study had bridged the gap left behind by some previous studies; it included quantitative and qualitative data from all players of the supply chain. Furthermore the study included the aspect of how SCM practices impact overall organisational performance in the company.

2.4. Conceptual Framework of the study

Based on overall review of related literature, and particularly the work of Li *et al*. (2006), Mutuerandu *et al., (2014),* Lenny *et al.* (2007), Priscila and Luiz (2011) and Moslem*et al*. (2013), the conceptual frame work of this study is pillared in three essential parts: SCM practices, challenges of SCM, and Organizational performance. SCM practice is conceptualized as a five dimensional construct. As the diagrammatical expression of the conceptual framework indicates commonly known SCM practices namely: strategic supplier partnership, customer relationship, level of information sharing, Quality of information and internal lean practices. SCM practices have an impact on organizational performance. The sixth supply chain management practice which is considered in most studies is deliberately excluded from the study due to its non-applicability with the nature of the production of EABSC.

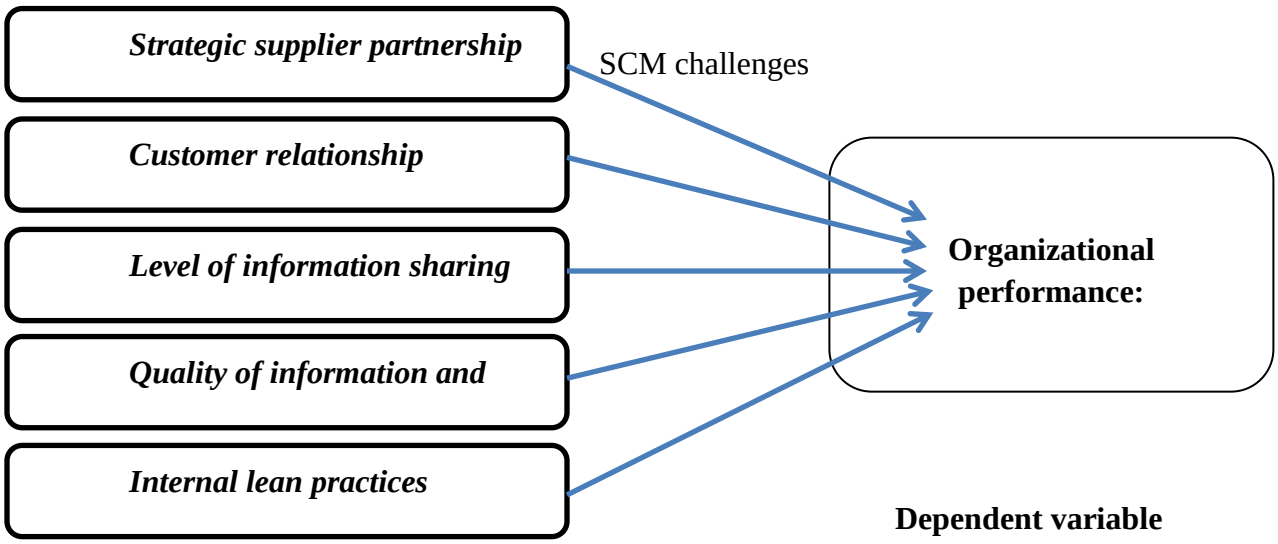

Figure 1: Conceptual frame work for the study

Source: adapted from Mutuerandu (2014) and Li (2006)

CHAPTER THREE

METHODOLOGY OF THE STUDY

This part describes the methodologies that were used in this study: the choice of particular research designs, sample and sampling techniques, sources of data and data collection tools, and data analysis method along with an appropriate justification associated with each approach.

3.1. Research Design

This study has implemented Cross-sectional field survey method to assess the relationship between supply chain management and organizational performance of the company. This study will use both descriptive and explanatory designs aforementioned objectives. Kothari (2004) explains descriptive research as a situation or condition at hand, it is one in which information is collected without changing operating environment. This design helps to identify the practices of supply chain management in the company. On the other hand, the researcher will use explanatory design to analyze the effect of supply chain management on organizational performance. Therefore, this study has used mixed approach.

This study has investigated the supply chain management practice in the case of East Africa Bottling Share Company. Accordingly, the approach used to conduct this research was inferential research design. The survey research design method was used. It involves using a self-design questionnaire and interview in collecting data from respondents.

3.2 Research Approach

Research approach is selected by researcher based on the research purpose, the nature of the research, the problem area, and research questions (Alhamdani et al. 2006). The purpose of the research is to find out the relationship and effect of independent variables, SCM practices on organizational performance by collecting data from all the players of the SC. Hence, in order to achieve the objective of this study and answer the research questions, the researcher has adopt both quantitative and qualitative approaches to examine the case on hand. The researcher has used both quantitative and qualitative data from primary sources that was collected through questionnaire and semi-structured interview respectively. Therefore, this study used mixed research approach.

3.3 Population and Sample

3.3.1 Population

According to Hair et al (2010), target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. To collect data about the practices of supply chain management, employees of the company that have direct relationship with supply chain management and which have diploma and above academic level, local strategic suppliers and customers that are distributors of the products were targeted. Although the company has foreign suppliers, only local suppliers are targeted due to inaccessibility of foreign suppliers. Although the distributors are not the end users of the products, the company mainly manages the distributors. Targeted population of the study is presented in the table 1 below.

Table 1: Targeted Population

No.	**Partners**	**Category**	**Targeted Population**
1	EABSC	Logistics Department	73
		Planning & Procurement department	43
		Manufacturing Department	34
2	Suppliers	CGS business group	1
		COBA impact PLC	1
		ECOPLANT	1
3	Distributors	Customers	40
Total			**193**

Source: EABSC (2018), CGS (2018), COBA (2018) and ECOPLANT (2018)

Supply chain management of EABSC is comprised of three departments. These departments are manufacturing, planning and procurement and logistics. Logistics department has 73 target employees, planning and procurement department has 43 target employees, manufacturing department has 34 target employees. Targeted population in

the company is 150. There are three local strategic raw materials suppliers for the company namely CGS business group (crown supplier), COBA impact PLC (Closure and preform supplier) and ECOPLANT (stretch rap supplier). Since the company directly communicates with the sales managers of the strategic suppliers, these managers are targeted for the study. Therefore, targeted population from the strategic suppliers is 3 managers. On the other hand, there are 40 distributors in Addis Ababa. Therefore, total targeted population for the study is 193.

3.3.2 Sampling Techniques

The study used stratified, purposive and simple random sampling technique. This was because stratified sampling technique will be appropriate to select respondents from all components of the SC department of EABSC. On the other hand, purposive sampling method is used when elements are selected due to a specific purpose, usually because of their unique position (Schutt, 2011). According to this study only sales managers of local suppliers who believed have best knowledge of SCM practices implementation were selected. Finally, simple random sampling was used to select respondents from customers located in Addis Ababa; hence each individual customer has an equal chance of being included in the sample.

The target population for the study is classified into three strata of organizations involving in supply chain of EABSC. Then departments of EABSC that are classifications of SCM in the company are stratified in to logistics, planning and procurement, and manufacturing departments. Then the samples were selected from each stratum according to their proportion to the total population. Since the information required for the study needs different people who have knowledge about different SCM practices/dimensions, and organizational performance of the firm, stratified sampling technique was used to have the right proportion of people from every concerned department in EABSC. In addition, this study used strategic suppliers and distributors to support the responses from the company. The concerned sales managers from each strategic supplier were purposively selected. Randomly respondents were selected from distributors and then the managers were used as respondents.

3.3.3 Sample Size

Malhortra & Peterson (2006) and Zikmund (2003) stated that, the larger the sampling size of a research, the more accurate the data generated. The sample size is determined based on table 2 presented below for method developed by Carvalho (1984), as cited in Malhorta& Naresh (2007).

Table 2: Sample Size Determinations

Population size	Sample size		
	Low	Medium	High
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
3201-10,000	80	200	315
10,001-35,000	125	315	500
35,001-150,000	200	500	800

(Source: Malhorta& Naresh, 2007)

By using the table 1 and table 2 above determination of the sample for the study is presented in the table 3 below.

Table 3: Sample Size Determination

No.	**Partners**	**Category**	**Sample**
1	EABSC	Logistics Department	18
		Planning & Procurement department	11
		Manufacturing Department	8
2	Strategic Suppliers	CGS business group	1
		COBA impact PLC	1
		ECOPLANT	1
3	Distributors	Customers	10
Total			**50**

Source: Own computation, 2018

Since the total targeted population of the study is 193, the researcher sampled 50 respondents from EABSC, strategic suppliers and distributors. This study has stratified the respondents from these entities and then stratified the respondents from EABSC according to their department in supply chain. The researcher proportionally computed the sample for the participants in the SCM and then for the departments in the EABSC. 37 respondents are sampled from EABSC. Then these samples are stratified in to departments. Accordingly, 18 samples from logistics department, 11 samples from planning and procurement department, and 9 samples from manufacturing department were selected. 1 respondent is sampled from each strategic supplier with total of 3 respondents. 10 distributors were computed out of 40 distributors.

3.4 Data Collection Tools

The study is analyzed based on the data collected from primary sources through questionnaire and interview and supported by secondary data. The questionnaire was prepared using 5-point Likert-Scale approach (i.e. Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree). According to Creswell (2007) open-ended questionnaires are appropriate when the objective is to discover opinions and attitudes. Accordingly, respondents were asked to indicate their level of agreement on 5 point Likert scale with the following ratings; Strongly Disagree (1), Disagree (2), neutral (3), Agree (4) and Strongly Agree (5) for ordinal scale measurement and to generate data suitable for quantitative analysis. In addition to quantitative data collection, qualitative approach through semi structured interview with managers of each SCM departments and strategic supplier was used. The questionnaire was used as a quantitative data collection instrument that helps to cover larger target groups than the interview, given the quality and chance of no response.

As it is indicated in the table 4 below, total of 44 questionnaires was distributed to 34 employees and sub-department managers in EABSC and 10 distribution agents. Managers of logistic, manufacturing, and planning and procurement departments in EABSC and sales managers from each strategic supplier were selected for interview with total of 6 interviewees.

Table 4: Tools of Data collection

No.	Partners	Category	Interview		Questionnaire		Total
			No	Interview	No	Respondent	
1	EABSC	Logistics	1	Department Manager	17	Sub-department managers & officers	18
		Planning & Procurement	1	Department Manager	10	Sub-department managers & officers	11
		Manufacturing	1	Department Manager	7	Sub-department managers & officers	8
		Total	**3**		**34**		**37**
2	Strategic Suppliers	CGS	1	Sales Manager	-		1
		COBA	1	Sales Manager	-		1
		ECOPLANT	1	Sales Manager	-		1
		Total	3				3
3	Customers	Distributors	-		10	Agents	10
		Total			**10**		**10**
Total			**6**		**44**		**50**

Source: Own computation, 2017

3.5. Data Analysis Method

This study was conducted by analyzing the data using both qualitative and quantitative methods. Questionnaires were analyzed by using quantitative methods and interviews were analyzed by narrating qualitatively.

Data collected through questionnaire from EABSC is analyzed by using both descriptive and inferential statistical techniques. On the other hand data collected through questionnaire from distributors is analyzed by using descriptive analysis. These analyses are by using Statistical Package for Social Sciences (SPSS) version 20. The statistical tools were aligned with the objectives of the study. Descriptive analyses were presented by using frequencies, percentages, mean and standard deviation. Inferential analyses were conducted by using correlation and multivariate regression to show the relationship and the significance between dependent and independent variables. The correlation analysis was computed by using Pearson correlation method and regression analysis was estimated by using the multivariate linear regression method. Thus, relationship between of SCM and organizational performance was analyzed after testing its significance statistically.

The result of the regression analysis was presented with following linear multivariate equation;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots + \beta_n X_n + \varepsilon_i$$

Where

Y is dependent variable which is explained by the independent variables X

β_0 is constant

$\beta_1 \ldots \beta_n$ are the coefficient of the independent variables X_1 to X_n.

ε_{iis} an error term

Specifically, model for this study is expressed as follows by using study variables;

$$OP = \beta_0 + \beta_1 SSP + \beta_2 CRM + \beta_3 LIS + \beta_4 QIS + \beta_4 ILP + \varepsilon_i$$

Where,

OP=Organizational Performance

SSP= Strategic Supplier Partnership

CRM= Customer Relationship Management

LIS= Level of Information Sharing

QIS=Quality of Information Sharing

ILP= Internal Lean practice

Linear Regression Assumptions;

First, multiple linear regression requires the relationship between the independent and dependent variables to be linear. Second, the linear regression analysis requires that the errors between observed and predicted values (i.e., the residuals of the regression) should be normally distributed. These assumptions are checked by a histogram. Third, multiple linear regression assumes that there is no multicollinearity in the data. Multicollinearity occurs when the independent variables are too highly correlated with each other.

3.6 Ethical Considerations

During the distribution of the questionnaire, respondents were informed about the purpose and the benefit of the study along with their full right to accept or completely reject the participation. The respondents` were told their response would be kept confidential and their identity shall not be exposed. Every person involved in the study was entitled to the right of privacy and dignity of treatment, and no personal harm was caused to subjects in the research. Information obtained is held in strict confidentiality by the researcher. All assistance, collaboration of others and sources from which information was drawn is acknowledged.

3.7 Validity test and Reliability test

Validity test

Bryman & Bell (2007) defined validity as how much any measuring instrument measures what it is intended to measure. The important issue of measurement validity relates to whether measures of concepts really measure the concept or not. There are several ways of establishing validity such as content validity; concurrent; predictive validity; construct validity; and convergent validity. This study addressed content validity through the review of literature and adapting instruments used in previous studies.

Reliability test

Nunnaly (1978) stated that reliability is the consistency of a test, survey, observation, or another measuring device. The level of reliability of the instrument indicates the consistency of the variables. Cronbach‘s alpha is an index of reliability associated with

the variation accounted for the true score of the underlying construct and it can only be measured for variables which have more than one measurement question. 0.5 is a sufficient value, while 0.7 is a more reasonable value. The reliability of the questionnaire is analyzed by using Cronbach's alpha statistics.

As it is indicated in the table 5 below, all Cronbach's alpha indexes are above 0.7 suggesting that the variables are consistent to measure relationship between supply chain management and organizational performance.

Table 5Reliability Test

Variable	Cronbach's Alpha	N of Items
Strategic supplier partnership	.744	6
Customer relationship	.895	5
Level of information sharing	.930	5
Level of information quality	.933	5
Internal lean practice	.837	3
Organizational performance	.703	5

Source: own computation, 2018

3.8 Multicollinearity Test

Multicollinearity problem arises when there is a linear relationship among explanatory variables that the result could not obtain estimates of all parameters. This causes large variance and standard error with a very low t- ratio and wide confidence interval. Different methods are often suggested to detect the existence of multicollinearity problem. Variance inflation factors (VIF) technique used for continuous explanatory variable and contingency coefficient (CC) method is used for dummy variables. For continuous variables, if the value of VIF is 10 and above, the variables are said to be collinear. Similarly, if the value of CC greater than 0.75, the variables said to be collinear (Gujarati, 2004).

To detect the problem of multicollinearity, the VIF technique is used prior to executing the regression analysis. As presented in the table 6, the values of VIF are well below 10 and suggesting that there is no problem of multicollinearity among the study independent variables.

Table 6Multicollinearity test

Variables	Collinearity Statistics	
	Tolerance	VIF
SSP	.832	1.202
CRM	.778	1.286
LIS	.903	1.107
LIQ	.611	1.637
ILP	.629	1.591

Source: own computation, 2018

3.9 Linearity Test

This test is conducted to identify linear relationship between dependent variable and independent variables with null hypothesis of linear relationship.

Table 7: Linearity Test

	Sum of Squares	Df	Mean Square	F	Sig.
Strategic supplier partnership	1.072	11	.134	1.338	.234
Customer relationship	1.405	10	.117	1.401	.179
Level of information sharing	1.890	12	.145	1.462	.147
Quality of information sharing	1.347	7	.135	1.292	.246
Internal lean practice	1.562	11	.390	1.438	.102

Source: own computation, 2018

The result of the linearity test is presented in the table 7 above. All variables are insignificant at both significance level of 0.05 and 0.01. Since the linearity between study variables is insignificant, the researcher cannot reject null hypothesis instead accepts null hypothesis of dependent and independent variables are linearly related. This implies that SCM and organizational performance have linear relationship.

3.10 Residual Normality Test

One of the classical linear regression models assumptions is the error term should be normally distributed or expected value of the error term should be normally distributed or expected value of the errors terms should be zero (E(UT))=0). Histogram is used to identify normal distribution of residuals and the result indicates that standard residuals are a little bit far away from the curve, many of the residuals are fairly close more to the curve and the histogram is bell shaped. This implies that the majority of scores lie around the center of the distribution (so the largest bars on the histogram are all around the central value. Therefore, this indicates that the residuals are normally distributed.

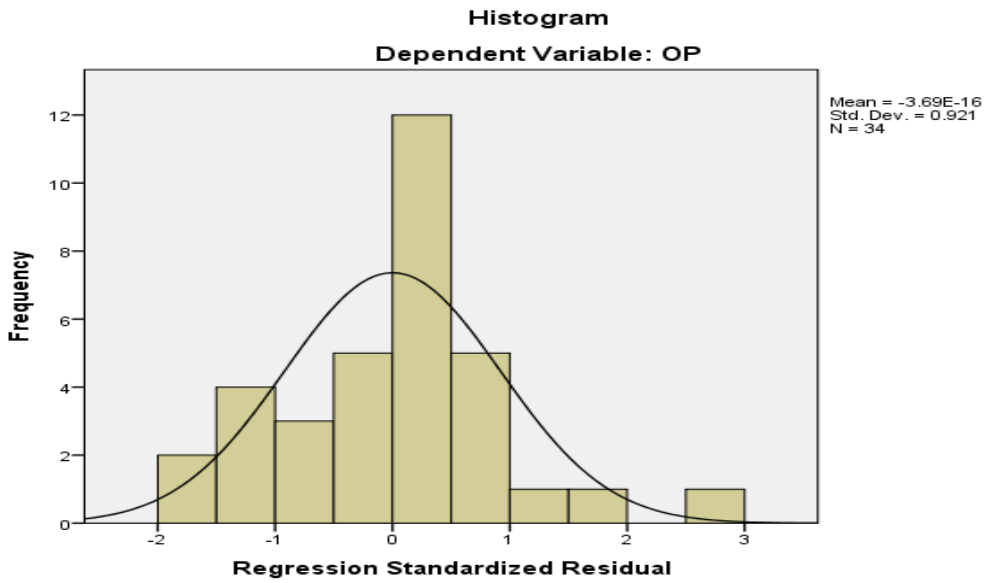

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Figure 2: Residual Normality Test Source:

Own computation, 2018.

CHAPTER FOUR

RESULT, INTERPRETATION AND DISCUSSION

This chapter presents the result of data analysis and discusses about results of SCM practices and their relationship with organizational performance EABSC. To collect relevant data 34 questionnaires were distributed to workers in SCM departments of the company and 10 distributors and all questionnaires were returned that are completely filled. Descriptive analysis is presented for the questionnaires collected from the company and distributors and inferential analyses conducted only for questionnaires collected from the respondents in the company. The researcher interviewed managers of logistics, planning and procurement, and manufacturing departments from EABSC and sales managers of strategic suppliers. The results the study are supported with relevant literatures.

4.1 Demographic information of respondents

The demographic information for respondents in EABSC is presented in the table 8 below by using frequencies and percentages.

Table 8: Demographic Information of Respondents

Factor	Category	Frequency	Percent
Gender	Male	22	64.7
	Female	12	35.3
Age	Less than 30	4	11.8
	31-40	12	35.3
	41–50	12	35.3
	Above 50	6	17.6
Department	Logistics	17	47.1
	Manufacturing	10	29.4
	Planning and Procurement	7	23.5
Experience	Less than 2	1	2.9
	2-5	10	29.4
	5-10	17	50.0
	Above 10	6	17.6
Education	Bachelor Degree	20	58.8
	Masters	14	41.2

Source: Survey, 2018

64.7% of the respondents are males and 35.3% of the respondents are females. This implies that majority of employees in SCM are males. 11.8% of the respondents are at age category of less than 30 years. Number of respondents in age category of 31 to 40 and 41 to 50 are equal, 35.3% each. These two categories comprise 70% of the respondents. 17.6% of the respondents are at age category of above 50 years. Only 2.9% of respondents have work experience in the company for less than two years. 29.4% of the respondents have the experience between 2 years and 5 years. Majority of the respondents have work experience between 5 to 10 years. 17.6% of the respondents have an experience above 10 years. 58.8% of the respondents have bachelors' degree and remaining 48.2% of the respondents have masters' degree.

This implied majority of respondents were well educated, well experienced on the subject matter and had the ability to understand the questions they were presented with and were able to provide a clear picture regarding supply chain management practices implementation and how it affect their organizational performance and this helped to achieve the objectives of the study.

4.2 Descriptive Analysis

This analysis is conducted to identify practices of the SCM in the company and further used to conduct regression analysis. Practices of SCM in EABSC is presented and discussed for each parameter with respective tables through mean and standard deviation. Overall all practice is computed from sub-variables by using mean.

4.2.1 Descriptive Analysis for Strategic Supplier Partnership

Practices of Strategic Supplier Partnership are presented in the table 6 above. The level of practice is presented by using mean and standard deviation. The responses with mean value of 4.00 indicated that company uses supply quality as criteria of supplier selection. Standard deviation of 0.69 indicates that there is slight variation from the mean that the respondents have common agreement on quality is important criteria in supplier selection.

Strategic partnership helped the company to solve problems jointly with suppliers. Responses with mean value of 3.64 indicated that the company is jointly solving problems with suppliers. Standard deviation of 0.64 indicates that the respondents have

similar outlook about solving problem jointly with strategic partners. This implies that the EABSC and strategic partners have a good coordination in solving problems.

Table 9: Descriptive Analysis of Strategic Supplier Partnership

Statement	Frequency	**Mean**	**Std. Deviation**
Quality is our first criterion in selecting suppliers	34	4.00	.69
Problems are jointly solved with suppliers	34	3.64	.64
The company supports suppliers to improve their product quality	34	3.82	.67
Key suppliers are included continuous improvement programs	34	3.94	.73
Key suppliers are included in planning and goal-setting activities	34	3.79	.80
Key suppliers involve in new product development processes	34	3.58	.74
Strategic Supplier Partnership	**34**	**3.79**	**.47**

Source: Survey, 2018

The mean value for responses that EABSC is providing support to suppliers to improve their product quality is 3.82 indicating the company supports the suppliers for supply quality improvement. The standard deviation of 0.67 indicates that there is low variation from mean.

The mean value of 3.94 indicates that the key suppliers are involved in continuous improvement programs. As strategic partners key suppliers have role in changes in the company because any change is based on performance of suppliers. This implies that EABSC is participating key suppliers in improvement programs. The standard deviation of responses for involvement of key suppliers in continuous improvement program is 0.74 suggesting that there is slight variation in agreement of respondents.

The mean value of responses for key suppliers' inclusion in planning and goal setting activities is 3.79 suggesting that the respondents are agreed on involvement of key suppliers. The standard deviation of this response is 0.81 suggesting that there is little variation from mean response. When the company plans to develop new product, it identifies the ability of suppliers to provide supplies for new products. Mean value of 3.59 indicates that key suppliers moderately participate in new product development. This implies that the EABSC provides priority to key suppliers before looking another supplier. The standard deviation of 0.74 suggests that there is slight variation in agreement of respondents.

Generally, strategic supplier partnership with mean value of 3.80 suggests the respondents agree that there is good strategic partnership practice in the company. Standard deviation of 0.48 suggests that there is slight variation in agreement from common mean. This implies that the strategic supplier partnership is well practiced in EABSC.

4.2.2 Customer Relationship Practices

Table 7 below presents the practices of customer relationship in the company.

Table 10: Customer Relationship Practices

Statement	Frequency	Mean	Std. Deviation
There is frequent interaction with customers to set reliability, responsiveness, and other standards	34	3.91	.67
The company frequently measure and evaluate customer satisfaction.	34	3.88	.64
The Company frequently determines future customer expectations	34	4.03	.39
The company facilitates customers' ability to seek assistance from us.	34	3.79	.59
Periodically, the company evaluate the importance of relationship with customers	34	4.00	.60
Customer Relationship	34	3.92	.49

Source: Survey, 2018

The responses with mean value of 3.91 and standard deviation of 0.67 suggest that there is frequent interaction with customers to set reliability, responsiveness, and other standards. This implies that EASBC reliable and responsible and it is loyal to different standards.

The mean value for statement 'the company frequently measure and evaluate customer' is 3.88 suggesting that the respondents agree that the company is evaluating the customer satisfaction. The standard deviation for this statement is 0.64 suggesting that there is slight variation in responses. Evaluating the customers helps to access the acceptance of the product and existence of the competitors. This implies that EABSC is evaluating the market based on the customers.

Responses with mean value of 4.03 suggest that there is practice of determining future customer expectation. This implies that the EABSC focuses on demand based selling. The standard deviation is 0.39 implying that there is low variation in agreement of the respondents.

The company provides assistance to distributors. Mean response for providing assistance to customers is 3.79 suggesting that the company is providing the assistance to customers when they need. The standard deviation of 0.59 suggests the there is little variation in from common mean.

Mean value for 'the company periodically evaluates the importance of relationship with customers' is 4.00 suggesting that the respondents agreed that the company evaluates relationship with customers. The standard deviation for this statement is 0.60 suggesting that there is similar agreement on the statement.

Generally, practices of customer relationship are implemented in the company. This is indicated by overall mean of 3.92 and standard deviation of 0.49. This implies that EABSC is customer focused organization.

4.2.3 Level of Information Sharing

The level of information sharing with the Supply chain partners is presented in the table 8 below.

Table 11: Descriptive Analysis for level of Information Sharing

Statement	Frequency	Mean	Std. Deviation
The company informs trading partners in advance of changing needs.	34	3.85	.61
Trading partners share proprietary information with the company	34	3.79	.54
Our trading partners keep us fully informed about issues that affect our business	34	3.85	.50
Our trading partners share business knowledge of core business processes with us	34	3.94	.55
We and our trading partners exchange information that helps establishment of business planning.	34	3.88	.48
Level of information sharing	34	3.86	.47

Source: Survey, 2018

The mean value for the response that the company informs the trading partners in advance for changing need is 3.85 suggesting that the company have good practice of informing the trading partners for changing need. The standard deviation of 0.61 suggests that there is lower variation in responses about the informing trading partners for changing need.

Supply chain partners share business knowledge of core business processes with the company. This is indicated by mean of 3.79 and standard deviation of 0.54. This implies that the Supply chain partners are sharing core business knowledge with company.

Mean value of responses for information from Supply chain partners about issues that affect business of the company is 3.85 suggesting that Supply chain partners informs the company about issues affecting the business of the company. EABSC is better in informing Supply chain partners than the Supply chain partners inform the company.

Response for the statement that trading partners share business knowledge of core business processes with the company is 3.94 suggesting that the company share knowledge about core business process. The standard deviation for this statement is 0.55 suggesting that there is low variation in agreement of respondents about the business knowledge sharing with trading partners.

As the response for information sharing between trading partners for sharing information for business planning with mean value of 3.88 suggests that the company shares information with trading partners for business planning. The standard deviation is 0.48 indicating lower variation of responses for agreement about information sharing for business planning.

Overall mean for practice of level of information sharing is 3.86 and the standard deviation is 0.47 suggesting that there is high information sharing in the company.

4.2.4 Quality of information

Table 12: Descriptive analysis for quality of information

Statement	Frequency	Mean	Std. Deviation
Information exchange between our trading partners and us is timely	34	3.71	.52
Information exchange between our trading partners and us is accurate	34	3.59	.56
Information exchange between our trading partners and us is complete	34	3.59	.61
Information exchange between our trading partners and us is adequate	34	3.65	.54
Information exchange between our trading partners and us is reliable	34	3.62	.55
Level of information quality	34	3.63	.49

Source: survey, 2018

Responses for information sharing timeliness indicated with mean value of 3.71 that information sharing with trading partners is timely. The standard deviation is 0.52 suggesting that there is lower variation with the responses. Quality of information sharing in the company with regard to accuracy and completeness has the same mean value of 3.59 suggesting that the information shared is moderately complete and accurate. Response for adequacy and reliability of information shared have mean value of 3.65and 3.62 respectively indicating that the information moderate existence of both adequate and reliable information. On overall quality of information sharing has mean value of 3.63 suggesting that information is moderately quality.

4.2.5 Internal Lean Practices

Table 13: Descriptive analysis for internal lean practices

Statement	Frequency	Mean	Std. Deviation
The company reduces process set-up time (time required to prepare or refit equipment/workstation for production)	34	3.88	.64030
The company has continuous quality improvement programs	34	4.18	.58
The company produces only what is demanded by customers when needed	34	3.56	.96
Internal Lean Practice	**34**	**3.87**	**.65**

Source: Survey, 2018

The responses with mean value of 4.18 and standard deviation of 0.58 indicated that the company has continues quality improvement programs. This implies the EABSC is using quality improvement as value adding activity. The mean value for company practice of reducing process set-up time is 3.88 suggesting that the company is efficient production process. The standard deviation is 0.64 suggesting that there is slight variation in agreement of the respondents. The mean value for production based on demand is 3.56 suggesting that the company moderately focuses on demand of customers.

The value of overall mean for internal lean practice 3.87 suggesting that there is high internal lean practice in the company. The standard deviation of 0.65 suggests that the agreement of the respondents is similar. EABSC is reducing non-value adding tasks through demand focus, quality improvement and production efficiency.

4.2.6 Organizational Performance

Table 14: Descriptive Analysis for Organizational Performance

Statement	Frequency	Mean	Std. Deviation
Market share	34	4.0588	.64860
The growth of market share.	34	3.9706	.57658
The growth of sales.	34	3.8824	.53737
Profit margin on Sales	34	3.8235	.38695
Overall competitive position.	34	4.2059	.53820
Organizational performance	34	3.9882	.25556

Source: Survey, 2018

Performance of the company is indicated in the table 14 about market share, growth of market share, growth of sales, profit margin on sales and overall competitive position. The respondents rated the performance of the company performance. Responses for the market share with mean value of 4.06 indicated that the market share of the company is increasing in last 5 years. The standard deviation for this response is 0.65 suggesting that all respondents have moderately similar response. The growth rate of the market share is also increasing within last five years as it is depicted by the mean value of 3.97. the sales of the company is increasing and profit margin on the sales also increasing with mean value as indicated with mean values of 3.88 and 3.82. The responses for all over competitiveness of the company indicated that the company's competitiveness is increasing. . Overall organizational performance has mean value of 3.99 suggesting that performance of the company was increasing

4.3 Correlation analysis

This study used both descriptive and explanatory designs to answer research questions. Correlation analysis is one of explanatory design that is intended to identify the relationship between independent variables, SCM, and dependent variable, Organizational performance. Based on assumption of linear relationship between the variables, Pearson correlation method is used to identify the relationship between the variables.

Table 15: Correlation Analysis

	OP	**SS**	**CR**	**IS**	**IQ**	**IL**
OP	*1*					
SS	*.440***	*1*				
	.009					
CR	*.551***	*.161*	*1*			
	.001	*.364*				
IS	*.163*	*.149*	*-.243*	*1*		
	.357	*.401*	*.166*			
IQ	*.592***	*.047*	*.392**	*-.132*	*1*	
	.000	*.791*	*.022*	*.456*		
IL	*.604***	*.314*	*.229*	*-.012*	*.536***	*1*
	.000	*.071*	*.193*	*.947*	*.001*	

Source: Own Computation, 2018

Table 15 above presents the correlation coefficients and respective significance of the correlation.

The strategic supplier partnership and organizational performance have positive and significant correlation with significance level of 0.05 suggesting that increase in strategic supplier partnership increases organizational performance significantly and vice versa. This implies that strategic supplier relationship of EABSC has positive and significant importance in improving the organizational performance of the company.

The correlation between customer relationship and organizational performance is positive and significant at significance level of 0.01. This implies that customer relationship

management of EABSC and organizational performance of the company are positively related.

The correlation between the level of information sharing and organizational performance is positive and insignificant. But the correlation between information quality and organizational performance is positive and significant at significance level of 0.01.

The correlation between internal lean practice and organizational performance is positive and significant at 0.01 suggesting that improving internal lean practice improves organizational performance and vice versa. This implies that internal lean practices of EABSC are improving organizational performance of the company.

4.4 Regression analysis

Model summary

Table 16: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846[a]	.716	.666	.18928

a. Predictors: (Constant), ILP, LIS, CRM, SSP, LIQ

The study model summary is presented in table 16 above. The researcher used adjusted R-squared to summarize the model. As it is shown in the table 15 adjusted R squared is 0.666 suggesting that that 66.6% variation in dependent variable is explained by independent variables used in the model. This implies that 66.6% variation in organizational performance of EABSC is affected by variation of SCM dimensions.

Table 17: ANOVA Analysis

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.532	5	.506	14.136	.000[b]
Residual	1.003	28	.036		
Total	3.535	33			

Source: own computation, 2018

ANOVA is presented in table 17. This analysis is used to address the general objective of the study. In addition, this analysis is used to identify appropriateness of the model in estimating relationship between SCM and organizational performance. The researcher used multivariate linear regression method to run regression analysis. F-statistic is significant at 0.01 indicating that the model used is appropriate to explain the relationship between SCM and organizational performance. This implies that SCM and organizational performance have statistically significant relationship.

Table 18: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.263	.490		.537	.596
SSP	.162	.076	.236	2.140	.041
CRM	.260	.076	.391	3.429	.002
LIS	.185	.073	.268	2.529	.017
LIQ	.209	.085	.316	2.454	.021
ILP	.139	.064	.274	2.161	.039

Source: Own Computations, 2018

The effect of individual dimension of SCM is presented in table 18 above. The researcher used unstandardized coefficients and their sign to analyze the relationship between SCM and organizational performance. The specific objectives are addressed based on this analysis.

Coefficient of strategic supplier partnership is positive and significant at 0.05. The positive coefficient indicates improving strategic supplier partnership improves organizational performance and vice versa holding other factors constant. This implies that strategic supplier partnership practices of EABSC have significant positive effect on organizational performance of the company.

Coefficient of customer relationship management is positive and significant at 0.01 indicating that customer relationship management has positive effect on organizational performance. Positive sign of the coefficient of the customer relationship indicates that increasing customer relationship increases organizational performance and vice versa

holding other things constant. This implies that EABSC has customer relationship management that positively contributes organizational performance.

Coefficient of level of information sharing is positive and significant at significance level of 0.05 suggesting that level of information sharing in the company and organizational performance are positively and significantly related.

Coefficient of information sharing quality is positive and significant at significance level of 0.05 suggesting that information quality have significant and positive relationship with organizational performance.

Coefficient of internal lean practice is positive and significant at 0.05. Positive sign of the coefficient suggests that when internal lean practice increases organizational performance of the company increases and vice versa holding other things constant. This implies that internal lean practice is positively affecting organizational performance of EABSC.

4.5 Descriptive Analysis for responses from Distributors

This study has identified the relationship between distributors and the company through responses from distributors and the result is presented in the table 19 below.

Table 19: Descriptive Analysis for responses from Distributors

Statement	Frequency	Mean	Std. Deviation
EABSC frequently interacts with distributors to set reliability, responsiveness, and other standards	10	4.1	.57
The company frequently measure and evaluate distributor satisfaction.	10	3.76	.44
The Company frequently determines future distributor expectations	10	3.85	.49
The company facilitates distributors' ability to seek assistance from the company.	10	4.12	.52
Periodically, the company evaluate the importance of relationship with distributors	10	3.67	.51
Customer Relationship	10	3.91	.59

Source: Survey, 2018

Responses from 10 distributors are collected about the relationship between the company and distributing agents. Overall response indicates that the company has good relationship with the distributors. All parameters about the relationship between the company and the distributors are well practiced.

4.5 Qualitative analysis

This section presents the results of interview from EABSC and strategic suppliers.

4.5.1 Interview result of EABSC

Managers of SCM departments in the company are interviewed to support the responses from employees. These departments include logistic, planning and procurement, and manufacturing.

Interview Item 1: What are criteria in selecting suppliers and to what extent do the suppliers and your company is related?

The company has strategic plan of selecting supplier. The company primarily considers quality, cost and performance of the supplier when selecting the companies. But the quality of the supply comes first because our product quality is highly dependent on supplies quality. The strategic suppliers of the company are considered as the other department of the company. Since the performance of the company is highly dependent on performance of the suppliers the company jointly solves problems associated with the performance of the supplies. EABSC supports the suppliers to improve product quality through advisory activities and advance payments for the products. EABSC includes the suppliers in continuous product improvement programs, planning and goal setting and new product development. The company considers the suppliers in performance in product quality improvement because their supply quality decreases the defective products. Any planning and goal setting is highly dependent on performance of the suppliers because production level of the company is highly dependent on performance of the suppliers. The company considers ability of the suppliers when plans to develop new product.

Interview Item 2: What does the company do to strengthen the relationship with customers?

The company frequently interacts with the customers especially with distributors to evaluate their performance, customer perception about the products, responsiveness of the distributors and their reliability. The company sets standards to distributors the products. The best performing distributors are rewarded for achieving their performance targets. The company measures customer satisfaction through preference of the product in the market. Due to seasonal variation of demand for the products the company estimates production of the specific products. Since in the hot seasons demand for the products go high, the company adjusts the production level. The company goes to retailers to check availability of individual product. The company provides assistance for the retailers in providing materials like refrigerator and glasses. The company periodically evaluates the performance and the importance of relationship with customers.

Interview Item 3: What information do you share with your trading partners?

The level of information sharing of the company with the trading partners is assessed through interview and identified that the company has high level of information sharing with the trading partners. The company informs trading partners when there is change in need, issues that affect business of the company, and establishment of business planning. The company shares proprietary information and core business process. Since the role of trading partners is significant on production, the company shares information such as market share and sales volume changes.

Interview Item 4: How the information you share with your trading partners is quality?

The company shares very important information for decision making with trading partners. This information has to be quality to make the right decision. The company uses the information when there is change in need for the supplies and distribution. These issues need very timely information to make right decision. Regarding the timeliness the company uses timely information. On the other hand the information shared is accurate.

The accuracy of the information is among the main focus of the information sharing. The company has developed modern information technology infrastructure to share the accurate information. Sometimes the information shared lacks completeness because of the level of practice with use of new system and ability of the trading partners. The information shared is adequate for decision making. Information shared with supplies is important for production level and supply quality. On the other hand information shared with distributors is very important for sales. Therefore, the information company shares with trading partners are adequate. This information is highly reliable for decision making. The company relies on the information shared for whole operation of the company. In general, the company shares quality information with trading partners. This made the company cost effective and production efficient.

Interview Item 5: What are the internal lean practices in your company?

The company is structured in modern setup and uses advanced technologies for production. As it is an international company the production process is cost effective and that highly minimizes non-value adding activities in the production process based on different consultations and researches. In addition to reducing cost through short and efficient production process, the company actively works for quality improvement. To improve the quality, the company has continuous quality improvement programs. The company uses frequent interaction with the suppliers to improve the supply quality and the company develops strategies that make more competitive with product quality. The company has programs like developing the variety of products. It produces with different fruit tastes. In addition to mass production the company gives attention to the demand of the customers. Customer satisfaction for the product is assessed and new product is released. There is seasonal variation in the market for the product. The company uses different sales promotion strategies during the slack times. The company aggressively promotes the products. In addition to this the company reduces production during the cold seasons because of the lower demand for the products. During the hot seasons the production level rises. This helped the company to improve the sales, market share, and overall competitive position.

Interview Item 6: How is the performance of your company regarding the market share and its growth rate, growth of the sales, profit margin from sales and overall competitive position of company?

Market share of the company is increasing within last five years due to increase in new product development. Focusing on the customer expectation and providing new products for the market helped the company to increase the market share. Since the customer focus of the company is increasing from time to time, aggressive promotion for the products, involvement in social responsibilities like sponsorships improved both market share and growth rate of the market share. Products of the company are becoming highly acceptable. Focusing on customer preference helped the company to improve the sales. The sales are highly increasing from time to time. The mass production helped the company to earn higher profit from sales due to economies of the scale. Overall competitiveness of the company is improving due to lower production cost, competitive price, quality products, higher sales and efficient delivery through competitive distributors.

The content of interview results show that responses from SC department managers of EABSC on the relationship of the five supply chain practices with organizational performance supports the validity of the questionnaire results. All respondents agreed that the implementation of SC practices is evident in the company and have positive and significant relationship.

4.5.2 Interview result of strategic suppliers

This section presents the result of interview from strategic suppliers of the EABSC. The researcher interviewed the sales managers of the each company.

Interview Item 1: Is a quality of supply first criterion to work with EABSC?

To be competitive in the market the suppliers provide quality products to EABSC. Unless the products cannot compete in the market the EABSC looks for another supplier. In addition to this, the suppliers worry for quality of supplies due to that these companies work as a single entity. Their performance is highly dependent on performance of the EABSC. When EABSC performs less due to quality of the supply the performance of the supplier is affected. To be competitive in the market and to get positive return from the

performance of EABSC, the strategic supplier worries for their product quality. These strategic suppliers are selected based on quality of the supplies and their performance to provide supply as per varying demand.

Interview Item 2: How do you solve the problems you face with EABSC?

The suppliers and EABSC work as a single entity. The problem of the one company due to inefficiency of the other company is jointly solved. When the suppliers face problem, EABSC involves in the problem solving because the company will be directly affected by inefficiency of the companies. The suppliers are provided with advance payments to strengthen the capacity. EABSC provides advisory services to suppliers to improve their efficiencies. Therefore, the problems are jointly solved by strategic suppliers and EABSC.

Interview Item 3: What supports do you receive from EABSC to improve the product quality?

Strategic suppliers and EABSC work as trading partners. They are independents companies. These suppliers are very big companies that do not need support but that have business to business relationship. Because of the long term relationship, companies that need support can be supported. EABSC provides advisory support to improve product quality.

Interview Item 4: Do you involve in improvement programs, planning and goal setting, and new product development of EABSC?

EABSC involves the strategic suppliers in improvement programs, planning and goal setting and new product development. Since the improvement program includes the capacity of the suppliers, the suppliers are asked for their capacity and willingness to involve in the program. Unless the organizations are capable to involve in the program EABSC cannot be successful with the program. This indicates that EABSC involves strategic suppliers in continuous improvement program. EABSC assesses the capacity of suppliers for production planning and long term goal setting. This is intended to focus on existing suppliers or search new suppliers. When the EABSC intends to develop new

products the company involves the strategic suppliers because the capacity of the suppliers is among the main determinants to develop new products.

4.6 Triangulation of the Data

This study has identified positive and significant relationship between supply chain management and organizational performance. Stronger partnership with strategic suppliers, efficient customer relationship, level of information sharing, quality of information sharing and internal lean practice on overall made supply chain management stronger that significantly affects organizational performance. Findings of this study is similar to results of Otchere et al(2013) and Adebayo (2012) that identified positive and significant effect of SCM on organizational performance. Higher level of integration with both upstram and downstream players improves organizational perfomance by improving market share, growth of market share, growth of sales, higher profit marigin from sales and overall compititive performance of the organization.

EABSC uses strategic partnership strategy to source supplies. The company uses both local and global sourcing strategies. Locally it uses multiple sourcing strategies from different supplies. Strategic supplier partnership has positive effect on organizational performance of EABSC that strategic supplier partnership enables organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products and strategically aligned organizations can work closely and eliminate wasteful time and effort. By focusing on quality during selecting and supporting the strategic supplier, jointly solving the problems with suppliers' involvement of key suppliers in goal setting and new product development the company improved organizational performance. This study is in line with finding of (Stuart, 2007; Balsmeier & Voisin, 2006, Noble, 2007). Peter, David& David, (2005) states that strategic partnership enables the buyer to get quality product based on long term relationship between the companies. Similar to this study the EABSC focusing on quality issue in selecting the supplier that have both long term and short term implication on organizational performance of the company.

Customer relationship has positive effect on organizational performance of EABSC by differentiating its product from competitors, sustaining customer loyalty, and

dramatically extending the value it provides to its customers. There is efficient customer relationship in the company through improved distribution management and customers' expectation assessment. The company provides assistance to distributors through credit financing and sales strategy. This improved performance of the distributors and then organizational performance of the company. Production plan of the company is based on seasonal fluctuation of demand for the products. Associating the demand of the customers helped to improve organizational performance through higher sales. Finding of this study has similar result with finding of (Magretta, 2008) that efficient customer relationship gives improves organizational performance, competitive advantage over competitors and improves economies of scale.

Another practice of supply chain management is level of information sharing is one which has strong positive effect on organizational performance and significant at 5%. This result is consistent with the work of Lalonde (2008) which describes sharing of information as one of five building blocks that characterize a solid supply chain relationship and have an impact on the performance of organizations in supply chain. Kroes & Ghosh (2010) stated that the higher level of information sharing is associated with the lower total cost, the higher-order fulfillment rate and the shorter-order cycle time. Simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain.

Level of information quality has positive significant impact on performance of the organization with significance level of 5%. This finding is consistent with the work of Towill (2003). The empirical findings of the study reveal that simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain. Supply chain partners who exchange information regularly are able to work as a single entity. They can understand the needs of the end customer better and hence can respond to market change quicker.

Company focuses on supply although the production considers demand as important criteria. There is seasonal variation of production based on demand. In addition, the company produces what is intended by the customers at different plants where the

product is demanded. This implies that internal lean practice is among the important factors of the efficient supply chain and then efficient organizational performance. This study has identified positive effect of internal lean practice on organizational performance that the demand driven supply chains management, lean procurement methods of eliminating waste in all procurement cycles, preventing shortages, reducing inventory investment, reducing procurement lead time and cost, increasing inventory turnover and ensuring customers relationship of the company are positively affecting organizational performance of the company. Finding of this study is similar to the finding of Ferch, et al., (2008) that efficient lean practice improves organizational performance by reducing non-value adding activities and minimizing the production process.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSSIONS AND RECOMMENDATIONS

5.1. Summary of Major Findings

This study was conducted with an objective of identifying relationship between of supply chain management practices and organizational performance of East Africa Bottling Sharing Company. To measure supply chain management practices, based on different literatures and implementations in the company, strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice were used as dimensions of supply chain management. Practices of supply chain management and organizational performance were gathered through questionnaire and interview. Practices of supply chain management in the company were identified by using mean of agreement of respondents and the relationship with these practices and organizational performance was identified by correlating and regression the practices on organizational performance by assumption of linear relationship. Strategic supplier partnerships, customer relationship, level of information sharing, information quality and internal lean practice have positive and strong relationship with organizational performance. Customer relationship, internal lean practices and strategic supplier partnership are significant at significance level of 0.05 implying higher significance of these practices on organizational performance of the company. Customer relationship has highest effect as significance level of 0.01. Overall supply chain management practices have strong relationship with organizational performance at significance level of 0.01.

5.2. Conclusions

From the study we can conclude that the organization performance of EABSC can be improved with the implementation of the said practices as compared to before implementation.

For an organization to achieve a competitive advantage in the global environment, then it has to embrace supply chain practices as its culture.

SCM and organizational performance are strongly and positively related because of developing strong partnership with strategic supplier, efficient customer relationship, productive internal lean practices, relevant information sharing and quality information.

This study has identified positive and strong relationship between strategic supplier partnership and organizational performance of EABSC. Strategic supplier partnership practices positively affect organizational performance of the company because of involvement of strategic suppliers in process improvement, new product development, planning and goal setting, focusing on quality of products during selecting supplier, and supporting suppliers to improve product quality and solving problems jointly.

The company has customer relationship that is positively related with organizational performance by increasing product flexibility, improving time to market, and determining quantity. Contact with customers, assessment of customer expectation, supporting retailers, and evaluation of customer relationship have positively contributed to organizational efficiency of the company.

Level of information sharing has strong positive relationship with organizational performance of EABSC. Similarly, level of quality of information sharing has strong positive relationship with organizational performance of the company.

Internal lean practices have positive and strong relationship with organizational performance of the company that non-value adding activities in the supply chain are minimized, outsourcing non value adding works and focus on the core competencies of the company and there is shorter production process. Therefore, internal lean practice improves organizational performance of the company.

5.3. Recommendations

Based on the study findings, it was confirmed that there is strong need for the implementation of SCM practices in EABSC to enhance the overall organisational performance. Hence the researcher provided some recommendations that can easily be applicable in the company as follows;

- It is essential for senior and middle managers are trained first so that they are more likely to understand the usefulness of SCM practices implementation and become committed to it. Furthermore, training programs should also be provided to other staff as the way to ensure they can put into consideration the SCM concept in greater detail so as to enable them to properly implement it since poor understand of the concept can hinder them from fully participating in the SCM practices implementation in their respective companies.
- *It is important* to conduct some evaluation within the company and along the supply chain from upstream (with company's suppliers) to downstream (with company's customers) for practices which were mentioned in this study as the way to measure their importance and effect in the daily company's operations for enhancing organisational performance.

- The company has to further strengthen on providing accurate, reliable, and timely information to trading partners and get feedback on regular basis. The company should extend the practice of using modern communication technologies used for transfer of information to and from customers to all areas.

- The management of EABSC is recommended to further improve internal lean practices by avoiding non-value adding activities by analyzing the value chain. It is recommended to outsource some activities which can be done better by outsiders.

5.4 Suggestions for future research

The study portrayed the current trends of SCM practices implementation and its effect on overall organizational performance in EABSC. However the findings were confined to the head office only. Thus further studies are needed to widen the scope of respondents by encompassing other regions of the company. More studies are needed specifically to deal with SCM practices implementation and how it impact organizational performance in Ethiopian food and beverage processing companies.

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Appendices

Questionnaire (EABSC)

Addis Ababa University

School of Commerce

Department of Logistics and Supply Chain management

Graduate program

The purpose of this study is to measure the supply chain management practice in the case company. It may be beneficial to those who are interested to make further study on the subject area and managers of the case company to forward different decisions. Thus, your free will and cooperation in giving the reliable information is very important. Filling out, these questionnaires may not take that much of your time. Any information provided will only be used for academic purpose. As a result it will be kept confidential and utmost anonymity.

General instruction

- Please do not write your name in the questionnaires
- Your participation is voluntary .i.e., there is no penalty if you do not participate.
- Please simply circle on the appropriate choices to the closed-ended questions or give an explanation to the open-ended questions.

Thank you in advance for your cooperation!

Part I: Demographic Information

Please mark (X) in appropriate box to your response.

1. Gender:

- □ Male
- □ Female

2. Age in years:

- □ Less than 30
- □ 31-40
- □ 41 – 50
- □ above 50

3. Your Department

- □ Logistics
- □ Manufacturing
- □ Planning and Procurement

4. For how long have you held the position (in years?)

- □ Less than 2
- □ 2-5
- □ 6-10
- □ Above 10

5. Level of Education

- □ Bachelor Degree
- □ Masters
- □ PhD

Part two: Supply chain management practices in the Organization

6. To what extent do you agree about practices of strategic supplier partnership which stated in following statements? (Please mark X in appropriate box to your opinion)
   Where; SD = strongly disagree, D = disagree, N = neutral A=agree and SA = strongly agree

Strategic supplier partnership:	*SD*	*D*	*N*	*A*	*SA*
Quality is our first criterion in selecting suppliers					
Problems are jointly solved with suppliers					
The company supports suppliers to improve their product quality					
Key suppliers are included continuous improvement programs					
Key suppliers are included in planning and goal-setting activities					
Key suppliers involve in new product development processes					

Customer relationship:	SD	D	N	A	SA
There is frequent interaction with customers to set reliability, responsiveness, and other standards					
The company frequently measure and evaluate customer satisfaction.					
The Company frequently determines future customer expectations					
The company facilitates customers' ability to seek assistance from us.					
Periodically, the company evaluate the importance					

of relationship with customers					

Level of information sharing:	SD	D	N	A	SA
The company informs trading partners in advance of changing needs.					
Trading partners share proprietary information with the company					
Our trading partners keep us fully informed about issues that affect our business					
Our trading partners share business knowledge of core business processes with us					
We and our trading partners exchange information that helps establishment of business planning.					

Level of information quality	SD	D	N	A	SA
Information exchange between our trading partners and us is timely					
Information exchange between our trading partners and us is accurate					
Information exchange between our trading partners and us is complete					
Information exchange between our trading partners and us is adequate					
Information exchange between our trading partners and us is reliable					

Internal lean practices:	SD	D	N	A	SA
The company reduces process set-up time (time required to prepare or refit equipment/workstation for production)					
The company has continuous quality improvement programs					
The company produces only what is demanded by customers when needed					

Part Three: Overall Organizational performance

Regarding organization performance, please circle appropriate numbers which best indicate your firm's overall performance. The item scales are five-point likert scales with 1= significant decrease, 2=decrease, 3=same as before, 4=increases, 5=significant increase,

Organizational performance: how well an organization achieves its market-oriented goals as well as its financial goals in the past five years?

	Significant decrease	Decrease	Same as before	Increase	Significant increase
Market share					
The growth of market share.					
The growth of sales.					
Profit margin on Sales					
Overall competitive position.					

Interviews:

I. EABSC

1. What are criteria in selecting suppliers and to what extent do the suppliers and your company is related?
2. What does the company do to strengthen the relationship with customers?
3. What information do you share with your trading partners?
4. How the information you share with your trading partners is quality?
5. What are the internal lean practices in your company?
6. How is the performance of your company regarding the market share and its growth rate, growth of the sales, profit margin from sales and overall competitive position of company?

II. Strategic suppliers

1. Is a quality first criterion to work with EABSC?
2. How do you solve the problems you face with EABSC?
3. What supports do you receive from EABSC to improve the product quality?
4. Do you involve in improvement programs, planning and goal setting, and new product development of EABSC?