



ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND
ECONOMICS SCHOOL OF COMMERCE

The Effect of Supply Chain Management
Practice on Organizational Performance: the
case of BGI Ethiopia

In Partial Fulfilment of the Requirements for the Award of
Master of Arts Degree in Logistics and Supply Chain
Management

By: - Mesele Haile

Advisor: Teklegiorgis Assefa (Asst.prof)

JUNE 2017
Addis Ababa, Ethiopia

**ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND
ECONOMICS SCHOOL OF COMMERCE**

THESIS TITLE

**The Effect of Supply Chain Management
Practice on Organizational Performance: the
case of BGI Ethiopia**

By: Mesele Haile

College of Business and Economics School of Commerce

Department of Logistics and Supply Chain Management

APPROVED BY BOARD OF EXAMINERS

_____	_____	_____
Advisor	signature	date
_____	_____	_____
Internal Examiner	Signature	date
_____	_____	_____
External Examiner	Signature	date

DECLARATION

I, the undersigned, declare that, this study “**The Effect of Supply Chain Management Practice on Organizational Performance: the case of BGI Ethiopia**” 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.

Declared by:

Name_____

Sign_____

Date_____

Confirmed by Advisor:

Name_____

Sign_____

Date_____

ACKNOWLEDGMENT

First and foremost, all many thanks and praise is to Almighty God, most gracious and most merciful, for His safeguard and brightened direction of my personal and academic journey. I am indebted to extend my deep gratitude and many thanks to various individuals who helped me with the accomplishment of this thesis work. It makes me sense and feel proud to express my heartfelt gratefulness to some of them.

After that I would like to thank my thesis advisor Teklegiorgis Assefa (Asst.prof). By his constructive criticism, guidance and countless fruitful discussions, he used to bring back me to the track, recharge and stimulate my enthusiasm for pressing on further. Undoubtedly, his innovative comments greatly improved the content of this thesis.

Next, I would like to thank employees of BGI Ethiopia especially Mr. Mulugeta Zenebe for his invaluable advices and contribution for this paper. I would also like to thank all individuals and institutions who helped me in many ways starting from the data collection to finishing this thesis.

Finally, my heartfelt thanks go to my family especially my mother Haregewoyn Kebede, my wife, kuku & daughters, Meklit and Betselot for their understandings, endless support, invaluable ideas and genuine patience; and also to all my classmates and colleagues in Addis Ababa University. I owe all of you my sincere and deepest gratitude - thank you very much indeed!

Mesele Haile

Abbreviation/Acronyms

SCM: – Supply Chain Management

SCN:- Supply chain network

CRM: – Customers Relationship Management

SRM: – Suppliers Relationship Management

CLM: Council of Logistics Management

BGI: - Brasseries Glaciers Internationals

CSCMP: - Council of Supply Chain Management Professionals

IT: - Information Technology

SCMP: – Supply Chain Management Practice

SPSS – Statistical Package for Social Science

List of Table

Table	Page
Table 3.1: Sample Size Determination.....	29
Table 3.2: Sample size Determination for the Study	29
Table 4.1. Respondents' frequency distribution of Gender, Age and Job title	33
Table 4.2 mean and standard deviation for each indicator	36
Table 4.3 Reliability Test table.....	37
Table 4.4: Correlation matrix between constructs of SCM practices and CA.....	38
Table 4.5: Regression between competitive advantage (CA) and supply chain management practices (SCMP).....	39
Table 4.6: Correlation matrix between construct of Competitive advantage and organizational performance)	42
Table 4.7: Regression Analysis between competitive advantage and OP.....	43
Table 4.8: Summary Result of Hypotheses Testing.....	45

List of Figure

Figure	Page
Fig 1.1 Conceptual Framework for the Study.....	27
Fig 2.1 stakeholders in the Brewery Supply Chain.....	26

List of graph

Graph	Page
Graph 4.1: Educational qualification.....	34
Graph 4.2 Years stayed at the organization.....	35

Abstract:

One of the most significant changes in the paradigm of modern business management is that individual businesses no longer compete as solely autonomous entities, but rather as supply chains. In this emerging competitive environment, the ultimate success of the business will depend on management's ability to integrate the company's intricate network of business relationships. Effective supply chain management (SCM) has become a potentially valuable way of securing competitive advantage and improving organizational performance since competition is no longer between organizations, but among supply chains. Supply chain management (SCM) is one of the most important tools that companies use to develop their performances. The basic objectives of this research was to study the relationship between supply chain management practices and organizational performance of BGI Ethiopia, four key dimensions of SCM practices (strategic supplier partnership, customer relationship, level of information sharing and quality of information sharing) were used as independent variables. A sample of 47 employees and 6 distribution agents taken. A questionnaire was used as a research tool for the collection of data. Baseline data was gotten from employees and agents of the company and also from secondary data. Collected data were analyzed through SPSS version 23. Main findings of the study revealed that there is a low level of practical implementation of SCM practices in BGI Ethiopia and that only Customer relationship has strong significant influence on competitive advantage. Strategic supplier partnership, Level of information sharing and Level of information quality on competitive advantage has no significant influences on competitive advantage of the case company. Quality, Delivery dependability and time to market have strong significant influences on organizational performance.

Keywords: Organizational performance, Supply chain management, Supply chain management practices

Table of Contents

<u>Content</u>	<u>page</u>
<i>Declaration</i> -----	<i>i</i>
<i>Acknowledgement</i> -----	<i>ii</i>
<i>Abbreviation / Acronym</i> -----	<i>iii</i>
<i>List of Tables</i> -----	<i>iv</i>
<i>List of Figures</i> -----	<i>v</i>
<i>Abstract</i> -----	<i>vi</i>
CHAPTER 1: INTRODUCTION -----	1
1.1 Background of the study -----	1
1.2 Background of the company -----	2
1.3 Statement of the problem -----	4
1.4 Basic research questions -----	6
1.5 Research hypothesis -----	6
1.6 Objective of the study -----	7
1.6.1 General objectives -----	7
1.6.2 Specific objectives -----	7
1.7 Significance of the study -----	7
1.8 Scope of the study -----	8
1.9 Limitation of the study -----	8
1.10 Definition of terms -----	9
1.11 Organization of the paper -----	10
CHAPTER 2: LITERATURE REVIEW -----	11
2.1 Concepts and Definitions of Supply Chain Management -----	11
2.2 Supply Chain Management Practices/Measurements -----	14

2.2.1 Strategic Supplier Partnership	-----16
2.2.2 Customer Relationship	-----16
2.2.3 Internal Operation	-----17
2.2.4 Information Sharing	-----18
2.2.4.1 Types of Shared Information	-----18
2.2.5 Level of Information Sharing	-----19
2.2.6 Quality of Information Sharing	-----20
2.2.7 Information Technology (IT)	-----21
2.3 Competitive advantage	-----22
2.4 Organizational Performance	-----22
2.5 Training	-----23
2.6 Supply Chain Performances	-----23
2.7 Brewery Industry in transition: Embracing new Markets, Products and Consumers	24
2.7.1 Retailer influence	-----25
2.7.2 Supply Chain / Distribution	-----25
2.8 Research framework	-----27
CHAPTER 3: RESEARCH METHODOLOGY	-----28
3.1 Research Design	-----28
3.2 Population and Sampling Techniques	-----28
3.3 Sample Size	-----29
3.4 Data Collection Tools	-----30
3.5 Methods of Data Analysis	-----30
3.6 Ethical Considerations	-----31
3.7 Validity and Reliability	-----31

3.7.1 Assessing Reliability	-----	31
3.7.2 Analysis of Validity	-----	31
CHAPTER 4: Data Presentation Analysis and discussion	-----	32
4.1 Introduction	-----	32
4.2 Demographic characteristics	-----	32
4.3 Reliability and Validity Test	-----	36
4.4 Correlation and Regression Analysis	-----	37
4.4.1 Correlation between SCMP and CA	-----	38
4.4.2 Regression Analysis between SCMP and CA	-----	39
4.4.3 Correlation matrix between Construct of CA and OP	-----	42
4.4.4 Regression between CA and OP	-----	43
CHAPTER 5: Summary of Major findings Conclusion and Recommendation	-----	46
5.1 Summary of major Findings	-----	46
5.2 Conclusion	-----	46
5.3 Recommendation	-----	47
5.4 Implication for Future Research	-----	48
Reference	-----	50
Appendix I	-----	57
Appendix II	-----	60

1 INTRODUCTION

1.1 Background of the study

The understanding and execution of supply chain management (SCM) practices have a key role for an organization in staying competitive and for enhancing profitability in the increasingly competitive global market place Childhouse and Towill, (2003). 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 effective 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).

In today's business world, things are constantly changing; and to stay competitive within the industry, Organizations increasingly find that they must rely on effective supply chains, or networks, to compete in the global market and networked economy. In Peter Drucker's (1998) new management paradigms, this concept of business relationships extends beyond traditional enterprise boundaries and seeks to organize entire business processes throughout a value chain of multiple companies.

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. The goal of SCM is to integrate both information and material flows seamlessly across the supply chain as an effective competitive weapon. Childhouse and Towill, (2003).

The concept of SCM has received increasing attention from academicians, consultants, and business managers alike Tan and Lyman (2002). 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. 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. Various theories have offered insights on specific aspects or perspectives of SCM, such as industrial organization and associated transaction cost analysis, resource-based and resource-dependency theory, competitive strategy, and social–political perspective Stern and Reve (1980).

Foreign investment in Ethiopia's beverage industry is showing a huge increase as global groups are increasingly attracted to the industry and multinational beverage companies are continuing to increase their presence in rapidly growing economy (Ethiopian Food, Beverage and Pharmaceuticals Industry Development Institute, 2016).

The beer industry has been through much change in recent years with numerous entrants in the better beer segment and consolidation among larger brewers. BGI, Dashen, Heineken, Meta, Raya, Habesha and Zebidar are the seven beer companies operating in Ethiopia which collectively run 11 factories. Four giant liquor and two wineries also make part of Ethiopia's growing beverage industry. Since the industry is extremely competitive pursuing effective supply chain management is the best methodology to reduce costs, increase customer satisfaction, better utilize assets, and build new revenues.

1.2 Back ground of the company

St. George is the first Brewery in Ethiopia and it was established in 1922 .The factory was pioneers in Ethiopia’s industrial development. Over two decades passed, since Ethiopia has started privatization of its most government owned business sectors by transferring ownership to local investors and international companies. This privatization policy put the current market in a fierce competition between companies. Especially, the brewery industry is the most affected industry by the privatization policy.

Currently BGI Ethiopia is facing a strong competition from international brands and successful international companies like Heineken and Diageo. Implementing effective supply chain management is very important for achieving competitiveness through competitive

advantage. In the current business environment Supply chain management is considered as one of the crucial element in the competitiveness of a company.

BGI Ethiopia Limited Company was established as per the commercial code of Ethiopia in 1996 G.C. The primary objective of the company is to produce and distribute quality bottle and draught beer to local and foreign market. The company was formed by two shareholders with a total paid-up capital of Birr 161,989,000.00.As stipulated in the company's memorandum of association the name, address & distribution of shares among shareholding members.

BGI Ethiopia is subsidiary company of BGI (Brasseries et Glaciers Internationals).The holding Company is Group Castel, which was founded by the 9 brothers and sisters of the Castel family in 1949.The Castel group's activities in the beer and soft drinks sector are mainly managed through the operational subsidiary BGI.

BGI Ethiopia inaugurated its first brewery located in Kombolcha in the year 1998.In the same year; the company acquired Saint George Brewery, the first and oldest brewery in the country, from Ethiopian Privatization & Public Enterprises Supervising Agency in the same year.

In order to satisfy local market needs BGI Ethiopia introduced high gravity brewing process and inaugurated the new bottling line at the Saint George Brewery in 2006. However, the demand for beer has shown significant growth over recent years. Recognizing capacity limitation to address the demand, BGI inaugurated (2011) the third brewery in Hawassa, as a careful strategically move to reach the southern parts of the country.

BGI Ethiopia has production capacity of 3.5M hectolitre attainable capacity totally and Addis Ababa plant has 1.4MHL capacity and producing three brands of products (Castel, St. George and Amber beer) both in draft and bottle. In Addis there are 6 distribution territories to cover all parts of the city from east to west and from north to south including central Addis Ababa. Since more than 40% of total sales is in Addis Ababa, the gap is covered from the two factories (Kombolcha and Hawassa).

BGI Ethiopia Brewery Marketing Manager Isayas Hadera indicated the emerging middle class income and population trend as key growth drivers of alcoholic beverage companies in Ethiopia. "The domestic market is rising from 15 to 20% every year. We are witness's rapid growth

in the previous decade which has allowed us get a better market share in the country," he said. With annual production capacity of three million hectoliters of beer, BGI is exporting beer to South Sudan, Djibouti, USA, Israel and Europe, which is showing increment every year (Fortune news January 18, 2015 [Vol 15 ,No 768]). However BGI Ethiopia is facing an intense competition from competitors these days and this paper was conducted to redirect the company's attention to the supply chain practice as a core activity and will try to examine the effect of supply chain practice to competitive advantage and organizational performance.

1.3 Statement of the problem

To remain competitive and to sustain growth, brewery companies would need to watch out for the trends that will shape the industry over the next few years and understand the challenges so that they may be able to potentially turn them into opportunities that exist there in the supply chain management and directed their effort towards developing a competitive supply chain based on speed, flexibility, innovation, quality & responsiveness had significantly improve customer service and their profitability. Therefore, the primary goal of supply chain management is to enhance competitive performance by closely integrating the internal functions within a company & closely linking them with external operations of suppliers, customers, and other channel members (Kim 2006).

The brewery industry is extremely competitive and also faces new opportunities and challenges. Changing consumer demands and preferences require new ways of maintaining current customers and attracting new ones. In a majority of beer markets, there has been a steady shift towards premium brands that offers health benefits. As a result there is a focused switch by brewers from mainstream brands to premium brands to enhance their growth prospects. This in turn has resulted in an increasing need to have an efficient supply chain network and to reduce operating expenses.

Therefore the problems of this study were to determine the relationship between variables of SCM practices and competitive advantage, and organizational performance of BGI Ethiopia Addis Ababa. The selected variables are strategic supplier partnership, customer relationship, level of information sharing and quality of information sharing.

Much of the current theoretical/ empirical research in SCM focuses only on the upstream or downstream side of the supply chain, or certain aspects/perspectives of SCM (Li et al., 2006). Topics such as the role of relationships with suppliers in improving supplier responsiveness Handfield and Bechtel, (2002), and the antecedence and consequences of buyer-supplier relationship Chen and Paulraj, (2004) have been researched on the supplier side. Studies such as those by Clark and Lee (2000), and Alvarado and Kotzab (2001), 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. (Tan et al. 1998) explore the relationships between supplier management practices, customer relations practices and organizational performance; Frohlich and Westbrook (2001) investigate the effects of supplier-customer integration on organizational performance; (Tan et al., 1998) study SCM and supplier evaluation practices and relate the constructs to firm performance; Min and Mentzer (2004) develop an instrument to measure the supply chain orientation and SCM at conceptual levels; Gyaneshwar (2012) study operational performance through SCM Practices and Moslem (2013) study the impact of supply chain management practices on competitive advantage.

However, the relationship of SCM with performance cannot be regarded as conclusive (Cousins et al., 2006). Despite the increase of empirical research in the last few years, important differences in research design undermine comparability: lack of consensus about the definition and dimensionality of the SCM practice (s), use of different units of analysis, and different approaches to performance measurement. As far as the knowledge of the researcher is concerned, there is no empirical study that is conducted in the area of SCM practices and firms performance (i.e. from perspectives of strategic suppliers partnership, customers relationships, level and quality of information sharing on organizational performances) which incorporate upper and down streams on brewery companies in Ethiopia particularly on BGI Ethiopia. Therefore, since the effort to achieve generalization of the causal relationship between SCM practices and Organizational performance calls for empirical confirmation in diverse environments, especially emerging economies, this paper is to contribute to the debate by testing the relationship between SCM practices and organizational performance in the case company.

1.4 Basic research questions

Hence, the study was primarily aimed to answer, what are the practices of SCM in BGI Ethiopia and more specifically to answer the following basic research questions.

1. What do the current supply chain managements practices of BGI Ethiopia look like?
2. What are strengths and weaknesses of supply chain management practices of the firm?
3. How does effective SCM practice related to Organizational Performance of BGI Ethiopia?
4. How does supply-chain management practice affect the organizational performance of BGI?

1.5 Research hypotheses

The SCM framework developed in this study proposes that SCM practice has a direct impact on the overall financial and marketing performance of an organization. SCM practice is expected to increase an organization's market share, return on investment (Shin et al., 2000), and improve overall competitive position (Person 1999).

SCM practices has impact on competitive advantage of an organization. They are expected to improve an organization's competitive advantage through price/cost, quality, delivery dependability, time to market, and product innovation. Prior studies have indicated that the various components of SCM practices (such as strategic supplier partnership) have an impact on various aspects of competitive advantage (such as price/cost). For example, strategic supplier partnership can improve supplier performance, reduce time to market (Ragatz et al., 1997), and increase the level of customer responsiveness and satisfaction (Power et al., 2001).

Information sharing leads to high levels of supply chain integration Jarrell JL (1998) by enabling organizations to make dependable delivery and introduce products to the market quickly. Information sharing and information quality contribute positively to customer satisfaction and partnership quality Lee and Kim (1999). The above arguments lead to

Hypothesis 1. Firms with high levels of SCM practices will have high levels of competitive advantage.

Having a competitive advantage generally suggests that an organization can have one or more of the following capabilities when compared to its competitors: lower prices, higher quality, higher dependability, and shorter delivery time. These capabilities will, in turn, enhance the organization's overall performance (Mentzer 2000). Competitive advantage can lead to high levels of economic performance, customer satisfaction and loyalty, and relationship effectiveness.

Brands with higher consumer loyalty face less competitive switching in their target segments thereby increasing sales and profitability (Moran 1981). An organization offering high quality products can charge premium prices and thus increase its profit margin on sales and return on investment. An organization having a short time-to-market and rapid product innovation can be the first in the market thus enjoying a higher market share and sales volume. Therefore, a positive relationship between competitive advantage and organizational performance can be proposed.

Hypothesis 2. The higher the level of competitive advantage, the higher the level of organizational performance. The above two hypotheses, taken together, support the SCM framework presented above.

1.6 Objective of the study

1.6.1 General objective

The major objective of this study is to investigate the effect of supply chain management practices in terms of strategic supplier partnership, customer relationship, level of information sharing and quality of information sharing and to determine whether supply chain practices has impact on competitive advantage and organizational performance of BGI Ethiopia.

1.6.2 Specific objectives

- 1) To identify the major challenges and causes of implementing effective Supply Chain Management practice in the study area.
- 2) To determine the relationship between supply chain management practices with competitive advantage and organizational performance of the company.
- 3) To present possible Recommendations.

1.7 Significances of the study

Investigating the practices of supply chain management and barriers for its effective implementation in this complex and dynamic business world is believed to have the following importance's to the academicians, corporate managers, policy makers; and generally for business practitioners, and specifically, for the case company.

Specifically, this study has the following main significances:

It paves the way for educators or training institutions to consider when designing training on the issues relating to the SCM and it also serves as a spring board to conduct further and more detail

study in the area; this is because at the current situation there are only few researches were conducted in the related area in Ethiopia, especially in the brewery industry.

1.8 Scope of the Study

SCM encompasses vast areas of managerial practices. However, it is difficult and unmanageable to conduct the study in all areas that summarizes SCM in terms of time, finance, and research manageability. Therefore, the scope of this study is delimited to SCM practices and organizational performance of one selected brewery factory in terms of topic.

The subject scope of this study is also delimited to the company's point of reference towards strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing. In terms of competitive advantage the study was delimited to (price/ cost, quality, delivery dependability and time to market) and organizational performance (which incorporate market share, return on investment, the growth of market share, the growth of sales, growth in return on investment, profit margin on sales and overall competitive position). The area of the study is also delimited to the case company i.e., BGI Ethiopia Addis Ababa branch.

1.9 Limitations of the Study

It is difficult to cover entire domain of supply chain just in one study. The research sample didn't incorporate all the supply chain participants namely: the suppliers and customers due to time and financial constrained so that it couldn't 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.

1.10 Definition of terms

Strategic supplier partnership:	The long-term relationship between the organization and its suppliers. It is designed to leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits. Tan KC, Lyman SB, Wisner JD. Supply chain management: a strategic perspective. <i>International Journal of Operations and Production Management</i> 2002;
Customer relationship:	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. Moberg CR, Cutler BD, Gross A, Speh TW. Identifying antecedents of information exchange within supply chains. <i>International Journal of Physical Distribution and Logistics Management</i> 2002;32(9):755–70
Level of information sharing:	The extent to which critical and proprietary information is communicated to one's supply chain partner. Child house P, Towill DR. Simplified material flow holds the key to supply chain integration. <i>OMEGA</i> 2003.
Quality of information sharing:	Refers to the accuracy, timeliness, adequacy, and credibility of information exchanged. Moberg CR, Cutler BD, Gross A, Speh TW. Identifying antecedents of information exchange within supply chains. <i>International Journal of Physical Distribution and Logistics Management</i> 2002.
Competitive advantage:	The extent to which an organization is able to create a defensible position over its competitors . It comprises capabilities that allow an organization to differentiate itself from its competitors and is an outcome of critical management decisions. Porter ME. <i>Competitive advantage: creating and sustaining superior performance</i> . New York: The Free Press; 1985.
Organizational performance:	Refers to how well an organization achieves its market-oriented goals as well as its financial goals. The short-term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain. Yamin S, Gunasekruan A, Mavondo FT. Relationship between generic strategy, competitive advantage and firm performance: an empirical analysis. <i>Technovation</i> 1999.
SCM practices:	Set of activities undertaken in an organization to promote effective management of its supply chain. Describes the latest evolution of SCM practices, which include supplier partnership, outsourcing, cycle time compression, continuous process flow, and information technology sharing. Donlon JP. <i>Maximizing value in the supply chain</i> . Chief Executive 1996.
Supply chain:	Is all inter-linked resources and activities needed to create and deliver products and services to customers (Sunil, 2004).
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).

1.11 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 were presented. In chapter four presents results and discussion of the study and finally, chapter five presents the major findings, conclusions and forwarded suggestions.

2. REVIEW OF THE RELATED LITERATURE

2.1 Concepts and Definitions of Supply Chain Management

Supply chain management was defined by different authors, Simchi and Kaminsky (2000) define supply chain management as “the integration of key business processes among a network of interdependent suppliers, manufacturers, distribution centers, and retailers in order to improve the flow of goods, services, and information from original suppliers to final customers, with the objectives of reducing system-wide costs while maintaining required service levels”. The Council of Supply Chain Management Professionals CSCMP (2004) defines SCM as: “SCM encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities, including coordination and collaboration with suppliers, intermediaries, third-party service providers, and customers”. (Cooper et al., (1997) define SCM as the management and integration of the entire set of business processes that provides products, services and information that add value for customers. The term "supply chain management" first appeared in 1982 (Oliver & Webber). Around 1990, academics first described SCM from a theoretical point of view to clarify the difference from more traditional approaches and names (such as logistics), to managing material flow and the associated information flow (Cooper et al., 1997). The term supply chain management has grown in popularity over the past two decades, with much research being done on the topic (Ashish, 2007).

The concept of SCM has received increasing attention from academicians, consultants, and business manager’s alike Feldmann & Muller (2003), (Tan et al., 2002), (Van, 1998). 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 (Jones, 1998). The concept of SCM has been considered from different points of view in different bodies of literature (Croom et al., 2000) such as purchasing and supply management, logistics and transportation, operations management, marketing, organizational theory, and management information systems.

(Tan et al., 1999) attempted to link certain supply chain management practices with firm performance. In particular, they examined the effects of quality management, supply base management and customer relations practices on firm financial performance. They found that some aspects of quality management – use of performance data in quality management, management commitment to quality, involvement of quality department, and social responsibility of

management all were positively related to firm performance (Gillyard, 2003). Managing the supply base was found to have a significant impact on firm growth but not on overall performance. The significance of supply chain management highlights the need for companies to actively manage their supply chain to maximize their performance. As (Mentzer et al., 2001) said, a supply chain will exist whether a firm actively manages it or not.

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 in its essence assumes that firms set up alliances with members of the same chain (i.e., upward stream, supplier, and downward stream,

customer) to improve its competitive advantage revealed by superior operational performance of all chain members.

Regarding definitions of SCM, many definitions have also been used to explain the term. The frequency with which the term SCM is used in today's environment would suggest that it is a well understood concept accompanied by an accepted set of managerial practices. However, definitions of and approaches to SCM vary substantially from organization to organization because it is influenced by many different fields and researchers in the area of SCM. (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.

2.2 Supply Chain Management Practices/Measurements

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 evolution of SCM practices, which include supplier partnership, outsourcing, cycle time compression, continuous process flow, and information technology sharing. (Tan et al., 1998) use purchasing, quality, and customer relations to represent SCM practices, in their empirical study. (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. 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. 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, four dimensions, including strategic supplier partnership, customer relationship, level of information sharing and quality of information sharing, are selected for measuring SCM practice. The four 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). 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) and Postponement Concept 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 present study, therefore, proposes SCM practices as a multi-dimensional concept.

2.2.1 Strategic Supplier Partnership

It is defined as the long term relationship between the organization and its suppliers. Strategic supplier 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). Sadikoglu 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 operational capabilities of individual participating organizations to help them achieve significant ongoing benefits (Noble 1997; 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 of 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).

2.2.2 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 (Claycombb 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), devoted 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).

Besides, the main goals of SCM are customer satisfaction and their loyalty as Stalk and Hout (1990), 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). 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 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 performance, 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.

2.2.3 Internal Operation

In addition to the upstream and downstream integration, SCM also emphasize on the importance of both effectiveness and efficiency of firm's internal operations on its performance. This is due to a significant element of SCM practice is an internal operations and they are the basis for developing a competitive advantage before embarking into external integrations. Poor internal operations can lead to failure in coordinating with external partners Handfield and Nichols (1999).

Internal operation summarizes all activities related to production system and internal, logistics flow Handfield and Nichols (1999). To judge the SCM practice as an effective and value

adding the internal operation should be flexible in responding to changing market needs, which is expressed on the basis of agility principles. This means that, a production system must be able to perform rapid change over in both order patterns and mass customization Lambert and Cooper (2000). Power and Soha (2001) find that technology utilization, continuous improvement and computer based automation in manufacturing are some of characteristics of agile/flexible organization.

Thus, the effectiveness of SCM can be examined by the ultimate effect it would have on customer satisfaction through responsiveness and lower price resulting from lean internal operations. Automated orders and automated productions are the key enablers to realize the quick response program Perry and Sohal (2000).

2.2.4 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 (Lazarevic, et al., 2007). 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.

2.2.4.1 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).

2.2.5 Level of Information Sharing

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 Rahman 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.

2.2.6 Quality of Information Sharing

Information quality includes an aspect such as accuracy, timeliness, adequacy and information exchanged credibility (Tan et al., 1998). 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 Childhouse 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. By determine production schedules, do raw material supply and the schedule of production, distribution of products as well is planned through sharing quality information (Chin et al., 2010). 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.

2.2.7 Information Technology (IT)

Nowadays, since IT is involved in every step of operation in each company, therefore it is not surprising that organizations' Supply Chain Management supported by adopting IT. (Talluri, 2000) makes the comment that the advances in IT systems have given opportunities for organizations' to transform the way they manage their business.

In SCM, IT is highly regarded as a major enabler in achieving effective SCM. As a supply chain spans many organizations in developing products to customers both up-stream, down-stream and many functional areas within a company, the implementation of IT allows the companies to increase communication and coordination of various value adding activities with their partners and between functions within their own operation (Simchi et al., 2000).

In addition, to advance development of the internet technology offers significant opportunities for cost reduction, increasing flexibility, increasing response time, and improving customer services Lee and Whang (2001). The benefits of IT in SCM do not come from the capabilities of IT itself; instead the significant benefits come from the combination of its application with corporate strategy and the nature of relationship between companies. IT will improve collaboration and coordination between supply chain members in the environment where trust and long-term commitment between partners exist (Chae, 2005). (Li et al., 2005) reviled that, the objectives of IT in SCM are; to provide the information availability and visibility to supply

chain partners, to enable the collaboration with organizations in the supply chain and to allow the decision making based on the total supply chain information.

2.3 Competitive advantage

Competitive advantage is the extent to which an organization is able to create a defensible position over its competitors McGinnis and Vallopra (1999). It comprises capabilities that allow an organization to differentiate itself from its competitors and is an outcome of critical management decisions (Tracey et al., 1999). The empirical literature has been quite consistent in identifying price/cost, quality, delivery, and flexibility as important competitive capabilities. In addition, recent studies have included time-based competition as an important competitive priority.

Research by Stalk (1988) and Vesey (1991), identifies time as the next source of competitive advantage. On the basis of prior literature, (Koufteros et al., 1997), describe a research framework for competitive capabilities and define the following five dimensions: competitive pricing, premium pricing, value-to-customer quality, dependable delivery, and production innovation. These dimensions are also described by Tracey (1999). Based on the above, the dimensions of the competitive advantage constructs used in this study are price/cost, quality, delivery dependability, product innovation, and time to market.

2.4 Organizational Performance

Organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals (Li et al., 2006). The short-term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain (Tan et al., 1998). Financial metrics have served as a tool for comparing organizations and evaluating an organization's behavior over time (Holmberg, 2000). Any organizational initiative, including supply chain management, should ultimately lead to enhanced organizational performance. A number of prior studies have measured organizational performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position

(Vickery et al.,1999; Stock et al., 2000; and Li et al., 2006). 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, profit margin on sales and overall competitive position are adapted as organizational performance measures in this study.

2.5 Training

Effective SCM requires managers to have an understanding of supply chain dynamic and ability to use information based tools. Lee and whang (2000) argue that information visibility throughout a supply chain will bring significant impact if companies do not have a capability to utilize the information in effective ways. Hence companies need to consider the skills requirements and education when integrating their value-adding activities with their partners Gattoma and Clark (2003).

The major concept of SCM is collaboration and seamless integration between various value adding activities with in individual companies and across different organizations along a supply chain. Beginning this concept in to practice requires significant changes in corporate culture as well as a new level of human performance. Successes full implementation of SCM concept largely depends on human aspects of organizations (Bowersox et al., 2000; Mentzer et. al., 2004).

The review literature of different studies indicates that, there are various complicated and sophisticated operations and decision making those primarily demand knowledge based employees. To this end, organizations are supposed to enhance and maintain existing skills and knowledge of employees. Continuous development and skill building activities demand are sources of competent employees (Lazarovic et al., 2007).

Therefore, effective training and knowledge based learning is essential in developing and maintaining these new SCM skills.

2.6 Supply Chain Performances

Empirical studies by Ross (1998), confirmed the theory that, SCM practices considerably improve companies performance. Moreover, the results specifically highlight that IT and information sharing significantly contributes to more performance measures than supplier and customer relationship practice. With regard to the relationship between SCM strategies and operational performance, (Tan et al., 2002) observed that the following SCM-related strategies

were significantly related to overall product quality and overall customer service: namely determination of customer's needs, reduction in response time and supplier delivery time, improvement of integration activities, trust among supply chain members, communication of future needs, use of information sharing, and assistance of suppliers in JIT (just in time) capability.

The supply chain performance is now increasingly perceived as critical means for attaining a competitive edge over others competitors. The traditional way of measuring performance based on cost alone has giving way to more innovative approach incorporating non-cost performance measures like quality, flexibility, time, and the need for customer satisfaction (Ashish, 2006).

The driving force for a supply chain performance is the supply chain performance enablers: delivery speed, new product introduction, collaboration across enterprise boundary, data interchange, flexibility, and customer responsiveness. This in turn leads to a positive effect on the overall cost, lead time, quality, and service level, over all capacity, which constitutes supply chain determinants. The current market situations require increasing service levels and quality in union with low cost and small lead times (Ashish, 2006).

Supply chain performance is a two dimensional definition which consists of effectiveness & efficiency. Effectiveness is about 'doing the right things' & efficiency is about 'doing things right'. Supply chain effectiveness relates to the preference of the end-consumer & the sole indicator is consumer satisfaction (David et al., 2006). Therefore, customer satisfaction is comes from meeting customer requirements, fitness for use, continuous improvement, elimination of waste, customer support, flexibility to meeting demands, design and engineering, quality assurance, inventory and etc (Eyong, 2009).

2.7 Brewery Industry in transition: Embracing new Markets, Products and Consumers

The brewery industry is going through a particularly challenging phase given the current economic, social, and cultural changes globally. While technology advancements can help address these massive structural shifts, there needs to be a deeper comprehension of the strategic requirement before embarking on technology and business initiatives. In this challenging environment, it becomes imperative that the industry completely understands the emerging industry trends and technology developments. *Jones, Lester. "Beer Industry Update, 2008".*

This paper discusses the impending changes that brewery players would need to get familiarized to in the coming years and how they could exploit these opportunities to gain competitive advantage. Supply chain management, operational issues faced by the brewery industry, and how technology can help mitigate potential risk has been particularly emphasized.

2.7.1 Retailer influence

Large retailers continue to demand better service and shorter order-to-delivery cycles from breweries, mindful of their significance to beer distribution. With higher standards being demanded in terms of operational excellence, breweries are under pressure to come up with initiatives that will not only squeeze their margins but also require significant capital investments. This necessitates that they make their supply chain agile to drive cost efficiency.

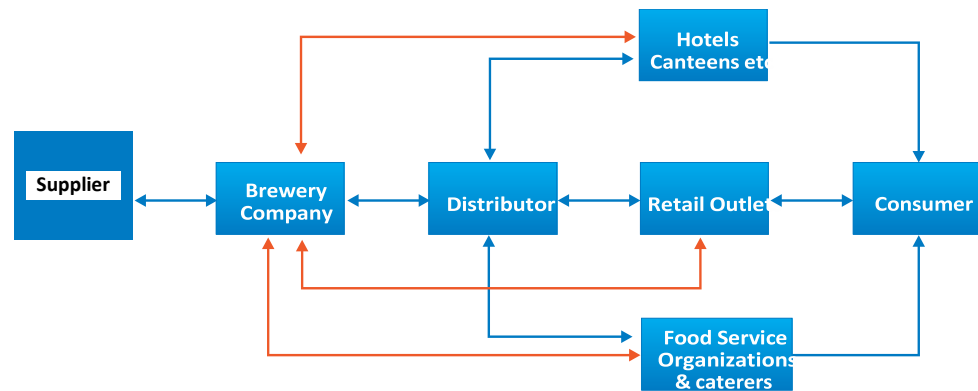
Retailers traditionally have a deeper understanding of consumer behavior because of the nature of their business. This plays to their advantage in terms of pricing power and providing prime shelf spaces to beer manufacturers who provide maximum sales. This also necessitates that manufacturers collaborate better with retailers to understand their end consumer and also to create effective trade promotion strategies. With the current outlook set to continue, the support funds that beer manufacturers spend towards retail can only continue to increase. They may potentially end up spending significant sums in retailer collaboration and trade promotion activities, and also actively look for IT support to help analyse their returns from this investment (EuroMonitor Report Global Beer Market. |Feb 2010).

2.7.2 Supply Chain / Distribution

The traditional distribution system in the brewery industry involves a three-tier structure with delivery enabled through value-added distributors. This structure is of particular relevance to the North American market. These distributors merchandise, sell, and deliver the product to the end consumers. This structure often creates a conflict of interest between the value-added distributors and the beer manufacturers.

The manufacturer's profits from increased sales is at the expense of distributors' margins whereas distributors could profit by selling products at higher profit margins, which forces the manufacturer to cut or optimize their own costs. The diagram below captures the complex interactions among the various stakeholders in the Brewery Supply Chain (EuroMonitor Report. Global Beer Market. | Feb 2010).

Figure 2.1 stakeholders in the Brewery Supply Chain



Source: EuroMonitor Report. Global Beer Market. | Feb 2010

The conflicting interests of manufacturers, distributors and retailers coupled with government regulations force manufacturers to reevaluate their supply chain systems to address some of the following challenges:

- Address commodity price volatility
- Manage expanding portfolio of multiple variants of different products/stock keeping units (SKUs) and eliminate non-profitable variants
- Provide higher service levels demanded by distributors and retailers
- Comply with government regulations in batch management and traceability requirements
- Accurately understand the complexities of working in emerging markets and the high cost to serve variation between urban and rural markets

The global diversification of operations is forcing brewers to adopt a model that will work on the concept of a centralized supply chain, which looks at integration of Sourcing, Distribution, and Manufacturing processes across various markets and geographies. The primary reason for adopting such a model is to have a supply chain that provides tangible improvement in logistic networks by rationalizing warehousing and transportation capacities. This ultimately enables the brewery organization to establish well in local as well and new markets, through cost competitiveness, increased focus on consumer-facing activities and faster product launches.

<http://www.tcs.com/consumerproducts> global.cpgsolutions@tcs.com

2.8 Research framework

This conceptual framework was developed for the purpose of this study. Some components of the framework were adopted from different authors developed at different time; where as other parts are taken from review literatures, which were findings of some other researchers. The framework proposes that SCM practices will have an impact on competitive advantage and competitive advantage will have impact on organizational performance. SCM practice is conceptualized as a four-dimensional construct. The four dimensions are strategic supplier partnership, customer relationship, level of information sharing and quality of information sharing.

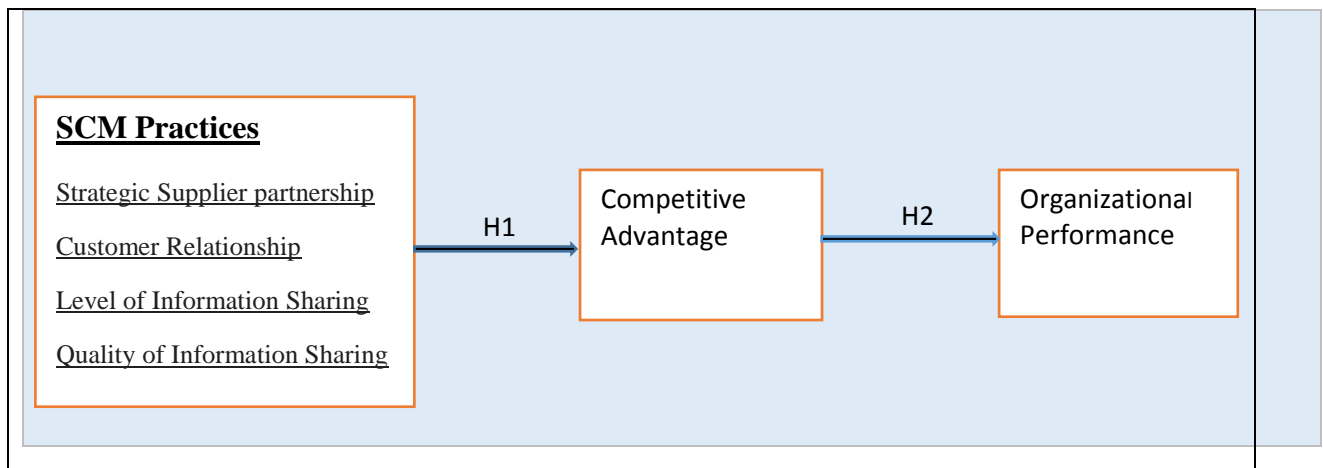


Figure 1.1: Conceptual Framework Developed for this study.

A detailed description of the development of the SCM practices construct were provided in the research hypothesis. Competitive advantage and organizational performance are concepts that have been operationalized in the existing literature.

Using literature support, the expected relationships among SCM practices, competitive advantage, and organizational performance were discussed, and hypotheses relating to these variables were developed.

3. RESEARCH METHODOLOGY

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

3.1 Research Design

The study were investigate SCM practices based on fundamental theories, principles and management philosophies that are supposed to be effective parameters just to evaluate the actual performance of the case company's key business activities. Accordingly, the case company's existing SCM practices and the challenges that prohibit its effectiveness were evaluated. That means the purpose of the research is to find out the underlying facts and /or actual circumstances existing within the case company with regard to SCM practices and describing the facts. Therefore, the student researcher used descriptive research type, which helps to use both qualitative and quantitative data analysis.

3.2 Population and Sampling Techniques

The target population of the research paper was mainly divided in to two parts, which were employees of the company and Distribution Agents of BGI Ethiopia. For the purpose of this study, the researcher used probability sampling particularly stratified sampling technique. The target population for the study was classified into eight strata based on the departments and section in the firm which is directly related with SC of the organization. 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 and awareness about different supply chain management practices/dimensions, operational performance and organizational performance of the firm, stratified sampling technique were used to have the right proportion of people from every concerned department or section. The departments considered as strata, from which data were collected, are: production department, administration, supply chain department, finance department, information technology department, quality control department, warehousing, marketing and sales department. In addition to employees all agent distributors were considered as respondents.

3.3 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, the student researcher preferred to use a method developed by Carvalho (1984), as cited in Malhorta Naresh, K. (2007).

Table 3.1: Carvalho's Sample Size Determination

Population size	Small	Medium	Large
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1200	32	80	125
1201-3200	50	125	200
3201-10,000	80	200	315
10,001-35,000	125	315	500
35,001-150,000	200	500	800

Source: Malhorta Naresh, Marketing Research: an applied approach, 2007)

Table 3.2 Number of Employees in BGI Ethiopia PLC

	St George Beer	Kombolcha	Castel Winery	Hawassa Beer	Total
Permanent	523	367	99	243	1232
Temporary	228	233	774	250	1485
Total	751	600	873	493	2,717

The total number of BGI Ethiopia employees in **St. George** are 523, out of this about 187 are not target population due to education level (not completed grade 8) and out of concerned departments. Therefore, from the remaining 336 **non-laborious** employees 50 were considered as sample size of the study as per Carvalho's sample determination method, through considering the heterogeneity of sample respondents on the basis of different units/ departments within the organization. Out of 50 sample size selected, 47 were considered as sample respondents and 3

were avoided due to incompleteness of the response. All the six distribution agents were responded the questionnaires, and totally 53 responses were analyzed.

3.4 Data Collection Tools

Basically there are two sources of data namely, primary and secondary source. In this research both primary and secondary sources of data were utilized through Questionnaires, and literature review. The questionnaires were distributed to employees of the company and Agents of BGI Ethiopia. As the secondary data; books, articles, journals, magazines, and brochures were reviewed.

Questionnaire: close ended questionnaire in a 5 point Likert scales were used to collect data from the sample respondents. Data gathered through questionnaires were simple and clear to analyses and it allows for tabulation of responses and quantitatively analyzes certain factors. Furthermore to this it is time efficient for both the respondents and researcher. The questionnaire were structured in such a way that it includes all relevant parts of and information to clearly acquaint the respondents.

3.5 Data Analysis Technique

Descriptive analytical technique were used with the aid of Statistical Package for Social Sciences (SPSS version 23). The reliability of the variables were measured by Cronbach alpha. To analyze the data collected with the use of questionnaires. The questionnaires have a five –point Likert-type response scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). In addition, the data collected were analyzed by Regression analysis and correlational research method because it helps to investigate the relationship between the independent variable i.e. Supply chain Management practice with its effect on the dependent variables competitive advantage and organizational performance. The study also used tables, graphs, frequencies, and percentages to analyze the collected data.

3.6 Ethical Considerations

The study were utilized human participants and investigation on SCM practices in BGI Ethiopia, certain issues were addressed. The consideration of these issues is necessary for the purpose of ensuring the privacy as well as the security of the participants. These issues were

identified in advance so as to prevent future problems that were rise during the research process. Among the significant issues that will be considered includes consent, confidentiality and data protection. People who were participated in the research were given an ample time to response to the questions posed on them to avoid errors and inaccuracies in their answers. The respondents were given a waiver regarding the confidentiality of their identity and the information that they were not wished to disclose.

3.7 Validity and Reliability

3.7.1 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, competitive advantage, and organizational performance were assessed with Cronbach's Alpha and the reliability values for all constructs are confirmed as greater than 0.7, which are considered acceptable (Nunnally, 1978).

3.7.2 Analysis of Validity

Malhotra (2010) mentioned about three types of validity in his study: content validity, predictive validity, and construct validity. This study addressed content validity through the review of literature and adapting instruments used in previous research.

4. DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

As discussed in previous chapters, this study attempted to examine the Relationship between supply chain management practices and organizational performance in case of BGI Ethiopia Brewery. 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 relationship between supply chain management practices and organizational performance, Correlation and regression analysis were conducted for scale typed questionnaire. A total of 56 questionnaires were distributed and 53 were collected from employees and distribution agents. The collected data were presented and analyzed using SPSS (version 23) 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 Demographic characteristics

The demographic profile of the sample respondents were presented and analyzed below. The purpose of assessing respondents' age, sex and title is that, to determine whether the researcher considered heterogeneity of sample units. On the other hand assessing the work experience and education level of the respondents' is that, when the respondents are more experienced and educated they have better opportunity to understand the case and give better response than else.

Table 4.1. Respondents' frequency distribution of Gender, Age and Job title

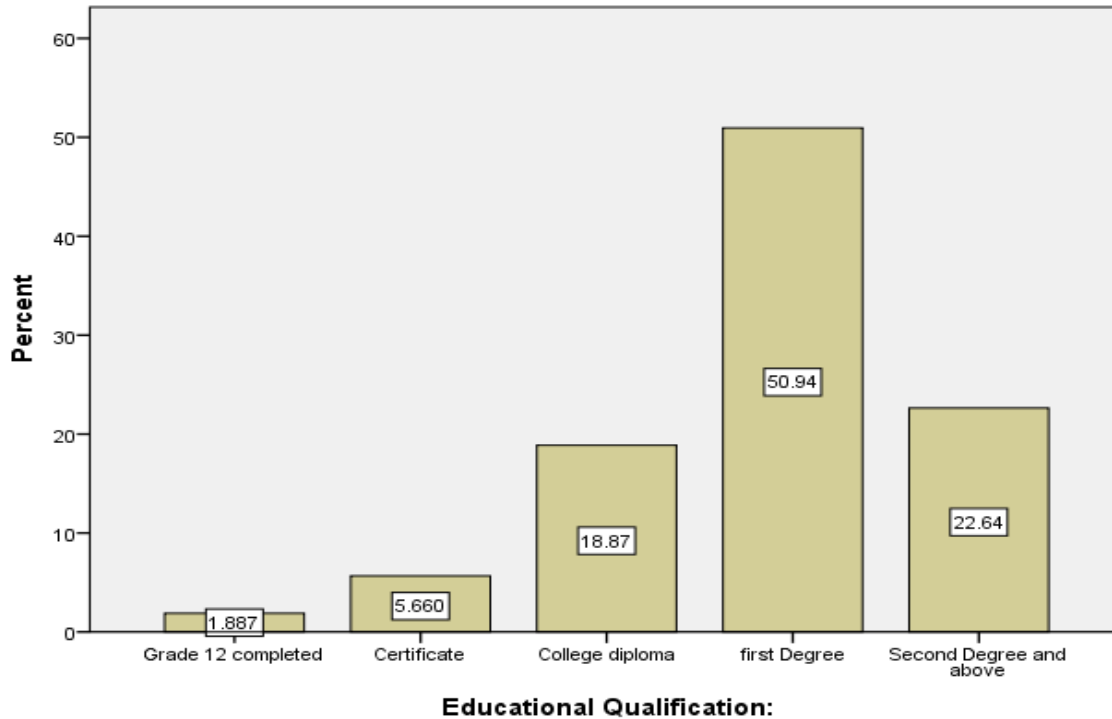
Characteristics	Value	Frequency	Percentage
Gender	Male	37	69.8
	Female	16	30.2
Age	20-25 years	12	22.6
	26-30 years	16	30.2
	31-35 years	14	26.4
	36-40 years	6	11.3
	above 40 years	5	9.4
Job title	Managerial position	14	26.4
	Section head	11	20.8
	Non managerial position	24	45.3
	Other	4	7.5

Source: Survey 2017

Gender frequency of the respondents shows that the numbers of male respondents were greater than two times as female respondents. That is 69.8% of the respondents were male, while 30.2 % were female respondents.

The researcher divided the age of the respondents in to five categories, starting from 20- 25 years of age to above 40. In this study, the researcher can conclude respondents were age of 26 up to 30 years covers 30.2%, age of 31 up to 35 covers 26.4%, age of 20 up to 25 years are 22.6%, age of 36 up to 40 are 11.3%, and above 40 are only 9.4% of respondents. Therefore 56.6% of respondents are between age of 26 and 35.

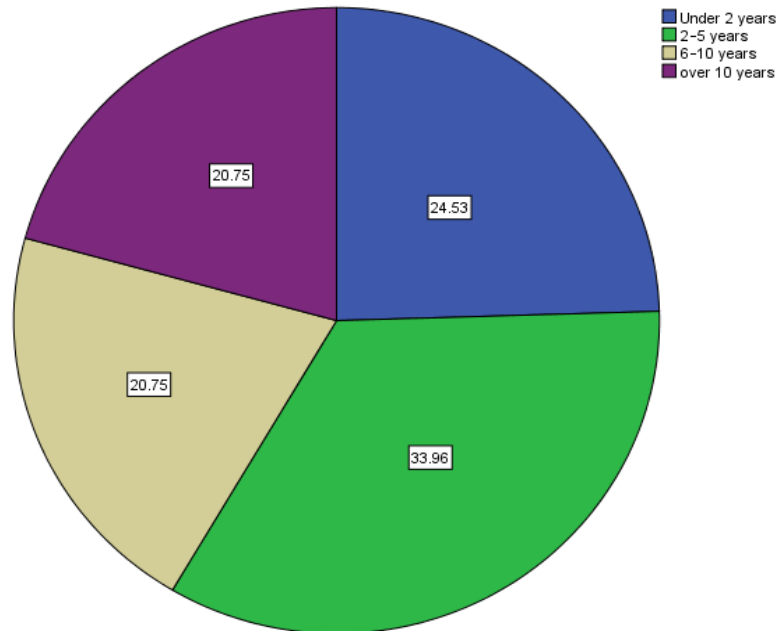
Graph 4.1: Educational qualification



Source: survey 2017

As shown in graph 4.1 the highest education level attained by most of the respondents was first degree holders which represents, greater than 50% out of the valid respondents and followed by second degree and above holders which accounts 22.64%, college diploma holders accounts 18.87%, Certificate and Grade 12 completed shows 5.6% and 1.88% respectively out of the valid respondents. Surprisingly there is no respondents below Grade 12 completed.

Graph 4.2 Years stayed at the organization



Source: survey 2017

As graph 4.2 above clearly shows the frequency distribution of respondents work experience, the largest of the respondents 33.96 % have between 2 and 5 years of work experience. In the same case, 24.53% of respondents have under 2 years of work experience. On the other hand, respondents within work experience of 6 up to 10 years and over 10 years show similar percentage, which is 20.75% of valid respondents. This implies that in total 41.5% of the respondents have more than 6 years of work experience with in the case company and 58.5% of respondents are below 5 years of experience. When the respondents are more and more experienced within the organization they have better opportunity to know more about the organization.

Mean and Standard deviation values for each indicator

This study focused on the case company's SCM practices. For each practices different items were developed and measured based on their mean and standard deviation values. As shown in table below the employees of BGI Ethiopia had Agree and common understanding about strategic supplier partnership (Mean= 3.94, S.D = 0.636), Customer relationship (Mean=3.95, S.D=0.866), Level of information sharing (Mean=3.74, S.D=0.667), Level of information quality(Mean=3.70, S.D=0.855), Quality(Mean=4.22, S.D=0.791), Delivery Dependability(Mean=3.85, S.D=0.868), Organizational Performance(Mean=3.96, S.D=0.695) and Competitive Advantage(Mean=3.82, S.D=0.665). Whereas respondents prefer neutral position regarding an organization is capable of competing against major competitors based on low price.

Table 4.2 mean and standard deviation for each indicator

Indicator	Mean	Std. Deviation
Strategic supplier partnership (SSP)	3.94	0.636
Customer relationship(CR)	3.95	0.866
Level of information sharing(LIS)	3.74	0.667
Level of information quality(LIQ)	3.70	0.855
Competitive advantage Price/cost(CAP)	3.25	0.711
Competitive advantage quality(CAQ)	4.22	0.791
Competitive advantage Delivery dependability(CAD)	3.85	0.868
Organizational performance(OP)	3.96	0.695
Competitive advantage(CA)	3.82	0.665

Source: survey 2017

4.3 Reliability and Validity Test

As stated by "Hair et al., (2007) reliability indicates the extents to which a variables or set of variables are consistent in what it is intended to measure" (Cited by Siddiqi; 2011:20). Reliability analysis used to measure the consistency of a questionnaire. There are different methods of reliability test, for this study Cronbach's alpha is considered to be suitable. Cronbach's alpha is the most common measure of reliability. For this study the Alpha coefficient for the overall scale calculated as a reliability indicator is 0.965. All the alpha coefficients for the scales were presented on the following table. As described by Andy (2006) the values of Cronbach's alpha more than 0.7 is good. The alpha values in this study are far from 0.7 and which are; therefore it had very good reliability for the questioners.

Table 4.3 Reliability Test table

Indicators	Number of items	Cronbach Alpha
Strategic supplier partnership (SSP)	6	0.834
Customer relationship(CR)	5	0.908
Level of information sharing(LIS)	7	0.870
Level of information quality(LIQ)	5	0.931
competitive advantage (CA)	16	0.921
organizational performance(OP)	7	0.896
Overall	46	0.965

Source: survey 2017

4.4 Correlation and regression 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 ± 0.1 represent a small effect, ± 0.3 is a medium effect and ± 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 organizational performance 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.

4.4.1. Correlation between SCM practices and Competitive Advantage (CA)

Table 4.4: Correlation matrix between constructs of SCM practices and CA

	Strategic supplier partnership (SSP)	Customer relationship(CR)	Level of information sharing(LIS)	Level of information quality(LIQ)
competitive advantage	.408**	.765**	.674**	.650**
** . Correlation is significant at the 0.01 level (2-tailed).				

Source own survey 2017

As it is indicated in the table, there is significant positive correlation between competitive advantage and customer relationship with correlation coefficient of 0.765($r=0.765$), and significance less than 0.01. Therefore, competitive advantage and customer relationship are genuinely correlated.

Table 4.4 also depict that as there is strong positive relationship between Level of information sharing (LIS) and competitive advantage with a Pearson correlation coefficient of 0.674 ($r=0.674$) and significance value is less than 0.01. This significance tells that there is genuine relationship between Level of information sharing and competitive advantage

As the conducted Pearson correlation test indicated in the table 4.4, also there is significant positive correlation between level of information quality (LIQ) and competitive advantage. In other words level of information quality and competitive advantage are Correlated in high relationship ($r=0.650$) with level of significance less than 0.01.

For Pearson correlation test conducted to know whether there is significant correlation or not between Level of Strategic supplier partnership (SSP) and competitive advantage, table 4.4 clearly indicates that there is positive relation between Strategic supplier partnership (SSP) and competitive advantage. The result of correlation analysis between Strategic supplier partnership and competitive advantage is correlation coefficient of 0.408 ($r=0.408$) and significance value less than 0.01.

4.4.2. Regression Analysis between supply chain management practices (SCMP) and competitive advantage (CA)

The parameters of this model are estimated using multivariate regression analysis. Table 4.5 shows the regression between all independent variables (strategic supplier partnership, customer relationship, level of information sharing and quality of information sharing) to examine the relationship to competitive advantage (CA), Table below also shows coefficients of each model along with corresponding test statistics.

Table 4.5: Regression between competitive advantage (CA) and supply chain management practices (SCMP)

Model: 1		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig. p.val
		B	Std. Error	Beta		
1	(Constant)	.964	.420		2.297	.026
	Strategic supplier partnership (SSP)	-.011	.108	-.011	-.104	.917
	Customer relationship(CR)	.422	.089	.550	4.730	.000
	Level of information sharing(LIS)	.265	.154	.266	1.724	.091
	Level of information quality(LIQ)	.065	.128	.084	.510	.612
a. Dependent Variable: competitive advantage						

Source: survey 2017

H1a: Strategic supplier partnership has significant positive effect on competitive advantage

From the given table 4.5 unstandardized coefficients and p-value for Strategic supplier partnership on competitive advantage were -0.011 and 0.917 respectively; these values indicate that there were no significant influences on competitive advantage based on this study. Since the p-value 0.917 which is greater than level of coefficient 0.05. From the result we can conclude that the research hypothesis is not accepted.

In the existed literature different authors wrote Effective partnerships with suppliers can be critical factor to guide supply chain management (Li *et al.*, 2006). *Sadikoglu and Zehir (2010)*

also stated that in strategic supplier partnership, suppliers play more direct role in an organization's quality performance. 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).

H1b: Customer relationship has significant positive effect on competitive advantage

From the given table 4.5 unstandardized coefficients and p-value for Customer relationship on competitive advantage were 0.422 and 0.000 respectively; these values indicate that Customer relationship had strong significant influences on competitive advantage based on this study. Since the p-value 0.000 which is less than level of coefficient 0.05. This indicates that from the unstandardized coefficient 0.422 as one unit of customer relationship increases with 42.2 percent increase of competitive advantage. From the result we can conclude that this research hypothesis is accepted.

Customer relationship management as an important component of SCM practices. As pointed out by Day (2000), devoted 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).

Besides, the main goals of SCM are customer satisfaction and their loyalty as Stalk and Hout (1990), customer relationship management is an important component of supply chain management practices (Noble, 1997).

H1c: Level of information sharing has significant positive effect on competitive advantage

From the given table 4.5 unstandardized coefficients and p-value for Level of information sharing on competitive advantage were 0.265 and 0.091 respectively; these values indicate that Level of information sharing had no significant influences on competitive advantage based on this

study. Since the p-value 0.091 which is greater than level of coefficient 0.05. From the result we can conclude that the research hypothesis is not accepted.

Information sharing is an important aspect in achieving perfect integration in a 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. 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.

H1d: Level of information quality has significant positive effect on competitive advantage

From the given table 4.5 unstandardized coefficients and p-value for Level of information quality on competitive advantage were 0.065 and 0.612 respectively; these values indicate that Level of information quality had no significant influences on competitive advantage based on this study. Since the p-value 0.612 which is greater than level of coefficient 0.05. From the result we can conclude that the research hypothesis is not accepted.

Information quality includes an aspect such as accuracy, timeliness, adequacy and information exchanged credibility (Tan et al., 1998). 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).

4.4.3: Correlation matrix between construct of Competitive advantage and OP

Table 4.6: Correlation matrix between construct of Competitive advantage and organizational performance

	competitive advantage Price/cost(CP)	competitive advantage quality(CQ)	competitive advantage Delivery dependability(CD)	competitive advantage time to market(CT)
organizational performance	.390**	.693**	.506**	.698**

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

** . Correlation is significant at the 0.01 level (2-tailed).

Source: own survey 2017

The above table shows the matrix of correlation between competitive advantage measures (i.e., price, quality, delivery dependability, and time to market) and organizational performance. The analysis of correlation matrix between each measures of competitive advantage and organizational performance is given as follows:

As shown in table 4.6 above, Pearson correlation test was conducted for time to market and organizational performance the result indicates as there is strong positive significant correlation between time to market and Organizational Performance. In other words time to market and Organizational Performance have genuine relationship with correlation coefficient of 0.698 ($r=0.698$) and significance value less than 0.01.

On the other hand, as it is shown in the table 4.6 above there is strong positive relationship between quality and organizational performance with a Pearson correlation coefficient of 0.693 ($r=0.693$) and significance value is less than 0.01. This significance tells that there is genuine relationship between quality and organizational performance.

Also for delivery dependability and organizational performance Pearson correlation test was conducted and the results are shown in above table 4.6. As it is shown in the table, there is positive significant correlation between delivery dependability and organizational performance. In other words delivery dependability and organizational performance have genuine relationship ($r=0.506$) at significance value less than 0.01.

correlation test for between price and organizational performance was also conducted as seen in table 4.6 above, the result shows that price positively related to organizational performance with a Pearson correlation coefficient of 0.390 ($r=0.390$) and significance value is less than 0.01. This significance tells that there is genuine relationship between price and organizational performance.

4.4.4. Regression between competitive advantage (CA) and Organizational Performance

The parameters of this model are estimated using multivariate regression analysis. Table 4.7 shows the regression between all independent variables (competitive advantage Price, competitive advantage quality, competitive advantage Delivery dependability and competitive advantage time to market) to examine the relationship to Organizational Performance(OP).

Competitive advantage is the extent to which an organization is able to create a defensible position over its competitors McGinnis and Vallopra (1999). It comprises capabilities that allow an organization to differentiate itself from its competitors and is an outcome of critical management decisions (Tracey et al., 1999). The empirical literature has been quite consistent in identifying price/cost, quality, delivery, and time to market as important competitive capabilities. Table below also shows [coefficients of each model along with corresponding test statistics](#).

Table 4.7 Regression Analysis between competitive advantage and organizational performance

Model:2	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.717	.411		1.744	.088
competitive advantage Price/cost(CP)	.142	.105	.145	1.350	.183
competitive advantage quality(CQ)	.423	.134	.481	3.146	.003
competitive advantage Delivery dependability(CDD)	-.285	.135	-.356	-2.119	.039
competitive advantage time to market(CTT)	.549	.182	.545	3.014	.004

Dependent Variable: organizational performance

Source: survey 2017

H2a: competitive advantage Price/cost has significant positive effect on organizational performance

From the given table 4.7 unstandardized coefficients and p-value for Price/cost on organizational performance were 0.142 and 0.183 respectively; these values indicate that Price/cost had no any significant influences on organizational performance based on this study. Since the p-value 0.183 which is greater than level of coefficient 0.05. From the result we can conclude that the research hypothesis was rejected.

H2b: competitive advantage quality has significant positive effect on organizational performance

From the given table 4.7 unstandardized coefficients and p-value for quality on organizational performance were 0.423 and 0.003 respectively; these values show that quality has strong significant influences on organizational performance based on this data. Since the p-value 0.003 which is less than level of coefficient 0.05. This indicates that from the unstandardized coefficient 0.423 as one unit of quality increases with 42.3 percent increase on organizational performance. From the result we can conclude that this research hypothesis was accepted.

H2c: competitive advantage Delivery dependability has significant positive effect on organizational performance

From the given table 4.7 unstandardized coefficients and p-value for Delivery dependability on organizational performance were -0.285 and 0.039 respectively; these values show that Delivery dependability has strong significant influences on organizational performance based on this data. Since the p-value 0.003 which is less than level of coefficient 0.05. This indicates that from the unstandardized coefficient -0.285 as one unit of Delivery dependability decreases with 28.5 percent increase on organizational performance. From the result we can conclude that this research hypothesis was accepted.

H2d: competitive advantage time to market has significant positive effect on Organizational performance

From the given table 4.7 unstandardized coefficients and p-value for time to market on organizational performance were 0.549 and 0.004 respectively; these values show that time to market has strong significant influences on organizational performance based on this data. Since the p-value 0.004 which is less than level of coefficient 0.05. This indicates that from the unstandardized coefficient 0.549 as one unit of time to market increases with 54.9 percent increase

on organizational performance. From the result we can conclude that this research hypothesis was accepted.

The specifics of each hypothesis testing result can be summarized in Table 8

Table: 8 Summary Result of Hypotheses Testing

Hypotheses	Description	Results
H1a	<i>Strategic supplier partnership has significant positive effect on competitive advantage</i>	Rejected
H1b	<i>Customer relationship has significant positive effect on competitive advantage</i>	Accepted
H1c	<i>Level of information sharing has significant positive effect on competitive advantage</i>	Rejected
H1d	<i>Level of information sharing has significant positive effect on competitive advantage</i>	Rejected
H2a	<i>competitive advantage Price/cost has significant positive effect on organizational performance</i>	Rejected
H2b	<i>competitive advantage quality has significant positive effect on organizational performance</i>	Accepted
H2c	<i>competitive advantage Delivery dependability has significant positive effect on organizational performance</i>	Accepted
H2d	<i>competitive advantage time to market has significant positive effect on Organizational performance</i>	Accepted

Source: own survey 2017

5. Summary of major findings, Conclusion and Recommendation

5.1 Summary of Major Findings

This study is intended to test if there is a relationship between SCM practices, competitive advantage and organizational performance of BGI Ethiopia Brewery. Based on the results of the study the summary of major findings are as follows.

Supply chain management practices play an important role in reaping and retaining customer satisfaction in the brewery industry. As the study shows that out of eight hypotheses, four are supported. Customer relationship on competitive advantage from hypothesis1 has significant positive effect on competitive advantage and competitive advantage quality, Delivery dependability, time to market from hypothesis2 have significant positive effect on organizational performance.

The study has a number of limitations: first, this is performed only in a particular industry and with a questionnaire survey. Future studies could extend the findings that would cover other industries; moreover, these may consider conducting a qualitative exploration of the dimensions of SCM practices, which may not be adequately captured through a quantitative survey alone.

5.2 Conclusion

This paper provides empirical justification for a framework that identifies four key dimensions of SCM practices and describes the relationship among SCM practices, competitive advantage, and organizational performance. It examines two main research questions: (1) do organizations with high levels of SCM practices have high levels of competitive advantage; (2) do organizations with high levels of competitive advantage have a high level of organizational performance? For the purpose of investigating these issues a comprehensive, valid, and reliable instrument for assessing SCM practices was developed. The instrument was tested using rigorous statistical tests. This study provides empirical evidence to support conceptual and prescriptive statements in the literature regarding the impact of SCM practices. Based on the results of the study and the summary of findings the following conclusions were given.

From the correlation analysis of competitive advantage, supply chain management practices (Strategic supplier partnership (SSP), Customer relationship (CR), Level of information sharing (LIS), and Level of information quality (LIQ)) had significant positive correlation to competitive advantage. And from the organizational performance side competitive advantage Price/cost (CP), competitive advantage quality (CQ), competitive advantage Delivery dependability (CD), and competitive advantage time to market (CTT) had also positive significant correlation to the organizational performance.

From Regression Analysis between competitive advantage (CA) and supply chain management practices (SCMP) only Customer relationship had strong significant influence on competitive advantage. Strategic supplier partnership, Level of information sharing and Level of information quality on competitive advantage had no significant influences on competitive advantage of the case company. Based on Regression analysis between competitive advantage (CA) and organizational performance (OP) quality, Delivery dependability and time to market had strong significant influences on organizational performance. Based on the study Price/cost had no significant influences on organizational performance of the case company

5.3 Recommendation

On the basis of the finding and the conclusion reached, the following suggestions are forwarded. So as to be competitive enough and to sustain in a changing market and remain profitable, BGI Ethiopia would need to re-evaluate their supply chain practices such that they keep pace on the market. IT systems and information sharing will play a major role in creating sustainable processes. Digital Marketing solutions, customer relationship, Supply Chain and strategic supplier Management are a few of the levers to attain their business goals.

The case company is suggested to improve its relationship with suppliers from simply buy-sale relationship to a modern supply chain relationship through establishing strategic or long term relationship. Level of information sharing and Level of information quality are also vital in the supply chain since information flow is an integral part of SCM and material flow is closely dependent on information flow. Poor information sharing between partners in a supply chain will result in poor coordination that will lead to many serious problems. In order to achieve advancement in marketing and financial performance in the long run through enhancing

organizational performance, it is significant for BGI Ethiopia to give due emphasis on SCM practices in the coming years and how they could exploit these opportunities to gain competitive advantage.

5.4 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 four 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 performance 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.

References

- Ahmadi, H. (2005), '*Supply Chain Management*', Tehran, Iran Industrial Research Center.
- Ashish (2006). *Modelling the Metrics of Lean, Agile, and Leagile Supply Chain: An ANP-based Approach*, European Journal of Operational Research 173 (2006) 211 – 225.
- Alireza Chavosh, Anahita Bagherzad Halimi, Mohammad Amin Edrisi, Seyed Babak Hosseini, Pejman Sheibani Esferjani, (2011) '*A Model for Supply Chain Performance of Electronics Industry in Malaysia*', .International Conference on Social Science and Humanity.
- Alvarado, U.Y., Kotzab, H., 2001. *Supply chain management: the integration of logistics in marketing*. Ind. Mark. Manag. 30 (2), 183–198.
- Arawati, A., (2011), '*Supply chain management, product quality, and business performance* International Conference on Sociality and Economic Development, 10: 98-102.
- Balsmeier PW, Voisin W., (1996) '*Supply chain management: a time based strategy*', Industrial Management, 38 (5):24-70.
- Banfield E. *Harnessing value in the supply chain*. New York, NY: Wiley; 1999.
- Bechtel C, Jayaram J. *Supply chain management: a strategic perspective. International Journal of Logistics Management* 1997.
- Beer Institute. [http //www.beerinstitution.org/ccLibrary Files/ Beer Tax Facts](http://www.beerinstitution.org/ccLibrary Files/ Beer Tax Facts).
- Beamon BM. *Supply chain design and analysis: models and methods*. International Journal of Production Economics 1998;55(3):281–94.
- Bowersox, D. J. (2000). *Ten mega trends that will Revolutionize supply chain* Logistics. Journal of Business Logistics, 21(2), 1-15.
- Carr A. S. and Pearson J. N., (1999) '*strategically managed buyer-seller relationship and performance outcomes*', Journal of Operation Management, 17(5): 497-519.
- Chae, B. (2005). *Information technology and supply chain collaboration: moderating effects of existing relationships between partners*. IEEE transactions on Engineering management, vol. 52 (4), 440.
- Chen, I. J. and Paulraj, A. (2004) '*Towards a theory of supply chain management: the constructs and measurements*', Journal of Operations Management, 22(20): 119 150
- Childhouse P, Towill DR. (2003) '*Simplified material flow holds the key to supply chain integration*', OMEGA; 31 (1):17–27.

- Chin S. Ou, Fang C. Liu, Yu C. Hung and David C. Yen (2010) ‘*A structural model of supply chain management on firm performance*’, International Journal of Operations&Production Management, 30(5): 526-545.
- Cigolini R, Cozzi M, Perona M. *A new framework for supply chain management*: conceptual model and empirical test. International Journal of Operations and Production Management 2004.
- Claycomb, C., Droge, C. and Germain, R. (1999) ‘*The effect of just-in-time with customers on organizational design and performance*’, International Journal of Logistics Management, 10(1): 37- 58.
- “Craft Brewing Statistics: Facts” Retrieved on 9/27/10 from statistics/facts
<http://www.brewersassociation.org/pages/business-tools/craft-brewing>.
- “Craft Brewing Statistics: Market Segments”
<http://www.brewers/craft-brewing-statistics/market-segments>.
- Cooper M. C. and Ellram L. M. (1993) ‘*Characteristic of supply chain management and the implications for purchasing and logistics strategy*’, International Journal of Logistics Management, 4(2): 13-24.
- Council of Logistics Management. *What it’s all about*. Oak Brook: CLM, 2000.
- Croom S, Romano P, Giannakis M. *Supply chain management: an analytical framework for critical literature review*. European Journal of Purchasing and Supply Management 2000.
- Donlon JP. (1996) ‘*Maximizing value in the supply chain*’, Chief Executive, 117:54–63.
- Ellram LM. *The supplier selection decision in strategic partnerships*. Journal of Purchasing and Materials and Management 1990.
- Ethiopian Food, Beverage and Pharmaceuticals Industry Development Institute, 2016
- Eyong, M. (2009). *Creating a competitive Supply Chain*: evaluating the impact of lean & agile supply chain.
- Feldmann M, Müller S. *An incentive scheme for true information providing in supply chains*. OMEGA 2003.
- Flynn, B.B. et al, *The impact of supply chain integration on performance*: a contingency and configuration approach, Journal of Operations Management, Vol. 28, 2010.
- Gattoma and Clark (2003). *Education and Skills training Requirements in supply*.
- Handfield, R. B. and Nichols, E. L. (1999) *Introduction to supply chain management*. New Jersey: Prentice Hall, Inc.

- Holmberg, S. (2000) '*A system perspective on supply chain measurement*', International Journal of Physical Distribution & Logistics 30(10): 847-68. IPEDR vol.5 (2011) © (2011) IACSIT Press, Singapore.
- Jarrell JL. *Supply chain economics*. World Trade 1998; 11(11):58–61.
- Jones C. *Moving beyond ERP: making the missing link*. Logistics Focus 1998.
- Jones, Lester. "*Beer Industry Update, June 2009*". <http://www.beerinstitute.org/statistics>.
- John Dunham and Associates. "*The Beer Institute Economic Contribution Study: 2008*" <http://www.beerservesamerica.org/resources>
- Kim, W. (2006). *Effects of Supply Chain Management Practices, I Integration, and Competition Capability on Performance*. An International Journal, Vol. 11(3), 241–248.
- Koufteros XA, Vonderembse MA, Doll WJ. *Competitive capabilities: measurement and relationships*. Proceedings Decision Science Institute 1997;1067–68.
- Lalonde BJ. (1998) '*Building a supply chain relationship*', Supply Chain Management Review, 2 (2):7–8.
- Lambert, M. and Cooper, C. (2000). *Issues in Supply Chain Management*. Industrial Marketing Management, vol. 29, no.1, pp 65-83.
- Lamming R. *Beyond partnership: strategies for innovation and lean supply*. New York: Prentice-Hall; 1993.
- Landeros, R. and Monczka, R. M., (1989) '*Cooperative buyer/seller relationship and a firm's competitive posture*', Journal of Purchasing and Material Management, 9-18.
- Lascelles, D. M. and Dale, B. G. (1989) '*The buyer-supplier relationship in total quality management*', Journal of Purchasing and Material Management, 25(3):10-19.
- Lazarevic, P. Sohal, A. Baihaqi, I. (2007). *Supply chain management practices & supply chain performance in the Australian Manufacturing Industries*. In Monish university.
- Lee, H.L. Padmanabhan, V. & Whang, S. (1997). *Information distortion in a supply chain: the bullwhip effect*. Management Science, Vol.43, no.4, pp.546–58.
- Lee J, KimY. *Effect of partnership quality on IS outsourcing: conceptual framework and empirical validation*. Journal of Management Information Systems 1999;15(4):26–61.
- Lee and Whang (2000). *Information sharing in a supply chain*. International Journal of Technology management, vol. 20, no. 3/4, pp 373-387.

- Li, S., et al, *The impact of supply chain management practices on competitive advantage and organizational performance*, Omega, Vol. 32,2006.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T., Subba Rao, S., 2006. *The impact of supply chain management practices on competitive advantage and organizational performance*. Omega Int. J. Manag. Sci. 34, 107–124.
- Li, S. Rao, S. & Ragu-Nathan, B. (2005) '*Development and Validation of measurement Instrument for Studying Supply Chain Management practices*', Journal of operation management, 23 (6): 618-641.
- Lin F, Huang S, Lin S. *Effects of information sharing on supply chain performance in electronic commerce*. IEEE Transactions on Engineering Management 2002;49(3): 258–68.
- Lori S. Cook & Daniel R. Heiser, *The moderating effect of supply chain role on the relationship between supply chain practices and performance*, International Journal of Physical Distribution & Logistics Management,41(2),2011.
- Magretta, J. (1998) '*The power of virtual integration: an interview with Dell computers*', Michael Dell. Harvard Business Review 76(2): 72–84.
- McGinnis MA, Vallopra RM. *Purchasing and supplier involvement in process improvement: a source of competitive advantage*. Journal of Supply Chain Management 1999;35(4):42–50.
- Mentzer, J.T., Flint, D.J., and Hult, G.T.M., *Logistics Service Quality as a Segment customized Process*, Journal of Marketing, 65(4), 2001.
- Mentzer, J.T. Min, S. & Zacharia, Z.G. (2004). *The nature of inter-firm partnering in Supply chain management*. Journal of Retailing, Vol.76, no.4, pp.549–568.
- Milgrom, P. and J. Roberts (1998). *Communication and Inventory as Substitutes in Organizing Production*. Scandinavian Journal of Economics, vol. 90, no.3, pp. 275- 289.
- Min S, Mentzer JT. (2004) '*Developing and measuring supply chain concepts*', Journal of Business Logistics; 25(1):63–99.
- Moberg CR, Cutler BD, Gross A, Speh TW. (2002) '*Identifying antecedents of information exchange within supply chains*' International Journal of Physical Distribution and Logistics Management, 32(9):755–70.
- Niknia, B. (2007) '*Customer Relationship Management (CRM), shoe industry*', the fourteenth year, 118; 52-53.
- Noble D. (1997) '*Purchasing and supplier management as a future competitive advantage edge*', Logistic Focus, 5(5): 23-27.

- Pagh JD, Cooper MC. *Supply chain postponement and speculation strategies*: how to choose the right strategy. *Journal of Logistics Management* 1998;19(2):13–33.
- Perry, M. and Sohl, S. (2000). *Quick Response Practices and Technologies in Developing Supply Chains*. *International Journal of Physical Distribution and Logistic*, vol.30, no 7/8, pp 627-639.
- Porter ME. *Competitive advantage: creating and sustaining superior performance*. New York: The Free Press; 1985.
- Power DJ, Sohal A, Rahman SU. *Critical success factors in agile supply chain management: an empirical study*. *International Journal of Physical Distribution and Logistics Management* 2001.
- Power D. (2005) ‘*Supply Chain Management Integration and Implementation: A Literature Review*’, *Supply Chain Management: An International Journal*, 10(4): 252-263.
- Power, J. and Sohal, A. (2001). *Critical success factors in Agile supply chain management*. *International Journal of physical distribution and logistics*, vol, 31 (4) 247-265.
- Ragatz GL, Handfield RB, Scannell TV. *Success factors for integrating suppliers into new product development*. *Journal of Product Innovation Management* 1997;14(3):190–202.
- Raghunathan (2003). ‘*Impact of Demand correlation on the value of and incentives for information sharing in a supply chain*’, *European Journal of operational research*, vol. 146, 634-649.
- Rahmanseresht, H and Afsar, A. (2008) ‘*Impact of information sharing on Competitive strategy and performance of supply chain*’, *Iranian journal of information technology management*, 1, (1):37-48.
- Robert E. Spekman, John W. Kamauff Jr and Niklas Myhr, (1998) ‘*An empirical investigation into supply chain management Distribution & Logistics Management: A perspective on partnerships*, 28 (8): 630-650. © MCB University Press, 0960-0035.
- Rosenzweig Eve D, Aleda V. Roth , James W. Dean Jr. (2003) ‘*The influence of an integration strategy on competitive capabilities and business performance: An exploratory study of consumer products manufacturers*’, *Journal of Operations Management*, 21(10):437-456.
- Ross, D.F. (1998). *Competing through chin management: creating market-winning strategies through supply chain partnership*. New York: Chapman and Hall.
- Rungtusanatham M, Salvador F, Forza C, Choi TY. *Supply chain linkage and operational performance, a resource-based view perspective*. *International Journal of Operations and Production Management* 2003.

- Sadikoglu E. and Zehir C. (2010) '*Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance*: An empirical study of Turkish firms', International Journal of Production Economics, 127: 13-26.
- Sheridan JH. (1998). *The supply-chain paradox*. Industry Week; 247 (3):20–9.
- Shin H, Collier DA, Wilson DD. *Supply management orientation and supplier/buyer performance*. Journal of Operations Management 2000;18(3):317–33.
- Simchi-Levi, D., Kaminsky, P., and Simchi-Levi, E. (2000), *Designing and managing the supply chain*, Irwin McGraw-Hill, New York, NY.
- “Small Brewers Reduced Rate” October 2000. Retrieved on 10/29/10 from <http://www.Brewers Association>.
- Stein T, Sweat J. (1998) Killer *supply chains*. Information week, 708 (9):36–46.
- Stern L, Reve T. *Distribution channels as political economies: a framework for competitive analysis*. Journal of Marketing 1980.
- Stalk G. *Time—the next source of competitive advantage*. Harvard Business Review 1988;66(4):41–51. [78].
- Stock GN, Greis NP, Kasarda JD. (2000) '*Enterprise logistics and supply chain structure: the role of fit*', Journal of Operations Management, 18 (5):531–47.
- Suhong Li, Bhanu Ragu-Nathan, T.S. Ragu-Nathan and S. Subba Rao *Omega*, 2006, vol. 34, issue 2, pages 107-124
- Talluri, S. (2000). *IT/IS acquisition and justification model for supply chain management*. International Journal of physical distribution and logistics management, vol, 30 (3), 221.
- Tan KC, Lyman SB, Wisner JD. *Supply chain management: a strategic perspective*. International Journal of Operations and Production Management 2002. .
- Tan KC, Kannan VR, Handfield RB. *Supply chain management: supplier performance and firm performance*. International Journal of Purchasing and Materials Management 1998.
- Tracey M, Vonderembse MA, Lim JS. *Manufacturing technology and strategy formulation: keys to enhancing competitiveness and improving performance*. Journal of Operations Management 1999;17(4):411–28.
- Tsay, A. (1997). *Forecast Revision and Supply Chain Performance*. Working Paper, Santa Clara University.

Van Hoek RI. *Measuring the unmeasurable—measuring and improving performance in the supply chain*. Supply Chain Management 1998.

Vesey JT. *The new competitors: they think in terms of speed- to-market*. Academy of Management Executive 1991;5(2):23 –33.

Vickery S, Calantone R. and Droge C. (1999) ‘*Supply chain flexibility: an empirical study*’, Journal of Supply Chain Management, 35(3):16–24.

Williamson O. *Markets and hierarchies: analysis and antitrust implications*. New York: The Free Press; 1975.

Wines L. (1996) ‘*High order strategy for manufacturing*’, The Journal of Business Strategy, 17(4):32-3.

Yoshino M and Rangan S. (1995) *Strategic alliances: an entrepreneurial approach to globalization*. Boston, MA: Harvard Business School Press.

Appendix I

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

Dear respondents, the purpose of this questionnaire is to gather data on the supply chain management practices on competitive advantage and organizational performance in the case of BGI Ethiopia. The study is purely for academic purpose and thus not affects you in any case. So, your genuine, frank and timely response is very important for successfulness of the study. Therefore, I kindly request you to respond to each items of the question very carefully.

General Instructions

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

Contact Address

If you have any question, please do not hesitate to contact me and I am available as per your convenience at (Mobile: 0911-44-96-77/0911-13-36-86

e-mail: meselehg@gmail.com)

Thank you for scarifying your precious time in advance

PART I: Demographic Information

Gender: Male Female

Age: Below 20 years 20-25 years 26-30 years

31-35 years 36- 40 years above 40 years

1) Educational Qualification:

Grade 10 completed Grade 12 completed Certificate

College diploma first Degree Second Degree and above

2) Job title

Managerial position Section head Non managerial position

Other _____

3) Years stayed at the organization:

Under 2 years 2-5 years 6-10 years over 10 years

1. Your department/work unit _____

Appendix II:

Instruments for Supply Chain Management practices, Competitive Advantage (CA) and Organizational Performance (OP)

Section one: Supply Chain Management Practices

With regard to SCM practices of your firm, please circle the appropriate number to indicate the extent to which you agree or disagree with each statement. The item scales are five-point Likert type scales with 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

Strategic supplier partnership (SSP)		SD	D	N	A	SA
1.	We consider quality as our number one criterion in selecting suppliers.	1	2	3	4	5
2.	We regularly solve problems jointly with our suppliers.	1	2	3	4	5
3.	We have been helping our suppliers to improve their product quality.	1	2	3	4	5
4.	We have continuous improvement programs that include our key suppliers.	1	2	3	4	5
5.	We include our key suppliers in our planning and goal-setting activities.	1	2	3	4	5
6.	We actively involve our key suppliers in new product development processes.	1	2	3	4	5
Customer relationship:		SD	D	N	A	SA
1.	We frequently interact with customers to set reliability, responsiveness, and other standards.	1	2	3	4	5
2.	We frequently measure and evaluate customer satisfaction.	1	2	3	4	5
3.	We frequently determine future customer expectations	1	2	3	4	5
4.	We facilitate customers' ability to seek assistance from us.	1	2	3	4	5
5.	We periodically evaluate the importance of our relationship with our customers.	1	2	3	4	5
Level of information sharing:		SD	D	N	A	SA
1.	We inform trading partners in advance of changing needs.	1	2	3	4	5
2.	Our trading partners share proprietary information with us.	1	2	3	4	5
3.	Our trading partners keep us fully informed about issues that affect our business.	1	2	3	4	5
4.	Our trading partners share business knowledge of core business processes with us	1	2	3	4	5
5.	We and our trading partners exchange information that helps establishment of business planning.	1	2	3	4	5
6.	Exchange of information with our partners (formal or informally) is frequent.	1	2	3	4	5

7.	We and our trading partners keep each other informed about events or changes that may affect the other partners	1	2	3	4	5
Level of information quality:		SD	D	N	A	SA
1.	Information exchange between our trading partners and us is timely.	1	2	3	4	5
2.	Information exchange between our trading partners and us is accurate.	1	2	3	4	5
3.	Information exchange between our trading partners and us is complete.	1	2	3	4	5
4.	Information exchange between our trading partners and us is adequate	1	2	3	4	5
5.	Information exchange between our trading partners and us is reliable.	1	2	3	4	5

Section two: competitive advantage

With regard to competitive advantage of your firm, please circle the appropriate number to indicate the extent to which you agree or disagree with each statement. The item scales are five-point Likert type scales with 1 = Strongly Disagree (**SD**), 2 = Disagree (**D**), 3 = Neutral (**N**), 4 = Agree (**A**), 5 = Strongly Agree (**SA**).

Price/cost:		SD	D	N	A	SA
1.	An organization is capable of competing against major competitors based on low price.	1	2	3	4	5
2.	We are able to offer prices as low or lower than our competitors	1	2	3	4	5
3.	We offer competitive prices	1	2	3	4	5
Quality: an organization is capable of offering product quality and performance that creates higher value for customers.		SD	D	N	A	SA
1.	We are able compete based on quality.	1	2	3	4	5
2.	We offer products that are highly reliable.	1	2	3	4	5
3.	We offer products that are very durable.	1	2	3	4	5
4.	We offer high quality products to our customer.	1	2	3	4	5
Delivery dependability: an organization is capable of providing on time the type and volume of product required by customer(s).		SD	D	N	A	SA
1.	We deliver the kind of products needed.	1	2	3	4	5
2.	We deliver customer order on time.	1	2	3	4	5
3.	We provide dependable delivery.	1	2	3	4	5
4.	Time to solve customer complaints is short.	1	2	3	4	5
5.	Customer order processing time is short.	1	2	3	4	5

Time to market: an organization is capable of introducing new products faster than major competitors.		SD	D	N	A	SA
1.	We deliver product to market quickly.	1	2	3	4	5
2.	We have time-to-market lower than industry average	1	2	3	4	5
3.	We are first in the market in introducing new products.	1	2	3	4	5
4.	We have fast product development.	1	2	3	4	5

Section three: organizational performance

Regarding organizational performance, please circle appropriate number which best indicate your firm's overall performance. The item scales are five-point Likert scales with 1 = **Significant Decrease (SD)**, 2 = **Decrease (D)**, 3=**Same as Before (SB)**, 4=**Increase (I)**, 5=**Significant Increase (SI)**.

Organizational performance: how well an organization achieves its market-oriented goals as well as its financial goals in the past five years?		SD	D	SB	I	SI
1.	Market share.	1	2	3	4	5
2.	Return on investment.	1	2	3	4	5
3.	The growth of market share.	1	2	3	4	5
4.	The growth of sales.	1	2	3	4	5
5.	Growth in return on investment.	1	2	3	4	5
6.	Profit margin on sales.	1	2	3	4	5
7.	Overall competitive position.	1	2	3	4	5

If any comment you well come:

Thank you again very much!!!

