

**ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE**



**The Effect of Supply Chain Management Practices on Competitive  
Advantage of Habesha Brewery S.Co**

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Chain Management**

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## ***DECLARATION***

I, the undersigned, declare that, this study “**Effect of Supply Chain Management Practices on Competitive Advantage**” is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been duly acknowledged.

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## Acronyms

CLM: - Council of Logistics Management

OCA:- Overall competitive advantage

CR: - Customer Relation

EFA: - Exploratory Factor Analysis ILP: - Internal Lean  
Practices

IT: - Information technology

LIQ: - Level of Information Quality

LIs: - Level of Information Sharing

OC: - Organizational culture

OMS:-Outsourcing and Multi-Suppliers OP: - Operational  
Performance

OrP: - Organizational Performance RBV: - Resource-  
Based View

ROI: - Return on Investment

RV: - Relational View

SCLP: - Strategic Collaboration and Lean Practices

SCM: - Supply Chain Management

SCM\_PR:- Supply Chain Management Practices

SMEs: - Small and Micro Enterprises SSP: - strategic  
Supplier Partnership

## ***Abstract***

*Supply chain management (SCM) is the means by which firms engaged in creating, distributing, and selling products, can join forces to establish a supply network with an unbeatable competitive advantage-has emerged as one of the most powerful business- improvement tools around 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. This research conceptualizes and develops five dimensions of SCM practice (strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing, and internal lean practices) and tests the effect of SCM practices on competitive advantage of a firm. The data for the study was collected from 80 employees of Habesha Brewery S.CO. The relationship.ps proposed in the framework were tested using Pearson correlation, and the causal relations were analyzed using regression analysis. From the result of the analysis it is concluded that there is strong relationship between SCM practices and overall Competitive advantage with Pearson correlation coefficient 0.864 ( $r=0.864$ ) and significance value less than 0.001. Besides, SCM practices have an influence on overall competitive advantage. Therefore, in order to achieve advancement in marketing and financial performance in the long-run through enhancing overall competitive advantage, it is better for the organization to give due emphasis to the constructs of SCM practices.*

***Keyword:*** *supply chain management, overall competitive advantage*

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

The understanding and practicing of supply chain management (SCM) has become an essential prerequisite for staying competitive in the global race and for enhancing profitably (Suhong, Bhanu, Nathanb and S. SubbaRaob, 2004). Challenges associated with delivering products and services to the right place at the right time and at the lowest cost evolved in the early 1990s as market become more global in their nature due to intense competition among business organizations (Frank, 2008). Organizations began to realize that it is not enough to improve efficiencies within an organization, but their whole supply chain has to be made competitive.

Supply chain management practice is the integration of key business processes across the supply chain (Salazar, 2012). Streamlining cross-company processes is the next great edge for reducing costs, enhancing quality, and speeding operations. This is where our time productivity wars will be fought. The winners will be those companies that are able to take a new approach to business, working closely with partners to design and manage processes that extend across traditional corporate boundaries. This is because individual entities shall no longer compete as solely autonomous businesses rather as a supply chains. Competition becomes no longer between organizations but with among their supply chains (Salazar, 2012).

Bottling industry as one of the manufacturing industries consists a network of supplier, distribution and logistics facilities of various products. Manufacturing as one of the big industries in Ethiopia plays an important role accounting for merely 13.3% of GDP 2006/07. It is mainly dominated by food, beverage, textile, hide skins and leather industry (MOFED, 2007).

The food and beverages sector is one of the main components of Ethiopia's manufacturing sector. Based on official industrial statistics, total employment can be estimated at some 53,000 while the value of sales is almost 7 billion Birr. Value added generated by the sector is in the order of Birr 3 billion, equivalent to little less than 2% of the GDP (Access capital research, 2010). The sector includes a wide variety of activities, mostly linked to the transformation of domestically produced agricultural products (Aregawi, 2006). In certain cases, reliance is made on imported products. For the purposes of this study, the attention was focused on one sub-sector, namely: Brewery Industry.

The brewery industry sector in Ethiopia is at growing stage. As a result of which, the industry is attracting multinational business companies with different mode of entry. Consequently, the number of beer manufacturing companies is increasing from time to time following the growing demand of beer in the country (ENA, 2016). As a result, the competition for these substitute products seems tough and aggressive promotional and marketing efforts are becoming high. Following the reports of international organizations like IMF and World Bank on the development and the fast economic growth of the country, direct foreign investment is increasing and the government of Ethiopia also opens up the beverage industry to foreign investors (ENA,2016). As a result, the world's leading multinational companies are entering this brewery industry through acquisition of the state – owned breweries and building new ones with huge investment in the country. The brewery industry currently supplying for local consumption due to growing demand of beer in the country, but it has a great potential to expand its production and enter the export business. Some of them have already started to export and some still planning to export beers. The state- of- the - art supply chain management plays irreplaceable role as a competitive weapon in such a highly competitive and growing brewery industry (Aregawi, 2006). Thus, managing the supply chain in this business environment has a major impact on performance of all parties involved in the chain.

Functional organization of most firms which is not integrated as a chain leads to the lack of common thought within and across organizations. According to Mirquez, (cited in Adane 2014), information sharing between members of the supply chain should be increased to reduce the uncertainty and level of inventory and costs while ensuring enhanced performance with in the supply chain. For Marquez, in order to avoid the occurrence of bullwhip effect and lack of trust in the system vertical information sharing should be both effective and efficient.

Compared with developed countries' facilities, information technology and connectivity, that of Ethiopian can be stated as of poor and undeveloped which in turn cause a huge barrier on the smooth communication of the firms and customers in the country. Habesha Breweries S. Co is one out of these companies. Therefore, the overall intention of this research is to study the Supply Chain Management Challenges and their connections to the competitiveness of Habesha Breweries S. Co in market.

## 1.2 Statement of the Problem

Beer is quickly becoming one of Ethiopia's favorite drinks, with consumption rates expected to increase by 15 percent annually each year. (Jontambek's, 2012). Though there is plenty of market opportunity in Ethiopia the competition among beer manufacturing companies is very stiff due to involvement of major international players. These international companies created beer war in the country. Each company has invested in loads of advertising new product development, sponsorships to help win over additional market share. So this beer war created a favorable market for the consumers. Historically, St George's Beer Company, established in 1992, has dominated the market, at roughly half of the total market share. But the landscaping is changing. Heineken bought out Bedele (at the time 10% of the market) and Diageo owns Meta Abo (roughly 15%-20% of the current market). Locally owned Dashen holds 13% and Harar 11% (Jontambek's, 2012). As Habesha Brewery S.Co is one of the newly emerged companies in the industry they have somehow a minimal amount of market share. To increase their market share to a significant level they are focusing on how to expand the logistics and distribution network in order to ship products to customers.

Most companies think that selling means getting new customers that are part of the job of course but truly successful companies thrive on their ability to keep the customers they have already acquired (Sara G and Erica L, 2005). Habesha Brewery S.Co gives priority to new site markets like condominiums in different villages by leaving stable market. This will give opportunity to competitors to strengthen themselves. Most important aspects of the overall marketing environment are competition (Bovee and Thill, 1992). They defined competition as the rivalry among sellers trying to increase sales, profits or market shares while addressing the same set of consumers. Competition is no longer one company against other companies, but one supply chain against other supply chains. Supply chain management is an approach that allows companies to respond to these challenges. The main purpose of any supply chain management system is to get the right product, in the right quantity, to the right place, at the right time. Long-term competitiveness therefore depends on how well the company meets customer preferences in terms of service, cost, quality, and flexibility, by designing the supply chain, which will be more effective and efficient than the competitors (Longitudes 04, 2004, p.8). In the case of this study Habesha Brewery S.Co product may be substituted with competitors' products due to lack of the availability

of the product in some domestic markets like in Tigray region, Gonder, partly wollo area and Gambela.

According to the research conducted by Ministry of Industry (2003 E.C), even though the industry benefits from duty- free privileges for the importation of machinery and spare parts, it has limited value since the manufacturers are not productive enough. This shows that the food and beverage industries are facing problems beyond finance or capacity. Among the major Problems contributing for the poor performance of this industry are mismanagement and lack of adequate knowledge of managers in supply chain management.

To alleviate problems facing the company market competitive advantage, supply chain integration needs to be considered as a performance- improving approach and its effect needs investigation on supply chain performance. So far there seems to exist few empirical studies that were conducted in the area of SCM practices and firms competitive advantage (i.e. from perspectives of strategic supplier's partnership, customers relationships, level and quality of information sharing, and internal lean practices on overall competitive advantage of a firm) which incorporate upper and down streams on brewery firms. There is also no study previously done in the case of Habesha Brewery S.Co. Therefore, since the effort to achieve generalization of the causal relationship between SCM practices and competitive advantage calls for empirical confirmation in diverse environments, especially emerging economies, this paper is to contribute to the debate by testing the effect of SCM practices on competitive advantage in the case company.

### **1.3 Research Questions**

Hence, this study is primarily aimed to answer, what the Supply Chain Management practices are and what effect this practices have on the competitive advantage of Habesha Brewery S.Co, the following research questions were formulated as follows:

Q1: Does Strategic supplier partnership have an effect on competitive advantage of Habesha Brewery S.Co?

Q2: What is the effect of customer relationships on competitive advantage of Habesha Brewery S.Co?

Q3: What is the effect of information communication on competitive advantage of Habesha Brewery S.Co?

Q4: Does the overall supply chain management practice of Habesha Brewery S.Co has an effect on competitive advantage?

## **1.4 Objectives of the Study**

### **1.4.1 General Objective**

The purpose of this study is to assess the effect of supply chain management practices on competitive advantage of Habesha Brewery S.CO.

### **1.4.2 Specific Objectives**

The specific objectives of the study are:

- To study the existing practices of supply chain management from the five SCM practices perspectives
- To analyze and assess the effect of strategic supplier partnership on overall competitiveness and recommend solutions based on the findings.
- To analyze and assess the effect of customer relationships on overall competitiveness and recommend solutions based on the findings.
- To analyze and assess the effect of information communication on overall competitiveness and recommend solutions based on the findings.

## **1.5 Significances of the Study**

First and foremost this study was important to the student researcher in doing the cross match of the theoretical aspect with the real practices. It will also be useful for other researchers who may be interested to conduct research in similar topics. In additions as a research, the primary merits of the study goes to the university academics. Since there are few studies in the area, it gives additional insight to distribution system in the supply chain process. The organization, which is taken up as a case study, get ideas on gaining market share and it helps the organization to identify the dimensions that need further improvement so as to benefit more from the demand of domestic

market. The study will serve the organization to see the strength, weakness, opportunity and threat to improve overall distribution system in order to gain better market share than competitors.

## **1.6 Scope of the Study**

Supply chain management (SCM) aids the members of the supply chain (SC) to consider themselves as an integrated whole and provoke synergy effect. Shortly an effective and efficient SCM has the importance of cost minimization, reducing lead time, defect prevention, operational flexibility, system integration, resource utilization and ultimately customer satisfaction.

As SCM has vast areas of managerial practices, it is difficult and unmanageable to study in all areas. Therefore, the scope of this study was delimited to specific context that was on SCM practices in Habesha Breweries S. Co and their effect on its competitiveness from its employee's perspective.

The subject scope of this study was also limited to the company's point of reference towards collaboration, supplier and customer relationship, information sharing, information technology, internal operations of SCM and customer services. The area of the study was also delimited to the case study company through assessing how it interact with their upper stream and down streams of the supply chain

## **1.7 Limitation of the Study**

It was difficult to cover entire domain of supply chain just in one study. The research sample did not incorporate all the supply chain participants namely: the suppliers and customers due to time constraints so that it cannot be generalized/applied to the complete chain of the company under investigation. On the other hand constructs of SCM are not only limited to SCM practices selected in this study. Therefore it is not representing all constructs that could explain SCM practices.

## **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 and company, the research problem, objectives of the study, scope and significance of the study. The second chapter discusses the literature review about the subject matter. In chapter three the research methodologies is presented. In chapter four, results

and discussion of the study is presented and finally, chapter five has the major findings, conclusions and forwarded suggestions.

## **1.9 Operational Definition of Terms**

**Supply Chain Management:** is a network of relationships, with the goal to deliver superior value, i.e., the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole (Christopher 2005).

**Supply Chain Management practices:** is defined as “the set of activities undertaken by an organization to promote effective management of its supply chain” (Li et al.).

**Competitive advantage:** is defined as the “capability of an organization to create a defensible position over its competitors” (Li et al.). Tracey, Vonderembse and Lim (1999) argues that competitive advantage comprises of distinctive competencies that sets an organization apart from competitors, thus giving them an edge in the marketplace

## **CHAPTER TWO**

### **REVIEW OF RELATED LITRATURE**

#### **Theoretical literature**

#### **2.1. Overview of Supply Chain Management (SCM) and Competitiveness**

A supply chain is a network of organizations performing various processes and activities to produce value in the form of products and services for the end customer (Christopher, 1992). According to Li, Ragu-Nathan, Ragu-Nathan and Rao (2006) the dual purpose of SCM is to improve the performance of an individual organization as well as that of the entire supply chain. Bowersox and Closs (1996) argued that to be fully effective in today's competitive environment, firms must expand their integrated behaviour to incorporate customers and suppliers. This extension of integrated behaviours, through external integration, is referred to by Bowersox and Closs (1996) as supply chain management. Thus SCM integrates both information flow and the flow of goods seamlessly between trading partners as an effective competitive weapon (Childhouse & Towill, 2003; Feldmann & Muller, 2003). The main reason and objective of SCM is to provide a strategic weapon to build up and enhance sustainable competitive advantage by cost reduction without compromising customer satisfaction (Mentzer et al., 2001).

#### **2.2 Supply Chain Management**

Supply chain management has been emerged during late 1980s (Harland, 1996) and can be defined as the systematic, strategic coordination of the traditional business functions and tactics across these business functions within a particular organization and across business within the supply chain for the purpose 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. SCM also could be described as the chain linking each element of the manufacturing and supply process from raw materials and ending with the user, encompassing several organizational boundaries (Scott and Westbrook, 1991; New and Payne 1995). According to this broad definition,

SCM encompasses the entire value chain and addresses material and supply management from the extraction of raw materials to its end of useful life (Tan, 2001). SCM focuses on how companies utilize their suppliers' processes, technology and capability to enhance competitive advantage, and the coordination of the manufacturing, logistics and materials management functions within an organization (Farley, 1997; Lee and Billington, 1992).

The goal of SCM is to integrate both information and materials flows seamlessly across the supply chain as an effective competitive weapon (Childhouse and Towill, 2003; Feldmann and Müller, 2003; Li et al., 2006). Also, SCM is concerned with smoothness, economically driven operations and maximizing value for the end customer through quality delivery (Al- Mudimigh et al., 2004). SCM is managed by the supply chain which can be expressed as the sum of parts involved in fulfilling a customer requests and consists of suppliers, manufactures, warehouses, retailers, transporters and customers. The purpose of a supply chain analysis is to maximize company's profit in the process of generating value for the customer, namely maximizing the difference between the final product worth and the total cost expended by the supply chain to provide the product to the customer (Franca et al., 2010).

Basically, SCM manages business activities and relationship internally within an organization, with immediate suppliers, with first and second-tier suppliers and customers along the supply chain, and within the entire supply chain (Tan, 2001). Internal supply chain is a part of external supply. The concept of SCM has been involved from two separate paths: purchasing and supply management, and transporting and logistics management (Tan et al., 1998). Regarding purchasing and supply management perspective, SCM is synonymous to the integration of supply base that involved from the traditional purchasing and materials function ( Lamming, 1993). In the perspective of transporting and logistics management, SCM is synonymous to the integrated logistic system and hence focuses on inventory reduction both within and across organizations in the supply chain (Van Hoek, 1998; Bechtel and Jayaram, 1997; Romano and Vinelli, 2001; Rudberg and Olhager, 2003). SCM practices are defined as the set of activities undertaken by an organization to promote effective management and supply chain. The practices of SCM are proposed to be a multi-dimensional concept, including the downstream and upstream sides of the supply chain (Li at al., 2006). SCM has to be integrated with inventory management, supplier management, production management, information management, technology management and

quality management (Jacobs, 2003). Leading companies have recognised that they must eliminate any inefficiency in their supply chains, but there still exist some barriers to supply chain optimisation such as technology incompatibility, inappropriate knowledge and leadership management in company, price pressures, low communication etc.

## **2.3 Supply Chain Management Practices**

SMC practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain (Li et al., 2006).

SCM practices involve suppliers in strategic and operational decision making, encouraging information sharing and searching for new ways to integrate upstream activities. It also involves developing customer contacts through the use of customer feedback to integrate the downstream activities and delivering orders directly to customers at point of use. To effectively achieve these goals, it is necessary to locate closer to the market, help suppliers and vendors develop JIT capability, create a compatible information platform and create SCM teams for quality and operational efficiency (Chow et al., 2008; Tan, 2002; Ramdas and Spekman, 2000; Narasimhan and Kim, 2001; Chopra and Meindl, 2004).

Supply chain practices are related to supply and materials management issues, operations, information technology and sharing (ICT) and customer service (Tan,2002). Supply chain practice also includes: technology, cost competitiveness, inventory management and external regulation (McMullan, 1996). All those have to be managed effectively to realize supply chain's strategic position which allows competitive advantage. SCM practice depends on business strategy and collaboration in the organization, plan and execution, logistic performance and information technology and its implementation in the organization and including five distinctive dimensions: strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and postponement (Li et al., 2006).

### **2.3.1 Strategic supplier partnership**

Is defined as the long-term relationship between the company and its suppliers and it is designed to leverage the strategic and operational capabilities of individual participating companies to help them achieve significant emphasized benefits (Stuart, 1997; Balsmeier, 1996; Noble, 1997; Li et

al., 2006). A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving efforts (Gunasekaran et al., 2001). Strategic supplier partnership enables companies to work more effectively with a few important suppliers who are willing to share responsibility for the success of the product. 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., 2002b). An effective supplier partnership can be a critical component of a leading edge supply chain (Noble, 1997). This is due to the ultimate objective of SCM is to deliver products to the satisfaction of end customers (Tan, 2001).

The growth of mass customization & personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival. The customer relationships include the complete range of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers & improving customer satisfaction (Tan et al. 1998; Claycomb et al. 1999). Close customer relationship allows a company to be more responsive in fulfilling customers' demand and differentiate its product from competitors, sustain customer loyalty, & dramatically extend the value it provides to its customer through improving customer satisfaction by proactively seeking customers' needs and requirements. The ability to build a close relationship with customers will bring companies in to a long-lasting competitive edge (Bowersox et. al, 1999).

SCM suggests that firms need to integrate with their suppliers and customers to achieve both financial and non-financial growth objectives (Tan, 2001). Stank et al, (2001) asserted that, the industry leaders increasingly build competencies to integrate with suppliers and customers and find that, these competencies lead them to supply chain excellence. Coordinating operational activities through joint planning with suppliers also results in inventory reduction, smoothing production, improve product quality, reducing supply uncertainty and lead time reduction (Lee, 2002). Makweba & Xu, (2009) in their study, reviled that customers' need to be given its deserved weight. In today's competition, firms with a superior ability to provide services that customers perceive as valuable incur an important competitive advantage. The food processors need to make commitments to learn what customers need and set strategies that implement customer friendly process relationship rather than the existing one buy-sell traditional relationship. This is because; in most cases customers base their purchasing decisions on the service they receive, not just on

price. Therefore, quality and availability of the product that provides superior service to the customers is very important for the firm (Makweba & Xu, 2009).

### **2.3.2 Customer relationship**

Comprises the entire array of practices that are employed for the purpose of managing customer complains, building long-term relationships with customers and improving customer satisfaction (Tan et al., 1998; Claycomb et al, 1999; Li et al., 2006). Good relationships with supply chain members, including customers, are needed for successful implementation of SCM programs (Moberg et al., 2002). Close customer relationship allows an organization to differentiate its products from the competitors, and sustain customer loyalty.

In this global competition and mass customization era, personalized attention and better relationship management with individual customers is of utmost importance for organizational success (Wines, 1996). Good relationships with trading partners, including customers are a key to successful SCM efforts by organizations (Moberg et al., 2002). Customer relationship has long been recognized as an internal component of an organization's marketing strategy to increase sales and profits (Bommer et al., 2001). Close customer relationship allows product differentiation from competitors, helps sustain customer loyalty, and elevates the value provided to customers. Immediate customer relationship activities have played a crucial role in developing effective SCM strategies (Wisner, 2003).

### **2.3.3 Information Sharing**

Information sharing is an important aspect in achieving perfect integration in a supply chain. Cross functional integration and inter organizational integration requires the visibility of information across the supply chain. Poor information sharing between partners in a supply chain will result in poor coordination that will lead to many serious problems such as high inventory levels, inaccurate forecasts, low resource utilization, and high production costs. Indeed, information sharing is highly considered as the way to reduce demand uncertainty (Lee and Whang, 2000; Lee, 2002).

Many studies have reported that information sharing can bring many benefits to both suppliers and buyers, such as inventory reduction, and reduced manufacturing costs (Yu et al,2001; and Raghunathan, 2003). The way companies share information whatever the confidential level or

not; determines the success of the collaboration. The nature of information to be across the supply chain differs based on the degree of integration, institutional trust and availability of infrastructure that facilitate the practice. Therefore, an informatics perspective is vital in the supply chain since information flow is an integral part of SCM and material flow is closely dependent on information flow.

### **2.3.3.1 Types of Shared Information**

**Sales Data:** In the traditional supplier-buyer relationship, companies communicate demand information exclusively in the form of orders. Indeed, orders from downstream serve as a critical source of information about future businesses. When the information is transferred in the form of orders tends to be distorted, can misguide upstream partners in their inventory and production decisions. It ultimately harms the efficiency of the supply chain in the form of excess raw material inventory, unplanned purchases of supplies, additional manufacturing expenses created by excess capacity, inefficient utilization and overtimes, excess warehousing expenses, premium shipping costs, and poor customer service level (Lee, et al. 1997).

**Sales Forecast:** To exploit the vendors' superior forecasting capabilities, retailers including Wal-Mart formed an initiative called Collaborative Planning, Forecasting and Replenishment (CPFR), which calls for the retailers and the manufacturers to exchange knowledge and jointly develop forecasts and replenishment plans. The common form of forecast sharing involves a downstream site sharing the information to the supplier, as it is closer to the market and is thus better positioned to forecast future market demand Tsay (1997).

**Inventory Level:** One of the most common data shared between supply chain partners is inventory level. Access to supply chain inventory status can contribute to lowering the total inventory level in the supply chain. If the retailer and the manufacturer independently manage their respective inventories without sharing inventory status information, they may end up having duplicate safety inventories or stock-outs at both locations (Milgrom and Roberts, 1998)

**Other Information Sharing:** Other information often shared in a supply chain include may be performance metrics and capacity. Performance metrics include product quality data, lead times, queuing delays at workstations and service performance. By sharing this type of information, the

supply chain can identify the bottlenecks of the chain and improve the overall performance (Tsay, 1997).

### **2.3.4 Level of information sharing**

Information sharing has two aspects: quantity and quality and both of aspects are important for SCM practice (Li et al., 2006). Level of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner (Monczka et al., 1998, Li et al., 2006). Shared information can vary from strategic to tactical in nature and from information about logistic activities to general market and customer information (Mentzer et al., 2000).

The impact of information sharing on SCM depends on what information is shared, quality on shared information, and company's capability in using and translating the information in to a supply chain strategy and operational activities (Moberg et al, 2002). Basically, Information sharing can vary from strategic to tactical & from information about logistics activities to general market & customer information (Mentzer et al. 2004).

### **2.3.5 Quality of information sharing**

Includes such aspects as the accuracy, timeliness, adequacy and credibility of information exchanged (Li et al., 2006; Moberg, 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 (Holmberg, 2000). Companies need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion (Li et al., 2006). Having, different interests & opportunities by supply chain participants affect the quality of information. Given these predispositions ensures that, the quality of the shared information becomes a critical aspect of effective supply chain practice (Feldmann and Muller 2003). Therefore, organizations need to view their information as a strategic asset & ensure that it flows with minimum delay & distortion (Feldmann et al. 2003).

## **2.4 Supply Chain Responsiveness**

Supply chain responsiveness is defined as the capability of promptness and the degree to which the supply chain can address changes in customer demand (Holweg, 2005; Prater et al., 2001; Lummus et al., 2003; Duclos et al., 2003). In a rapidly changing competitive world, there is a need to develop organizations and supply chains that are significantly more flexible and responsive than the existing ones (Gould 1997, James-Moore, 1996). Firms need to aptly respond to changing customer needs so as to succeed in today's uncertain environment ( Huber, 1984) as well as any disruptions in supply ( Lee, 2004; Christopher and Peck, 2004). Although it would be interesting to study supply chain responsiveness from supply disruption perspective also, the current study focuses mainly on customer demand perspective.

## **2.5 The Concept and dimension of Competitive Advantage**

Competitive advantage is the extent to which companies are able to create a defensible position over its competitors (McGinnis and Vallopra, 1999). In today's global competition environment, facing the rapid technology progress and high customer expectations, companies find it hard to win the competition only depending one's own capacity (Su et al., 2008). In this situation, the establishment of the supply chain partnership among companies and the coordination of the partners are highly valued. Also, many companies struggle in justifying the cost of quality within their supply chain, but many companies fail to see the cost associated with varying quality levels from their suppliers. In order to create a quality product, which is one of the competitive advantages, company must address all aspects of the supply chain, including individual processes and supplier selection (Franca et al., 2010). This is the main role of the supply chain management.

There are some dimensions of supply chain performance based on supply chain processes and management which have direct influence to competitive advantage: resource, output, flexibility, innovativeness and information. So, improving supply chain performance has become one of the critical issues for gaining competitive advantage for companies. Supply chain is a dynamic management tool and continuously improving performance has become a critical issue for most suppliers, manufactures and the related retailers to gain and sustain competitiveness (Cai et al., 2009).

Increasing competitive pressure and the rapid pace of technological change are motivating companies to focus on partnership with suppliers as a means of distributing risks and enhancing business processes, through the development of joint skills and shared interorganisational routines (Anderson and Christensen, 2000; Trent and Monczka, 1999). Companies are enhancing their innovative and competitive ability by focussing on their core competencies and leaving marginal activities to a selected group of competent suppliers (Sheth and Sharma, 1999).

A lot of companies emphasize quality as a means to stay competitive in the marketplace over the long run. They have a reputation of high quality as representing future market share for new customers and maintaining market share for existing customers over their lifetime. Further, improving quality can provide term financial savings (Franca et al., 2010). For purpose of this paper, next dimensions of the competitive advantage are chosen: price/cost, quality, delivery dependability, product innovation and time to market.

## **2.6 Supply Chain Management Practices and Competitive Advantage**

Supply chain management simply can be defined as how to manage all activities along the entire supply chain in order to gain competitive advantage. Similar to definition stated by Ellram and Cooper (1993:1), supply chain management is “an integrating philosophy to manage the total flow of a distribution channel from supplier to ultimate customer”. In addition to defining supply chain management, Mentzer et al. (1999) and Porter and Millar (1985) underline the goals of supply chain management. They assert that supply chain management strives for competitive advantage through performing all activities at a lower cost or creating unique value that customer wants with a premium price. Managing a firm’s value chain means to manage linkages between interrelated value activities. A competitive advantage, which can be achieved either by low cost and or differentiation strategy, depends on how a firm manages its linkages. Porter (1985) suggests two beneficial ways to better manages linkages: optimization and coordination. Optimization is essential for linkages reflecting tradeoffs among activities to achieve the same results. For example, better final inspection process on product may reduce sales after service cost. Meanwhile, coordinating activities along value chain will lead to reduced cost and enhance differentiation. Porter (1985) also underlines the importance to manage linkages between a firms with other related

entities, in particular its suppliers. Jointly optimizing and improving coordination activities between a firm's value chain and suppliers' value chain will enhance competitive advantage (Porter, 1985). Effective SCM produces competitive advantage for a firm in that it is said to reduce costs (Martin and Grbac, 2003; Sheth and Sharma, 1997; Tan et al., 1998; Araujo et al., 1999). SCM practices have been found to be positively related to competitive advantage (price, quality, delivery dependability, product innovation, and time to market) in prior literature (ex: Li et al., 2006).

It has been pointed out that practicing SCM has become an essential requirement to staying competitive and growing profitably in today's global race (Power et al., 2001; Moberg et al., 2002). Larson and Kulchitsky (1998), in an empirical study found that developing strategic supplier partnerships also lead to cost effectiveness of the focal firm. Christopher (1992) states that, the greater the collaboration, at all levels, between supplier and customer, the greater the likelihood that competitive advantage can be gained by organizations. Extensively coordination with suppliers and involving them in new product development process has been found to enhance the ability of organizations to develop successful new products, and thus gain competitive advantage in the marketplace (Ragatz et al., 2002; Twigg, 1998). Ragatz et al. (2002) found that supplier integration can reduce material costs and quality, product development time and cost, and manufacturing cost while improving functionality. Advantages of supplier participation in new product development include reduced project costs (Kessler, 2000; Clark, 1989), and improved perceived product quality (McGinnis and Vallopra, 1999; Ragatz et al., 1997). A long-term relationship with the supplier will have a lasting effect on the competitiveness of the entire supply chain (Choi and Hartley, 1996; Kotabe et al., 2003). Sharing information (and data) with other parties within the supply chain can be used as a source of competitive advantage (Jones, 1998; Novack et al., 1995). Furthermore, Tompkins and Ang (1999) consider the effective use of pertinent, timely, and accurate information by supply chain members as a key competitive factor. Information sharing with suppliers has given Dell Corp. the benefits of faster cycle times (implying faster time to market), reduced inventory (implying reduced costs), and improved forecasts. Customers, for their part, have benefited by getting a higher-quality product at a lower price (Magretta, 1998; Stein and Sweat, 1998).

## 2.7 Empirical Review of Studies

According to 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 who have devoted a 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 findings are discussed as follows:

Alireza *et al.* (2011) conducted a study on the 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.

Moslem (2013), conducted research on the 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 indicated as there is a relationship between SCM practices and competitive advantage.

Lenny *et al.* (2007) conducted a study on the impact of supply chain management practices on the performance of SMEs in Turkey. Based on exploratory factor analysis (EFA), researchers grouped SCM practices into 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 a direct positive and significant impact on operational performance. In contrast, both SCLP and OMS do not have a significant and direct impact on SCM-related organizational performance.

Also, as the direct relationship between the two performance-constructs was found significant, both factors of SCM practices have an indirect and significant positive effect on organizational performance through operational.

On the research topic Supply Chain Management measurement and its influence on Operational Performance conducted by Priscila and Luiz, (2011), SCM measurements were considered as consists of information sharing, long term relations, cooperation and process integration as independent variables influences operational performance in case of Brazilian companies. The empirical results of this study provided evidence of a positive impact of SCM measurements on operational performance.

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.

Adebayo (2012) conducted study on SCM Practices in Nigeria Today: Impact on SCM Performance. The SCM practices considered in this paper were namely strategic supplier partnership, customer relations practices, information sharing, information quality and postponement. This paper provides empirical justification for five key dimensions of SCM practices identified and describes the relationship among SCM practices and SCM performance as well as the impact of these practices on SCM performance. The study thus showed that SCM practices definitely impacts SCM performance.

Mahbubul (2013) conducted research on Effects of Supply Chain Management Practices on Customer Satisfaction in the pharmaceutical industry of Bangladesh: Evidence from Pharmaceutical Industry of Bangladesh. The results of the study indicate that SCM practices as observed in the industry comprise three dimensions, namely, collaboration and information sharing, logistics design and IT infrastructure, and organizational culture (OC). However, while the first two exert their impact on customer satisfaction, OC does not have any influence on it.

Boddy et al. (1998) found that more than half of the respondents to their survey considered that their organizations had not been successful in implementing supply chain partnering; Spekman et al. (1998), noted that 60% of supply chain alliances tended to fail. Deloitte Consulting survey reported that only 2% of North American manufacturers ranked their supply chains as world class although 91% of them ranked SCM as important to their firm's success (Thomas, 1999). Thus, while it is clear that SCM is important to organizations, effective management of the supply chain does not appear to have been realized.

Bowersox and Closs (1996) argued that to be fully effective in today's competitive environment, firms must expand their integrated behavior to incorporate customers and suppliers. This extension of integrated behaviors, through external integration, is referred to by Bowersox and Closs (1996) as supply chain management. In this context, the philosophy of SCM turns into the implementation of supply chain management: a set of activities that carries out the philosophy. This set of activities is a coordinated effort called SCM between the supply chain partners, such as suppliers, carriers, and manufacturers, to dynamically respond to the needs of the end customer (Greene, 1991).

Availability of accurate and up-to-date marketing data at every node within the supply chain is a key to create a seamless supply chain (Childhouse and Towill, 2003; Balsmeier and Voisin, 1996; Towill, 1997; Turner, 1993). Lalonde (1998) regards information sharing as one of key element that characterizes a strong supply chain relationship. Yu et al. (2001) point out that the negative impact of the bullwhip effect on a supply chain can be reduced or eliminated by sharing information with trading partners. Lalonde (1998) regards information sharing as a key to creating strong supply chain relationships.

Lau and Lee (2000) maintain that creating an environment for controlled sharing of business data and processes, improves information sharing effectiveness among trading partners. However, there is the reluctance on the part of organizations in the supply chain to share information with each other. Information is generally viewed as providing an advantage over competitors, and organizations resist sharing with their partners (Vokurka&Lummus, 2000) due to the fear of giving away competitive and sensitive information such as inventory levels, production schedules (Lancioni et al., 2000; Ballou et al., 2000; Croom et al., 2000).

To sum up, this chapter discussed the theoretical foundation of various constructs used in this research: SCM practices, supply chain responsiveness, and competitive advantage. In the next chapter, the researcher present the research methodology used to collect and analyze the data and their reliability and validity.

## 2.8. Conceptual Framework

So Based on overall review of related literature, and particularly the work of Somuyiwa (2012), Lenny et al. (2007) and Ronald M. Salazar (2012), the following conceptual framework in which this specific study will be governed is formulated as follow.

Independent Variable

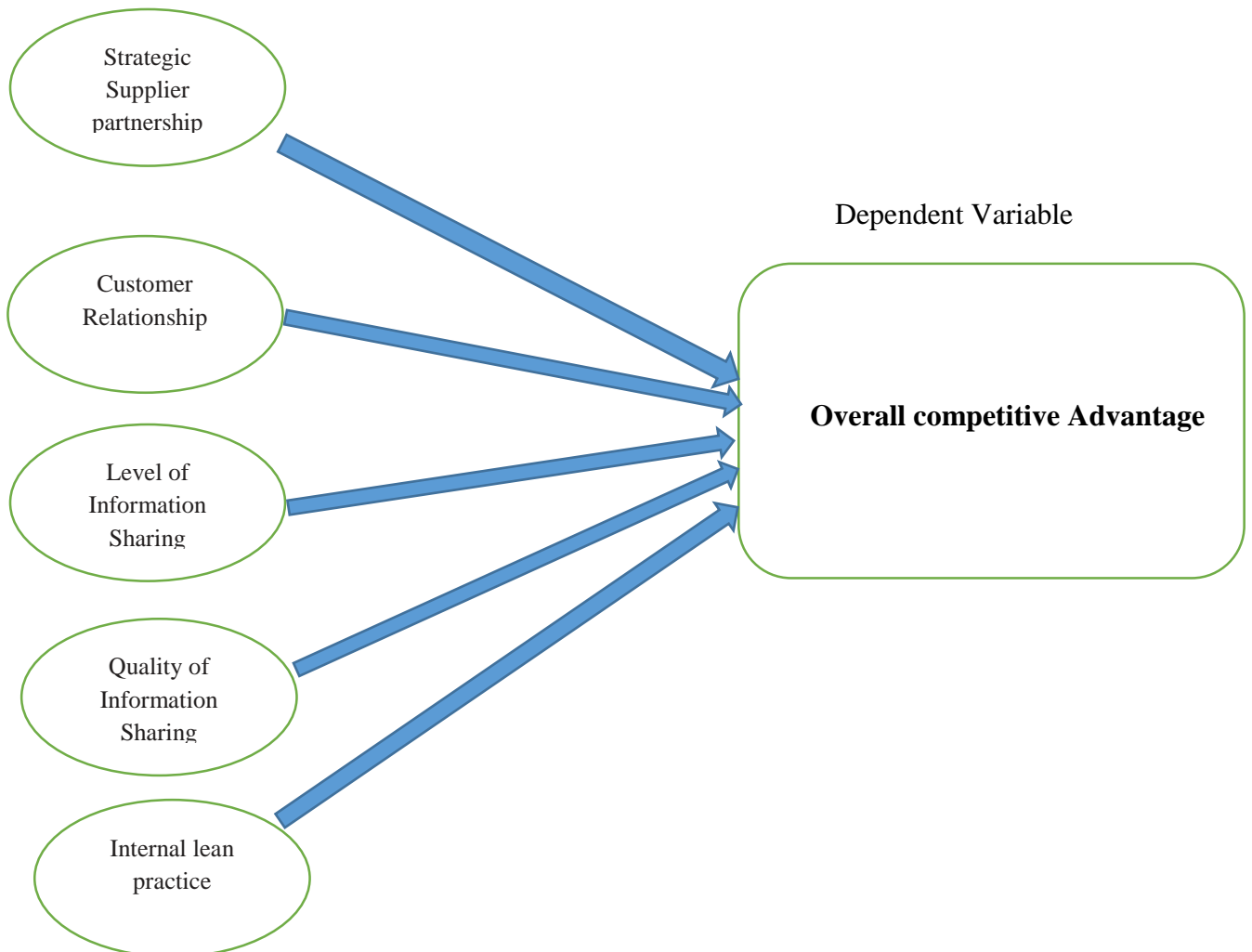


Fig 2.1 Conceptual framework for the study. Source: adapted from Li *et al.* (2006) and Lenny *et al.* (2007).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This part describes the methodology that was used in this study: the choice of particular research designs, data type and source of data, research approach, data gathering technique and instruments, sampling and sampling techniques and data analysis techniques along with an appropriate justification associated with each approach.

#### **3.2 Research Approach**

##### **Qualitative versus quantitative research approach**

Qualitative and quantitative research approaches differ basically in some major areas, including: their analytical objectives; types of questions posed; types of data collection methods used; types of data produced; degree of flexibility in study design (Mack et al., 2005).

In this research the effect of independent variables on dependent variables were assessed. Therefore this research employed quantitative approach to accomplish the overall aim of the study.

#### **3.3 Research Design**

Designing a study helps the researcher to plan and implement the study in a way that will help the researcher to obtain intended results, thus increasing the chances of obtaining information that could be associated with the real situation (Burns & Grove 2001). This study is an applied research which follows a correlation research approach in order to address the aforementioned objectives. It was conducted on one selected area called Habesha Brewery S.Co, in Addis Ababa, Ethiopia. The data that is used in the study are quantitative in nature which they are collected from primary sources. In this research the Cross-sectional field survey method was used to assess the effect of SCM practices on organizational performance of Habesha Brewery S.Co. In the cross sectional field survey, independent and dependent variables were measured at the same point in time by using a single questionnaire. In addition the study is also said to be associational in design because there is the intent to establish the relationship between dependent and independent variable of the

study. The sample was selected from the target population by using probability sampling particularly stratified sampling technique.

Correlation research aims to ascertain if there is a significant association between two variables (Reid, 1987). Hence, after the data is collected, it was selected by using correlation, particularly Pearson's coefficient of correlation, and regression analysis technique to show the effect of independent variables on the dependent variable.

### **3.4 Data Type and Source**

In this research primary data was used for the entire analysis of this study. The information was gathered through questionnaire from the selected sample of respondents/ employees of Habesha Brewery S.Co. The data that was collected from the respondents through questionnaires was used as primary data. According to Biggam (2008), primary data is the information that the researcher finds out by him/herself regarding a specific topic. It implies that the information resulting from it is more consistent with the research questions and objectives.

### **3.5 Population and sample**

#### **3.5.1 Target population**

According to Hair et al. (2010), target population is said to be specified group of people or object for which questions can be asked or observed made to develop required data structure and information. Therefore for this research the target populations were all employees of Habesha Breweries S. Co. Samples are some of the factory workers which are believed to be the right information sources for the subject under consideration.

#### **3.5.2 Sampling Techniques**

This study used probability sampling particularly stratified sampling technique. The target population for the study was classified into five strata based on the departments and section in the firm. Then the samples were selected from each stratum according to their proportion to the total population. Since the information that is required for the study needs different people who have knowledge and awareness about different supply chain management practices/dimensions and

competitive advantage of the firm. The departments were considered as strata, from which data was collected, that is: production department, local sales and purchasing department, general accounts, property administration, general service and technique department.

### 3.5.3 Sample Size

Malhortra and Peterson (2006) and Zikmund (2003) stated that, the larger the sampling size of a research, the more accurate the data generated. However, due to time and financial limitations and the nature of the population, sample determination method was developed by Carvalho (1984) was preferred to be used as a method to determine a sample size. According to the data obtained during the interview with director of the department of Human Resource of Habesha Brewery S.CO the number of employees are currently 430 out of which only 298 are grade 10 and above. As per carvalho's(1984) sample determination method the sample size was considered to be 80.

Table 3.1: Carvalho's(1984) Sample Size Determination

<b>Population size</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>
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: Carvalho (1984)

### 3.6 Data Collection Methods and Instruments

In this research primary data was gathered particularly using survey questionnaire. Questionnaires were distributed to sampled respondents. For the purpose of this study a quantitative methodology involving a close-ended questionnaire was used as the measuring instrument. The close-ended questionnaires can be administered to groups of people simultaneously, since they are less costly

and less time consuming than other measuring instruments. The standard questionnaire that was used to collect the necessary information regarding the study is adopted from the work of Li et al. (2006), Lenny et al. (2007), and Priscila and Luiz (2011). The Likert-type scale method uses a range of responses: ‘strongly disagree’, ‘disagree’, ‘Neutral’, ‘Agree’, and ‘Strongly Agree’, with a numeric value of 1-5, respectively. The usage of this particular scaling method ensured that the research study illustrated the ability to assess the responses and measure the responses quantifiably so that a pattern or trend may be produced in order to assess research hypotheses. As Neuman (2003) hypothesize, it is a process of asking many people the same questions and examining their answers.

### **3.7 Ethical Issues**

The study of Leedy & Ormrod (cited in Yohannes, 2014) shows that there are certain ethical issues that must be kept when undertaking a research. These are protections from harm, informed consent, right to privacy, and honesty with professional colleagues. Accordingly participants were not exposed to physical or psychological harm; participants participated only on a voluntary basis, right to privacy of participants was respected and findings were reported in complete and honest fashion.

### **3.8 Data Analysis and Techniques**

After the data was collected, inferential statistical technique was employed to analyze the information, as this study is quantitative in nature. The data was analyzed using SPSS version 20. The statistical tools were aligned with the objectives of the research. Inferential statistics is particularly the Pearson’s correlation was used to show the relationship and the strength/degree as well as direction of associations between variables. The other inferential statistics that was used is regression analysis so that to show interdependence of independent variables and dependent variable. Thus, both the strength of the relationship between variables and the influence of independent on dependent variable and statistical significance were assessed.

### 3.9 Validity and Reliability

#### 3.9.1 Assessing Reliability

According to Bryman and Bell (2007), reliability analysis is concerned with the internal consistency of the research instrument. As multiple items in all constructs were used, the internal consistency/reliabilities of SCM practices, operational performance, and organizational performance were assessed with Cronbach's Alpha and the reliability values for all constructs were confirmed as greater than 0.7, which are considered acceptable (Nunnally, 1978). The following tables shows the summary of reliabilities of all constructs.

Table 3.2: Reliability of SCM Practices, Operational Performance and Organizational Performance

<b>Variable</b>	<b>Reliability</b>
<b>a) SCM practices</b>	-
Strategic supplier partnership	.872
Customer relation	.747
Level of information sharing	.747
Level of information quality	.779
Internal lean practices	.846
<b>b) Overall competitive Advantage</b>	.788

#### 3.9.2 Analysis of Validity

The standard questionnaire that was used to collect the necessary information regarding the study is adopted from the work of Li et al. (2006), Lenny et al. (2007), and Priscila and Luiz (2011). It was also adapted from previous standard researches of Adane, (2014) on the study of “an assessment of supply chain management practices and its challenges on competitiveness: the case of mugher cement factory”. The questions were well tested by previous researchers and hence it was believed that using those questions increases validity of this research too. In addition two supply chain managers from selected companies (beverage industry) were approached to test how

they understand and respond to the questions in questionnaire. They all understood the questions and responded in the manner needed which has given confidence of validity. Moreover, one Masters Students of Logistics and Supply Chain Management (MALSCM) filled the questionnaire to strengthen its validity. Based on the comment the final questionnaire was amended accordingly. The test result was the same as what is perceived by the selected supply chain managers and professionals.

## **CHAPTE FOUR**

### **DATA PRESENTATION, ANALYSIS AND DISCUSSION**

#### **4.1 Introduction**

As discussed in previous chapter, this study attempted to examine the effect of supply chain management practices on firm's competitive position in case of Habesha Brewery S.co. Therefore, the findings of the study are presented and discussed in this chapter. The questionnaire were developed in five scales ranging from five to one; where 5 represents Strongly agree, 4 agree, 3 Neutral, 2 disagree, and 1 strongly disagrees. In order to assess the effect of supply chain management practices on firm's competitive position, Correlation and regression analysis were conducted for scale typed questionnaire. A total of 80 questionnaires were distributed to employees and all of the questionnaire were obtained valid and used for analysis. The collected data were presented and analyzed using SPSS (version 20) statistical software.

The study used correlation analysis, specifically Pearson correlation to measure the degree of association between different variables under consideration. Regression Analysis was also used to test the effect of independent variable on dependent variable.

#### **4.2 Inferential Statistics for SCM Practices and Firm's Competitive advantage**

##### **4.2.1 Correlation Analysis**

Correlations are the measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship. As described by Andy (2006), the correlation is a commonly used measure of the size of an effect: values of  $\pm 0.1$  represent a small effect,  $\pm 0.3$  is a medium effect and  $\pm 0.5$  is a large effect.

In this section, correlation analysis conducted in the light of each research objectives and hypotheses developed. The relationship between supply chain management practices and overall competitive advantage was investigated using correlation analysis. This provided correlation

Coefficients which indicated the strength and direction of relationship. The p-value also indicated the probability of this relationship's significance.

#### 4.2.1.1 Correlation Analysis between Constructs of SCM Practices and Overall Competitive advantage (OCA)

Table 4.1 Correlation Matrix between Construct of SCM Practices and Organizational Performance

		<b>SSP</b>	<b>CR</b>	<b>LIS</b>	<b>LIQ</b>	<b>ILP</b>	<b>OCA</b>
<b>SSP</b>	Pearson Correlation	1	.687**	.528**	.615**	.800*	.800**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	80	80	80	80	80	80
<b>CR</b>	Pearson Correlation	.687**	1	.628**	.656**	.763**	.763**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	80	80	80	80	80	80
<b>LIS</b>	Pearson Correlation	.528**	.628**	1	.683**	.727**	.727**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	80	80	80	80	80	80
<b>LIQ</b>	Pearson Correlation	.615**	.656**	.683**	1	.797**	.797**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	80	80	80	80	80	80
<b>ILP</b>	Pearson Correlation	.800*	.763**	.727**	.797**	1	.520**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	80	80	80	80	80	80
<b>OCA</b>	Pearson Correlation	.800**	.763**	.727**	.797**	.520**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	80	80	80	80	80	80

The correlation between constructs of SCM practices with overall competitive advantage was run as seen in the above table. The result of correlation matrix between each constructs and overall competitive advantage are analyzed as follow:

As it is shown in the table 4.1 above, strategic supplier partnership positively related to overall competitive advantage with a Pearson correlation coefficient of 0.800 ( $r=0.800$ ) and significance value is less than 0.001. This significance tells that there is genuine relationship between strategic supplier partnership and overall competitive advantage.

Table 4.1 also depict that as there is strong positive relationship between customer relation (CR) and overall competitive advantage with a Pearson correlation coefficient of 0.763 ( $r=0.763$ ) and significance value is less than 0.001. This significance tells that there is genuine relationship between customer relation and overall competitive advantage.

As the conducted Pearson correlation test indicated in the table 4.1, also there is significant positive correlation between level of information sharing (LIS) and overall competitive advantage with a Pearson correlation coefficient of 0.727 ( $r=0.727$ ) and significance value is less than 0.001. This significance tells that there is genuine Level of Information Sharing and overall competitive advantage.

For Pearson correlation test conducted to know whether there is significant correlation or not between Level of Information Quality (LIQ) and overall competitive advantage, table 4.1 clearly indicates that there is strong and positive relation between Level of Information Quality and overall competitive advantage. The result of correlation analysis between Level of Information Quality and overall competitive position is correlation coefficient of 0.797 ( $r=0.797$ ) and significance value less than 0.001 which indicates as there is genuine relation between them.

For Internal Lean Practices (ILP) and overall competitive advantage also Pearson correlation test was conducted and the results are shown in table 4.1. As it is shown in the table, there is positive and significant correlation between Internal Lean practices and overall competitive advantage with a Pearson correlation coefficient of 0.520 ( $r=0.520$ ) and significance value is less than 0.001. This significance tells that there is genuine relation between internal lean practices and overall competitive advantage

### 4.2.1.2 Correlation between SCM Practices and Overall Competitive advantage (OCA)

Table 4.2: Correlation Matrix between SCM Practices and OCA

		SCM practices	OCA
<b>SCM practices</b>	Pearson Correlation	1	.864**
	Sig. (2-tailed)		.000
	N	80	80
<b>OCA</b>	Pearson Correlation	.864**	1
	Sig. (2-tailed)	.000	
	N	80	80

\*\* . Correlation Is Significant At the 0.01 Level (2-Tailed)

Pearson correlation test was conducted between SCM practices (collective representative of five constructs of SCM) and overall competitive advantage. As it is shown in the table 4.2 above there is strong positive relationship between SCM Practices and overall competitive advantage with a Pearson correlation coefficient of 0.864 ( $r=0.864$ ) and significance value is less than 0.001. This significance tells that there is genuine relationship between SCM practices and overall competitive advantage.

### 4.3 Regression Analysis

This regression analysis was conducted to know by how much the independent variable explains the dependent variable. The regression was conducted between supply chain management practices (independent variable) and overall competitive advantage (dependent variable). The result of the regression analysis is presented as follows.

### 4.3.1 Multi Collinearity Test

Table 4.3: Multi collinearity test of independent variable

Model	Collinearity	Statistics
	Tolerance	VIF
Strategic supplier partnership	.111	9.021
Customer relation	.184	8.942
Level of information sharing	.236	4.232
Level of information quality	.151	6.620
Internal lean practices	.275	3.632

Dependent Variable: overall competitive advantage.

The result in table 4.3 show that the co linearity between independent variables has no series problem Since the value of tolerance for all independent variable is greater than 0.1 and all VIF is less than ten ( $VIF < 10$ ).

### 4.3.2 Normality Test

Table 4.4 normality test for dependent variable

Descriptives <sup>a,b,c,d</sup>			
	SCM_PR	Statistic	Std. Error
	Mean	3.92	.009
	95% Confidence Interval for Mean	Lower Bound	3.90
		Upper Bound	3.94
	5% Trimmed Mean	3.92	
	Median	3.88	
	Variance	.004	
OCA	4	Std. Deviation	.061
		Minimum	4
		Maximum	4
		Range	0
		Interquartile Range	0
		Skewness	.533
			.343
		Kurtosis	-1.792
			1.038

As stated in the work of George and Mallery (2010) which describes that the values for Asymmetry and Kurtosis between -2 and +2 are considered acceptable and the departure from normality is not extreme.

### 4.3.3 Regression Analysis between SCM Practices and OCA

Table 4.5: Regression Analysis between SCM Practices and OCA

Model	B	Std. Error	t-stat	p-value	Adjusted R Square
1	.864	0.086	10.02	.000	.777

*Predictor: SCM practices.*

**Dependent variable:** OVERALL COMPETITIVE ADVANTAGE

As shown in the table 4.4, there is causal relationship between SCM practices and overall competitive advantage. There might be many factors that can explain this variable, but our model, which includes SCM practices, can explain approximately 77.7% of it. This suggests that the remaining 22.3% of the variation in overall competitive advantage cannot be explained by those dimensions of SCM practices. The significant and positive  $\beta$  coefficient also implies that SCM practices have a positive influence on overall competitive advantage.

## 4.4 Discussion of the Results

The objective of this study is to determine the underlying dimensions of SCM practices and to empirically test a framework identifying the relationships among SCM practices and overall competitive advantage with special emphasis on Habesha Brewery S.CO. The literature has suggested that there is a relationship between SCM practices and competitive advantage. But, the dimensions used in expressing SCM practices and the measures of overall competitive advantage, are not directly the same with the framework used in the previous studies.

This study makes contributions by exploring the relationship between SCM practices and overall competitive advantage. The results of the study are discussed as follows:

This study revealed that there is significant positive relationship between SCM practices and overall competitive advantage. As the test results indicate there is positive relationship between

strategic supplier partnership and overall competitive advantage with correlation coefficient of 0.800 ( $r=0.800$ ) and significance value less than 0.001. The evidence from the review literature shows as 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). As Li *et.al* (2006) also described, effective partnerships with suppliers can be critical factor to guide competitiveness of organizations in the supply chain. So from this discussion it is possible to show as there is a relation between strategic supplier partnership and overall competitive advantage.

The other practice of SCM is customer relation, which is positively correlated with overall competitive advantage with Pearson correlation coefficient 0.763 ( $r=0.763$ ) and significant level less than 0.001. The finding of this study is consistent with the work of Carr and Pearson (1999) which describe that 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 that will guaranty in increasing market share. As pointed out by Day (2000), devoted relationships with customers are also the most sustainable advantage because of their essential barriers to competition. This statement indicates that customer relation plays vital role to enhance operational performance of the organization which enables to be competitive.

Level of information sharing is one among the constructs of SCM practices which has strong positive relationship with overall competitive advantage with correlation coefficient 0.727 ( $r=0.727$ ) and significant value less than 0.001. This result is consistent with the work of Lalonde (1998) 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. As Alireza et al. (2011) also stated, integration and coordination across supply chain can be well provided through information sharing. From 54 Alirezas' statement, it is possible to conclude as there is positive relationship between information sharing and overall competitive advantage of the firm in the supply chain.

Level of information quality is the other construct of SCM practices which has positive and

strong relation with overall competitive advantage with correlation coefficient 0.797 ( $r=0.797$ ) and significance value less than 0.001. This finding is supported by the work of Child house and Towill (2003). 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. As Ahmadi (2005) also describes, effective use of relevant and timely information by all the functional elements in the supply chain is considered as a competitive factor and distinctive, and this statement is very consistent with the finding of this study.

Internal lean practice is also one construct of SCM practices which is positively correlated with overall competitive advantage with coefficient 0.520 ( $r=0.520$ ) and significance level less than 0.001. As White (1993) describes, production of lean and timely is a production system that its aims are to optimize processes and production process by reducing waste and other inefficient factors. This has an impact on the organizational performance in long term. From this discussion, it is possible to conclude that there is relationship between internal lean practices and overall competitive advantage. Moslem *et al.* (2013), on the other hand, also described that internal lean practice can reduce waste and contribute to lower transaction cost. This realizes that as the organization implement lean practices the firm operational performance will be enhanced

In general SCM practices have strong positive relationship with overall competitive advantage with Pearson correlation coefficient 0.864 ( $r=0.864$ ) and significance value less than 0.001. It also explains 77.7 % overall competitive advantage. This finding is consistency with Adebayo (2012) who describes SCM practices 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, the prime aim of realizing the enhancement of overall competitive advantage in supply chain is to produce value whether in the form of products or services to end user.

## CHAPTER FIVE

### SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATION

#### 5.1 Summary

This study was aimed at analyzing the effect of supply chain management practices on overall competitive advantage of Habesha Breweries S. Co. The specific objectives of the study include identifying the existing practices of supply chain management from the five SCM practices perspectives, analyzing and assessing the effect of strategic supplier partnership on overall competitiveness, analyzing and assessing the effect of customer relationships on overall competitiveness, analyzing and assessing the effect of information communication on overall competitiveness. The study was conducted by using primary data. The primary data for this study was collected through questionnaire. The study used 80 respondents selected using probability sampling particularly stratified sampling technique.

#### 5.2 Findings

The research indicated that there is an application of Supply chain management practices in Habesha Breweries S. Co and it has a positive effect on the company's overall competitive advantage with significant positive correlation ( $r=0.864$ ) at significance level less than 0.001. In addition, 77.7% of variability of overall competitive advantage explained by SCM practices

The questionnaire analysis indicated that most of the respondents responded "disagree" for the question regarding actively involving their key suppliers in new product development. This implies that the company lacks such initiative during new product development.

A significant number of respondents also responded "disagreed" for the question regarding information exchange with their trade partners concerning events or changes that may affect the other partners. This implies that there is Poor information sharing between partners in a supply chain. This will result in poor coordination that will lead to many serious problems such as high inventory levels, inaccurate forecasts, low resource utilization, and high production costs. In general this will have huge impact on the overall competitive advantage of the company.

### **5.3 Conclusion**

The brewery industry in Ethiopia is becoming a very competitive environment where maximum efficiency and sustainable competitive advantage are critical for the success of a company. And, in the current business environment managing the supply chain is becoming an increasingly important practice to enhance competitiveness. From the findings above, we can conclude that the application of Supply Chain Management in Habesha Breweries S. Co has a positive effect on their overall competitive advantage. In addition, From the questionnaire analysis and data collected from the interview, we can conclude that even though Habesha Breweries S. Co is applying Supply Chain Management practices, it's hard to say that the company is effective in implementing them successfully.

### **5.4 Recommendation**

Even though, Habesha Breweries S. Co is doing well in implementing SCM practices effectively, it has also deficiencies. Therefore, the following recommendations are forwarded.

- From examining the response of questioners concerning strategic supplier partnership it is recommended for the company to give attention to its relationship with its suppliers and put more effort especially in involving suppliers in new product development process.
- 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). Hence Habesha Breweries S. Co should improve the level and quality of information sharing with trade partners.
- Based on the response to the questionnaire the company's products development needs improvement in terms of differentiation. It is therefore recommended that the company should effectively utilize supply chain management practices so that it can differentiate itself from its competitors
- According to the response of respondents during the interview and through questionnaire currently the company is not a price leader in the market. It is simply adjusting its prices based on the competitor sated prices. An effective supply chain management practice can deliver a significant level of production cost reduction. So the company should work hard

to get the best out of SCM practices to reduce its costs and enjoy being the price leader in the market.

In general, Habesha Breweries S. Co can improve its competitiveness by applying a quality supply chain management practices, and by evaluating and proactively implementing changes in response to the dynamic business environment. Because there are very strong global competitors in the market, there is a consequent increase in complexity of the brewery industry. So, the company should redesign and reconfigure its supply chain continually and consider the SCM practices as a core activity to enhance its competitiveness.

### **5.5 Implication for Future Research**

It should be noted that the SCM practices maybe influenced by contextual factors, such as the type of industry, firm size, a firm's position in the supply chain, supply chain length, and the type of a supply chain. For example, the level of customer relationship practice, measured by customer satisfactions and expectations, maybe higher for company located at the end of a supply chain (close to the consumer). The larger organizations may have higher levels of SCM practices since they usually have more complex supply chain networks necessitating the need for more effective management of supply chain. The level of information quality maybe influenced negatively by the length of a supply chain, information suffers from delay and distortion as it travels along the supply chain, the shorter the supply chain, the less chance it will get distorted.

In another way, the concept of SCM is complex and involves a network of companies in the effort of producing and delivering a final product, it is difficult to cover entire domain just in one study. Future research can expand the domain of SCM practice by considering additional dimensions such as geographical proximity, cross-functional coordination, logistics integration, and agreed supply chain leadership, which have been ignored from this study.

The future study can also test the relationships/dependencies among five dimensions of SCM practices. For example, information sharing may require the establishment of a strategic supplier partnership and customer relation.

This study focus on showing relationship between SCM practices and overall competitive advantage at organizational level, future research can study SCM issues at the supply chain level.

It will also be of interest to use the respondents from pairs of organizations at two ends of supply chains. By comparing different view of SCM practices from organizations across the supply chain, it is possible to identify the strength and weakness of the supply chain and also the best common SCM practice across the supply chain.

Future studies can also examine the proposed relationships by bringing some contextual variables into the model, such as organizational size and supply chain structure. For example, it will be intriguing to investigate how SCM practice differs across organization size. It will also be interesting to examine the impact of supply chain structure (supply chain length, organization's position in the supply chain, channel structure, and so on) on SCM practice and operational as well as organizational performance.





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Appendix  
ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE QUESTIONNAIRE

**Questionnaire to be distributed for the Employees of the Habesha Brewery S.Co**

Dear Respondents;

My name is Zelalem Abera conducting thesis entitled “**The Effect of Supply Chain Management Practices on Competitive Advantage of Habesha Brewery S.Co**” for partial fulfillment the University’s (Addis Ababa University) requirement set for awarding of a Master of Arts Degree in Logistics and Supply Chain Management. I would like to extend my deep appreciation to your company and the staff for the willingness in undertaking this valuable research. The information obtained from this questionnaire will be kept confidential and will not be used for any other purposes. Hence, I am kindly asking respondents to give your candid information.

NB:

- It is not necessary to write your name
- Try to address all the question given below
- For the closed ended questions use (v)mark for your choice in the given box

**Contact Address**

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Mobile: +251911478229 or e-mail: [zee01983@yahoo.com](mailto:zee01983@yahoo.com))

**Thank you for your cooperation!**

**Questions Directly Related with the Study**

**1. Supply chain management practices**

Here under the questions with regard to SCM practices of your firm, therefore, you are kindly requested to put “v” “X” mark on the box which represents your degree of agreement. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree, 6 = not applicable.

<b>Strategic supplier partnership:</b>	1	2	3	4	5
1. We consider quality as our number one criterion in selecting supplier.					
2. We include our key supplier in our planning and goal-setting activities.					
3. We regularly solve problems jointly with our supplier.					

4. We have been helping our suppliers to improve their product quality.					
5. We have continuous improvement programs that include our key suppliers.					
6. We actively involve our key suppliers in new product development processes					
<b>Customer relationship:</b>					
1. We frequently interact with customers to set reliability, responsiveness, and other standards for us.					
2. We frequently measure and evaluate customer satisfaction.					
3. We frequently determine future customer expectations					
4. We facilitate customers' ability to seek assistance from us.					
5. We periodically evaluate the importance of our relationship with our customers.					
<b>Level of information sharing:</b>					
1. We inform trading partners in advance of changing needs.					
2. Our trading partners share proprietary information with us.					
3. Our trading partners keep us fully informed about issues that affect our business.					
4. Our trading partners share business knowledge of core business processes with us					
5. We and our trading partners exchange information that helps establishment of business planning.					
6. Exchange of information with our partners (formal or informally) is frequent					

7. We and our trading partners keep each other informed about events or changes that may affect the other partners					
<b>Level of information quality:</b>					
1. Information exchange between our trading partners and us is timely.					
2. Information exchange between our trading partners and us is accurate.					
3. Information exchange between our trading partners and us is complete.					
4. Information exchange between our trading partners and us is adequate					
5. Information exchange between our trading partners and us is reliable.					
<b>Internal lean practices</b>					
1. Our firm reduces process set-up time (time required to prepare or refit equipment/workstation for production)					
2. Our firm has continuous quality improvement programs					
3. Our firm produces only what is demanded by customers when needed (e.g. JIT)					

## 2. Competitive Advantage

Here under the questions with regard to competitive advantage of your firm, therefore, you are kindly requested to put “√” “X” mark on the box which represents your degree of agreement. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree, 6 = not applicable.

<b>Price/cost</b>	1	2	3	4	5	6
1. We are able to offer prices as low or lower than our competitors.						
2. We run operation with less Production cost						
3. We offer competitive prices.						

<b>Quality:</b> an organization is capable of offering product quality and performance that creates higher value for customers.						
1. We are able compete based on quality.						
2. We offer products that are highly reliable.						
3. We offer products that are very durable.						
4. We offer high quality products to our customer.						
<b>Delivery dependability:</b> an organization is capable of providing on time the type and volume of product required by customer(s).						
1. We deliver the kind of products needed.						
2. We deliver customer order on time.						
3. We provide dependable delivery.						
4. Time to solve customer complaints is short.						
5. Customer order processing time is short.						
<b>Time to market:</b> an organization is capable of introducing new products faster than major competitors.						
1. We deliver product to market quickly.						
2. We have time-to-market lower than industry average.						
3. We are first in the market in introducing new products.						
4. We have fast product development.						