THE EFFECT OF SUPPLY CHAIN MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: A CASE OF TABOR CERAMIC PRODUCTS S.C.

MSc THESIS

GUTEMA ALEMAYEHU

HAWASSA UNIVERSITY,

HAWASSA

JUNE, 2021

THE EFFECT OF SUPPLY CHAIN MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: A CASE OF TABOR CERAMIC PRODUCTS S.C.

GUTEMA ALEMAYEHU WARE

A THESIS SUBMITTED TO THE

DEPARTMENT OF INDUSTRIAL ENGINEERING, FACULTY OF MANUFACTURING,

INSTITUTE OF TECHNOLOGY,

SCHOOL OF INDUSTRIAL ENGINNERING,

HAWASSA UNIVERSITY,

HAWASSA, ETHIOPIA

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN INDUSTRIAL ENGINEERING AND LOGISTICS MANAGEMENT

JUNE, 2021

SCHOOL OF GRADUATE STUDIES

HAWASSA UNIVERSITY

ADVISORS' APPROVAL SHEET

This is to certify that the thesis entitled "THE EFFECTS OF SUPPLY CHAIN MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: A CASE OF TABOR CERAMIC PRODUCTS S.C." submitted in partial fulfillment of the requirements for the degree of Master's with specialization in INDUSTRIAL ENGINEERING AND LOGISTICS MANAGEMENT, the Graduate Program of the Department/School of DEPARTMENT OF INDUSTRIAL ENGINEERING, and has been carried out by GUTEMA ALEMAYEHU WARE under our supervision. Therefore, we recommend that the student has fulfilled the requirements and, hence, hereby can submit the thesis to the department.

_____	_____	_____
Name of main advisor	Signature	Date
_____	_____	_____
Name of co-advisor	Signature	Date

SCHOOL OF GRADUATE STUDIES

HAWASSA UNIVERSITY

EXAMINERS' APPROVAL SHEET

We, the undersigned, members of the Board of Examiners of the final open defense by GUTEMA ALEMAYEHU have read and evaluated his/her thesis entitled "**A EFFECTS OF SUPPLY CHAIN MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: THE CASE OF TABOR CERAMIC PRODUCTS S.C.**", and examined the candidate. This is, therefore, to certify that the thesis has been accepted in partial fulfillment of the requirements for the degree.

Name of the Chairperson	**Signature**	**Date**
Name of Major Advisor	**Signature**	**Date**
Name of Internal Examiner	**Signature**	**Date**
Sisay Addis (PhD)		**12/08/2021**
Name of External Examiner	**Signature**	**Date**
SGS Approval	**Signature**	**Date**

Final approval and acceptance of the thesis is contingent upon the submission of the final copy of the thesis to the School of Graduate Studies (SGS) through the Department/School Graduate Committee (DGC/SGC) of the candidate's department

Stamp of SGS

Date: _____

SCHOOL OF GRADUATE STUDIES

HAWASSA UNIVERSITY

EXAMINERS' APPROVAL SHEET-2

As members of the Board of Examiners of the final Master's degree open defence, we certify that we have read and evaluated the thesis prepared by GUTEMA ALEMAYEHU WARE under the title "THE EFFECTOF SUPPLY CHAIN MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: A CASE OF TABOR CERAMIC PRODUCTS S.C.," and recommend that it be accepted as fulfilling the thesis requirement for the degree of Masters of Sciences in Industrial Engineering and Logistics Management

. Name of the Chairperson	**Signature**	**Date**
Name of Internal Examiner	**Signature**	**Date**
Name of External Examiner	**Signature**	**Date**

Final approval and acceptance of the thesis is contingent upon the submission of the final copy of the thesis to the SGS through the DGC/SGC of the candidate's department/School. Thesis approved by

DGC/SGC	**Signature**	**Date**

Certification of the final Thesis I hereby certify that all the corrections and recommendation suggested by the Board of Examiners are incorporated into the final Thesis entitled "**THE EFFECT OF SUPPLY CHAIN MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE: A CASE OF TABOR CERAMIC PRODUCTS S.C**" by GUTEMA ALEMAYEHU

Name of the Designate	Signature	Date

Stamp of SGS Date:

Acknowledgement

First and foremost, I would like to thank the Almighty God who is the reason for my existence, and has given me His grace to accomplish this research thesis successfully. My deepest gratitude also goes to my advisor Fasika BeteGeorgise(Dr.-Ing.) for his invaluable comments and unreserved guidance during this research work. I am also indebted to my co-advisor, Mr. Alemayehu Tesefaye, for his assistance and constructive comments. I would also like to thank all staff members of Hawassa University, Institute of Technology, and Industrial Engineering for their invaluable I received throughout this study. Moreover, I would like to extend my deepest appreciation to my parents, brothers, sisters and friends for their continuous support love and care during my study.

Furthermore, I would like to acknowledge Hawassa University Department of Industrial Engineering for providing me with the opportunity to pursue my graduate studies. Again, my gratitude goes to all my colleagues who have helped me morally and professionally. Last, but not least, my appreciation goes to the Director of Tabor Ceramic Products S.C for his patience, guidance constructive advice and comments during the data collection.

Author's Declaration

I hereby declare that this M.Sc. Thesis entitled as "**THE EFFECTOF SUPPLY CHAIN MANAGEMENT PRACTICES AND ORGANIZATIONAL PERFORMANCE: A CASE OF TABOR CERAMIC PRODUCTS S.C**" is my original work and has not been presented for a degree in any other university, and all sources of material used for this thesis have been duly acknowledged.

Name: _____

Signature: _____

Place and Date of Submission: _____

CONETENTS

List of Tables

Table: **Page**

List of Figure

Figure: **Page**

Abbreviations and Acronyms

ANOVA	Analysis of Variance
CII	Confederation of Indian Industry
CSCMP	Council of Supply Chain Management Professionals
EDP	Electronic Data Processing
GTP	Growth and Transformation Plan
ICT	Information Communication technology
IS	Information Sharing
JIT	Just in Time
Mg	Management
S.C	Share Company
SBR	Supplier Buyer Relations
SC	Supply Chain
SCM	Supply Chain Management
SCMP	Supply Chain Management Practice
SCOR	Supply Chain Operations Reference
SCP	Supply Chain Performance
SCR	Corporate Social Responsibility
SPSS	Statistical Package for Social Science
TSPSC	Tabor Ceramic Products Share Company
VCs	Voucher Cards
VIF	Variance Inflation Factor

ABSTRACT

Supply Chain Management (SCM) practices are crucial for an organization to promote the effective management of its supply chain. These practices are initiatives that influence the whole supply chain. Therefore, this practice has great influence on the operational performance of any organization. In Tabor Ceramic Products S.C, the operational performance of the company is highly impacted by the problem in information sharing across the internal/external customers, by planning problems of the company which lead to unnecessary inventory and inefficient use of inventories. The study examines the role of supply chain management practices and the organizational performance at Tabor Ceramic Products S.C. by employing descriptive and explanatory research design with this study mix of qualitative and quantitative research approach. The required data were collected through a systematic random sampling technique from 236 employees of Tabor Ceramic Products S.C. The data collected through questionnaire were analyzed using SPSS software version 21. Descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (correlation and multiple linear regressions) were applied for analyzing the data. The findings show that the companies not well perform in strategic partnerships, customer relationship, high level of information sharing, information quality, as well as internal lean practices. Moreover, the findings show that there is a significant effect on organizational performance. If companies follow the proposed solutions, sustainable supply chain management (SCM) practices can be achieved and recommended that Tabor Ceramic Products S.C should take aggressive action on improving the supply chain management practice to improve its performance. This study contributes some part to the improving the supply chain management practice and to propose framework by describing to improve its performance in Tabor Ceramic Products S.C.

Keyword: Supply chain management practices, customer relationship, internal lean practices, organizational performance, Tabor Ceramic

CHAPTER ONE:

INTRODUCTION

1.1. Background of the study

The best companies around the world are discovering a powerful new source of competitive advantage. It's called supply-chain management and it encompasses all of those integrated activities that bring product to market and create satisfied customers. Supply chain management Indicate integrates topics from manufacturing operations, purchasing, transportation, and physical distribution into a unified program. Successful supply chain management, then, coordinates and integrates all of these activities into a seamless process. It embraces and links all of the partners in the chain. In addition to the departments within the organization, these partners include vendors, carriers, third party companies, and information systems providers.

Over the years the nature of competition has changed to the extent that companies no longer compete against each other on the basis of quality as traditionally practiced in the 80`s (Faweet, 2007). However, the new source of business competition links their operation with their supply chain partners; suppliers, distributors, wholesalers, retailers and end customers (Petrovic, 2007). Being able to create business relationships with customers, suppliers and other strategic partners anchored on trust and long term commitment becomes a crucial competitive parameter (Mattson, 2002). For this and other factors like shorter product lifecycle and customer expectation, businesses have had to invest and re-focus greater attention on relationship with customers and suppliers. Consequently, an organization supply chain has become a strategic agenda driving decision making at senior management level.

A supply chain (SC) can be described as a network linking various entities, from the customer to the supplier, through manufacturing and services, so that the flow of materials, money and information can be effectively managed to meet the business requirements. (Zigiaris, 2000). Within the organization, supply chain refers to a wide range of functional areas.

Effective supply chain management practices are important to build and sustain competition in products and services of the firm. Gunaseken and Ngai, (2004) state that the performance of the supply chain is influenced by managing and integrating key element of information into the supply chain. To achieve effective supply chain integration, the firms, need to implement information technology which will see them gain competitive advantage through numerous supply chain dimensions such as quality, cost, flexibility, delivery and profit.

In present day world, there is an assumption that SC's should compete instead of companies, being the SC's success mainly determined by the marketplace. Therefore, SCM is considered as a strategic factor for the better attainment of organizational goals such as enhanced competitiveness, improved customer service and increased profitability. However, to ensure a better SCM system it is important to develop a performance measurement system that properly reflects the real SC's performance. Given a SC perspective, the performance measurement is also strategic and essential because most companies realize that SCM needs not only to be assessed for its performance but also SCM processes must be well-defined and controlled. (Azevedo, Carvalho, and Cruz-Machado, 2011).

Tabor ceramic factory was planted by Ethiopian government for the purpose of manufacturing ceramic products in 1987 E.C with a capital of 240 million Ethiopia Birr. The plant is located in Hawassa, the headquarters ofSidama Nation Nationalities Regional State at270km, south of the capital Addis Ababa; The factory's total land is 206,250 m2, of which 140,000 m2 is covered by buildings comprising plants, offices and social rooms. The factory is located at a strategic location for the availability of raw materials from inside and outside of the country. Tabor Ceramic Products S.C is the only ceramic factory in Ethiopia, engaged in producing a marketing of ceramic table wares, sanitary and tiles in the first phase and proceed further to include the production of electrical insulation pins and accessories for low tension electric power distribution, refractory materials and fine ceramic parts of high tech equipment until last year.

The most common ceramics are composed of oxides, carbides, and nitrides, silicides, borides, phosphides, tellurides, and selenides also are used to produce ceramics. Ceramic processing generally involves high temperatures, and the resulting materials are heat resistant or refractory. In addition to clay materials, today ceramics include a multitude of

products with a small fraction of clay or none at all. Ceramics can be glazed or unglazed, porous or vitrified. Characteristic properties of ceramic products include high strength, wear resistance, long service life, chemical inertness and non-toxicity, resistance to heat and fire, (usually) electrical resistance and sometimes also a specific porosity.

Currently, the factory manufactures tiles, sanitary ware and insulators. Tableware production is halted because of market problem and produced for only private ordering and tile production started last year, and under expansion. Since its establishment, Tabor Ceramic Factory was directly financed by the government till the launch of the privatization policy in 1992E.C. Hence, the privatization policy made the company transferred to S.C with a capital of 208,321,000 EthB. After its operation for 16 years, Tabor Ceramic S.C was sold for private company, in 2003E.C. The factory is owned by the private company named ALTHETS PLC.

1.2. Statement of theproblem

The concept of SCM has received increasing attention from academicians, consultants and business managers alike. Many organizations have begun to recognize that SCM is the key to building sustainable competitive edge. Despite this increased attention, the literature has not been able to offer much way of guidance to help the practice of SCM (Perona, 2014).

Supply Chain Management practice in Ethiopia is still in the beginning stages, there are small numbers of manufacturing companies integrating it to their organizational system. In addition, there are some challenges in the industry which resulted in reducing the quality and demand of products manufactured domestically.

According to the key informant of the company, Tabor Ceramic Products S.C has worked a lot in improving its operational performance but it doesn't reach as per the required level to meet the customers' needs and demands. It is required to improve the planning, distribution, supplier and customer relationship approaches of the company and it is also required to reduce the waste in the inventory by optimizing the supply chain practices of the company.

In Tabor Ceramic Products S.C, the operational performance of the company is highly impacted by the problem in information sharing across the internal customers, by planning problems of the company which lead to unnecessary inventory and inefficient use of

inventories. According to Tewodros,(2014), Supply chain inefficiencies lead Tabor Ceramic Products S.C, to incur additional cost and receive many complaints from the customers who lost their trust on the company. Some of these efficiencies are: Tabor Ceramic Products S.C has suffered longer time lag in the process of delivering the goods to end customers, fragmented contract with suppliers and internal/external integration problem, which is all related to the operational performance of the company.

As far as the knowledge of the researcher is concerned, there is no empirical study that is conducted on the effect of Supply Chain Management practices on organizational performance in the Tabor Ceramic Products S.C (i.e. from perspectives of strategic supplier partnership, customer relationship, level and quality of information sharing, and Internal Lean Practices) which incorporate upper and down streams sides of a supply chain, information flow across a supply chain and internal supply chain process on Ceramic Products manufacturers in Ethiopia particularly on Tabor Ceramic Products S.C. Therefore, since the effort to achieve generalization of the causal relationship between SCM practices and performance calls for empirical confirmation in diverse environments, especially emerging economies like Ethiopia, this paper is to contribute to the debate by analysis the relationship between SCM practices and organizational performance in the Tabor Ceramic Products S.C. This study therefore required to fill this gap and by establishing the effect of supply chain practices on organizational performance of Tabor Ceramic Products S.C, Hawassa.

1.3. Objectives of the study

1.3.1. General objective

The general objective of this study is to investigate and propose framework with the effect of supply chain management practices on organizational performance of the Tabor Ceramic Products S.C.

1.3.2. Specific objectives

The specific objectives of this study include:

- To examine how the supply chain management practices are currently conducted by Tabor Ceramic Products S.C.
- To investigate the organizational performance of Tabor Ceramic Products S.C.
- To identify the relationship between the supply chain management practices and operational performance of Tabor Ceramic Products S.C.
- To propose framework with the organizational performance of Tabor Ceramic Products S.C.

1.4. Research questions

In order to achieve the research objectives, the following research questions have been formulated:

- How is the supply chain management practices of Tabor Ceramic Products S.C conducted currently?
- What does the organizational performance of Tabor Ceramic Products S.C. look like?
- What is the relationship exists between the supply chain management practices and operational performance of Tabor Ceramic Products S.C?

1.5. Significance of the study

More specifically, research endeavors are limited within Tabor Ceramic Products S.C. The investigation results are important to the academicians, researchers, policy makers, business practitioners, and management units in the case company specifically, the research helps to identify bottlenecks, waste, problems and improvement opportunities in the supply chain

practices and its contribution for the operational performance of Tabor Ceramic Products S.C. This research will also contribute to narrow the gap in the literature on the generalization of the causal relationship between SCM practices and performance.

1.6. Delimitation (scope) of the study

As is the case for any research, this study has limitations. The first limitation was the sample used by the study is delimited only in one company (Tabor Ceramic Products S.C) employees working in Hawassa. The problem in this regard is that when generalizing the result beyond the current study. The second limitation of the study is that the cross-sectional survey design of the study. Data were collected at one point in time, so examining inferences about the causal nature of the relationship in this study may be difficult. 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 the role of SCM strategy on firm performance of Tabor Ceramic Products S.C.

1.7. Organization of the thesis

To introduce and develop the arguments summarized here in detail, the thesis comprises five chapters. These chapters are constituted as follows in the first chapter all introductory parts of the study like background of the study, problem statement, research question, objectives of the study, significance of the study and delimitation are included.

The second chapter of the study comprises the theoretical framework, which is a compilation of other journal articles, literature about the humanitarian supply chain challenges. This section also includes a review of various empirical studies that have been made on supply chain challenges. The methodology part of the thesis represents the processes to mapping out the study area, research design, target population, method of data collection and research instruments, reliability test, methods of data analysis and ethical consideration.

The ranges of issues that bear, both directly and more peripherally, on the research approach adopted were discussed within this chapter. This section covers data analysis, results, interpretation and discussion. It also describes the expected results and findings based on primary data gathered and secondary data collected. The last chapter covers the summary of the finding, conclusion, recommendation and consideration for future research.

CHAPTER TWO:

LITERATURE REVIEW

This part of the study provides the outline of literature specific to the concepts or ideas of role of supply chain management practices on operational performance. The relevant conceptual issues, theoretical, empirical literatures' related to the topic of the study are reviewed and based on the literature reviewed, the selected conceptual framework are also presented on this chapter.

2.1 Supply Chain Management

Supply Chain Management is commonly regarded as a sequence of material suppliers, production facilities, distribution services and customers which are linked together by the flow of goods and information wikner (1992).

According to the Council of Supply Chain Management Professionals (CSCMP) — 'Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies.

Supply chain management is also defined, as 'the coordination and management of a complex network of activities involved in delivering a finished product to the end-user or customer' (Hervani and Sarkis, 2005). The supply chain management includes the logistics activities plus the coordination and collaboration of staff, levels, and functions. The logistics activities in the supply chain management includes the operational components like quantifications, procurement, inventory management, transportation and fleet management, data collection and reporting Supply chain activities cover everything from product development, sourcing, production, distribution to the end customer and logistics, as well as the information systems needed to coordinate these activities.

Supply Chain Management integrates supply and demand management within and across companies. An integrated supply chain management streamlines processes and increases profitability by delivering the right product with the right quality and quantity, to the right place, at the right time, and at the lowest possible cost. In addition, the supply chain management also facilitates customer service improvements. It enables the management of inventories, transportation systems and whole distribution networks so that organizations are able to meet or even exceed their customers' expectations.

2.2. Importance of Supply Chain Management

In view of the importance of SCM to be a commercial success, making the right decision about which system is best is important and before deciding how to develop new service SCM chain with economical distribution centers, factors to be considered are such as, required customer service levels, optimum location, stock holding policies and Electronic Data Processing (EDP) systems. The organizations to make the best decisions, employs an integrated planning approach, consisting of four steps from planning to realization as given below: (a) Potential analysis. (b) Concept study. (c) Detailed planning. (d) Project or change management. Traditional models of business organization were based upon the notion that the interests of individual firms are best served by maximizing their revenues and minimizing their costs. If these goals were achieved by disadvantaging another entity in the channel, then that was the way it was. Under the supply chain, management model the goal is to maximize profit through enhanced competitiveness in the final market a competitiveness that is achieved by a lower cost to serve, achieved in the shortest period possible. Such goals are only attainable if the supply chain as a whole is closely coordinated in order that total channel inventory is minimized, bottlenecks are eliminated, time frames compressed and quality problems eliminated. This new model of competition suggests that individual companies compete not as company against company, but rather as supply chain against supply chain. Thus, the successful companies will be those whose supply chains are more cost-effective than those of competitors (brigadier j matte (retd), 2014).

2.3. Supply Chain Management in the Global Context

The relevance of global perspective of business operation is evident as nowadays every introduction to a major or minor text on managerial issues heights the new challenge and

risk of the globalization world economy. It's apparent that in this paper the opinion is shared .as globalization is evolving, all corporate activates have to cope with the influence as well as the opportunities that arise from it. Here, we will focus on the implication for bossiness logistics and especially consider the impact on supply chain management.

We will depict the basic concept of supply chain management as well as the phenomena of globalization for subsequently highlighting the characteristics problem that arise from supply chain management in the global context. In the first part, we will treat the problem and underlying idea of the supply chain management concept and its relation to the logistic. Afterwards, we will have a closer look on globalization and its effect on logistics and supply chain management. In the last part of this selection we will elucidate some aspects appearing to be of central relevance in global SCM.

Supply chain management (SCM) is one of business strategy increasingly being used in the business world today and has become the focus of academic attention in recent years (Ballou, Gilbert & Mukherjee, 2000). Because the concept of SCM is still in development, there are several theoretical frameworks and research methodologies need to be developed in the study of SCM (Tage, 1999). However, many articles have been published in various disciplines to try to define the SCM and discuss future directions and the corresponding empirical research methodology.

Chen and Paulraj (2004) have also conducted the research regarding supply chain management practices; they investigated long-term relationship, cross-functional teams, supplier base reduction, and supplier involvement. The same with Chen and Paulraj, Min and Mentzer, (2004) also examined in their study long-term relationship, information sharing, cooperation process integration and supply chain leadership underlying the supply chain management practices. Lie et al (2005,2006); Thatte (2007) identified supply chain management practices in form of strategic supplier partnership, customer relationship, and information sharing. This research adopts the same supply chain management practices (supplier partnership, customer relationship and information sharing). However, this study conducted in Malaysia perspective, especially in consumer goods industry. Li et al (2005); Thatte (2007) have developed a valid and reliable instrument to measure supply chain management practices. The similar instrument also adopted in this research. The literature

also depicts supply chain management practices from different perspectives with goal of improving competitive advantage of firm. By improving competitive advantage of the firm, organization could improve its performance. Three dimensions of supply chain management practices lead to supply chain responsiveness.

The supply chain has been defined as 'the network of organizations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate customer' (Christopher, 1992).

A firm's customer relationship practices can generate the organizational success in supply chain management practices efforts as well as its performance (Scott and Westbrook, 1991; Ellram, 1991; Turner, 1993). The success of supply chain management encompasses customer integration at the downstream and supplier integration at the upstream, considering that each entity in a supply chain is a supplier as well as a customer (Tan et al., 1999; Thatte, 2007). In the competitive business, better relationship management with customers is crucial for organization success (Wines, 1996). Good relationship with business partners, including key customers are important role to success of supply chain management practiced by organization (Moberg et al, 2002; Tathee, 2007). Customer relationship recognized as an internal component of an organization's market strategy to increase sales and profits (Bommeret, 2001; Thatte, 2007). Close customer relationship allows product differentiation from competitors, help sustain customer satisfaction and loyalty, and elevated the value provide to customer (Margaretta, 2008; Thatte, 2007).

The advent of information technology and intense global computation has enticed many world class manufacturing and service providers into adopting an integrated strategic approach to supply chain management. Although many supply chain management efforts have failed to achieve the desired results, it has become significant strategic tool for firms striving to achieve competitive success. (Tan, 2002) Deferent scholars have defined supply chain management for instance Chopra defined it as follows 'A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request. The supply chain includes not only the manufacturer and suppliers, but also transporters, warehouses, retailers, and even customers themselves. Within each organization, such as a manufacturer, the supply chain includes all functions involved in receiving and filling a customer request.

These functions include, but are not limited to, new product development, marketing, operations, distribution, finance, and customer service' (Sunil Chopra, 2007).

It also has been argued by (Suhong, Li, Ragu-Nathan, Ragu-Nathan T.S. &Rao S., 2004). The concept of SCM has received increasing attention from academicians, consultants, and business managers alike. 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. The concept of SCM has been considered from different points of view in different bodies of literature, such as purchasing and supply management, logistics and transportation operations management, marketing, organizational theory, and management information systems. 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.

In general, regarding the definition of SCM, 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.

2.4. Supply Chain Management in Ethiopian Companies

Ethiopia started the implementation of a five-year Growth and Transformation Plan (GTP) in 2010/2011 with the aim of becoming a middle-income country with a climate-resilient green economy by the year 2025. For the duration of the GTP, the sugar sub-sector (production and processing of sugarcane) has been given top priority together with a few other sub-sectors such as the textile industry, and the meat and leather processing industry. Compared to the recent development in the sugar sub-sector, development has been very slow both in terms of the area under production and the number of factories from the establishment of the first commercial sugarcane production in 1953 until 2006 (Wendimu et al. 2015, p. 201).

Now a day, factories are changing as companies discover new ways of working together to achieve the ultimate supply chain goal, the ability to fill customer orders faster and more efficiently than the competition. This has triggered the need for performance measures, or metrics, for global supply chain performance improvements. According to Beamon (1999)

performance measures must show not only how one is providing for your customers (service metrics) but also how an organization is handling its business (speed, asset, inventory and financial metrics).

In addition, some studies conducted in Ethiopia in general and sugar factories in particular, states that the supply chain management plays pivotal role in the effectiveness and efficacy of sugar factories. According to Wendimu et. al. (2015) associated the issue of supply chain management performance of sugar factories both from the perspectives of demand side and supply side. These includes supplier-buyer relations, external supply chain, environmental factors, human factors, information sharing and supply chain models used in the overall sugar industry.

Measurement of supply chain performance is necessary to be carried out in order to solve some problems that may arise out of the supply chain before the widespread impacts are realized. Supply chain performance measurement would organize supply-chain coordination to cope with consumer demands Chopra and Meindl, (2001), evaluate holistically supply chain performance, and create more efficient supply chain integration (Balfaqih et al. 2016). Agro-industrial supply chain management has a different model from conventional manufacture, that perishable raw materials and product, business activity depends on seasonal condition, raw material varied size and quality, voluminous and hard handling Marimin et al. (2010). By these constraints, the complexity of agriculture and agro-industrial supply chain has not been studied and reviewed widely Higgins (2007).

Due to the fact that supply chain management process is an early stage at ethio telecom, the company is facing different challenges in implementing and managing the supply chain of the company and based on the feedback in the Growth Transformation Program (GTP) meeting, the following challenges are some of the many concerns of the supply chain management:- Inspection delay, Office equipment quality problem and shortage, challenging rooftop management, scrap items in all company premise, warehouse space problem and disposal of obsolete items, vehicle assignment and etc. (Fanuel, 2013).

The other study conducted by (Addis, 2015) has investigated the impact of supply chain practices on the performance of pharmacies in governmental health facilities in Addis o performances of the pharmaceutical industries, the study only focusses on upper tire of supply chain and information sharing with suppliers. He findings showed that JIT, holding

safety stock, few suppliers, close partnership and level of information quality improve quality, product or service innovation, time to market and reduce price, operational costs and time to market, most of which is related to the operational performance of the organization.

2.5 The Roles of Supply Chain Management in Manufacturing Company

SCM is a concept that originated and flourished in the manufacturing industry. Abdallah et al., (2014) found that supply chain management has a positive impact on an organizations performance and competitive advantage. They further highlights that the supply chain management practices do not only affect the flexibility performance but the levels of output and the performance of the resources available within the organization. Furthermore, they indicated that beside customer relations, all other components of the supply chain management positively affect the performance of the supply chain. According to Diab et al., (2015), due care on the part of the supplier affects the element of supplier partnership. Green purchasing is a relatively new concept and an additional element to the supply chain management. It entails the tendency of an organization to assess the practices adopted by their suppliers in their operations to ensure that they preserve the environment. Under supply chain management, green purchasing is defined as the environmental plans lay down by an organization to ensure a steady receipt of long term material and system requirements. Moreover, Diab et al., (2014) suggest that eco-designing and product packaging influences the relationships within the supply chain. This concept requires that suppliers or manufacturers adopt product designs that reduce the use of materials and energy. This means that some of the buyers will be inclined to engage suppliers who exercise this in the supply chain. Considering the growing trends of consumption of eco-friendly products and use of eco-friendly fuels, implementation of the eco-designs and packaging may result in improved performance of the supply chain and the organization as a whole

In general, SCM has become an important management paradigm. In SCM a key issue emerges and that is to develop mechanisms that can align the objectives and coordinate their activities so as to optimize the system performance. There is also a need to review coordination mechanisms of supply chain systems in a framework that is based on supply chain decision structure and nature of demand. This framework discussed highlights the behavioral aspects and information required in the coordination of a supply chain. The

identification of these issues also points out towards the direction of future research in this area. One of the important issues in SCM is the coordination between manufacturers and multi-buyer. A single manufacturer supplying a product to single buyer is rare to be found in today's business environment. Present day business environment is increasingly becoming aware that the opportunity to have a competitive edge in business can come through efficient and effective supply chain. In the case of companies operating on global scale, supply chain strategies drive operational efficiencies and affect the bottom line. Unlike technology or other core areas affecting business, Supply chain is always in a dynamic mode. Project managers who head supply chain projects are often faced with numerous challenges and issues to be overcome. There is a need to understand impending practical problems, issues effecting SCM and likely hurdles encountered while implementing the operations of Global supply chain projects. The relevant issues are discussed in succeeding paragraphs. (Brigadier j matta (retd) ,2014).

2.6. Supply Chain Management Practices

The concept of supply chain management was introduced in the 1980`s and it was developed from traditional logistics management. Earlier companies were considered as single entities with little connection with other companies that were considered as competitors. Therefore, the company focuses their decision making on internal processes and flows. This processes and flows were optimized without taking the other parts of the company into consideration. As a result of this, the cost of optimization was either pushed upstream or downstream therefore not affecting the total cost of production. SCM is focusing on both internal and external flow of processes and flows and like mentioned earlier, competition today is between supply chains rather than individual organizations. (Christopher, 2005) defines SCM as a strategic view of materials and distribution management that shows the benefits to the individual from the boost of performance of the supply chain as a whole through the lens of the business processes across functional and corporate borders.

SCM practices' is defined as "the set of activities undertaken by an organization to promote effective management of its supply chain" (Li, 2006). He proposed SCM practices as a multi-dimensional construct that includes both upstream and downstream sides of the supply chain. Donlon (1996) considered outsourcing, supplier partnership, information sharing, cycle time compression, and continuous process flow, as SCM practices. Tan, 1998) used

quality, purchasing, and customer relations to represent SCM practices, in their empirical study.

Chen and Paulraj (2004) used long-term relationship, cross-functional teams, supplier base reduction, and supplier involvement. Min and Mentzer (2004) identified long-term relationship, information sharing, vision and goals, risk and award sharing, cooperation, process integration, and supply chain leadership underlying the concept of SCM. Li et al, (2005) identified strategic supplier partnership, customer relationship, and information sharing as key SCM practices. These elements of the SCM practice were discussed by Youn et al. (2013), Li et al. (2006), Mentzer et al. (2000) among others

Table 2.1 Supply Chain Management Practices

Sub-construct	Definition	Literature
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 on-going Benefits	change et al., (2017), Youn et al. (2013), Gunasekaran et al. (2001), Monczka et al. (1998), Li et al. (2005), Li et al.(2006)
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	change et al. (2017), Youn et al. (2013), Li et al.(2006), Mentzer et al.
Level of information sharing	The extent to which critical and proprietary information is communicated to one's supply chain partner.	change et al. (2017), McAdam and McCormack (2001), Li et al.(2005),
Quality of information sharing	Refers to the accuracy, timeliness, adequacy, and credibility of information exchanged	child house (2003), Li et al.(2006), Holmberg, (2000)

Lean practices	It is the process of removing all of the wasted time and resources in the production process. Lean can be considered a philosophy, a work	chang et al. (2017), Li et al.(2006)

2.6.1 Strategic Supply Chain Relationship

As it is constructed by Ibrahim & Hamid (2012) Strategic Supplier partnership is defined as 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.A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving efforts. Such strategic partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more key strategic areas such as technology, products, and markets (Yoshino, 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 (Wisner, 2002). Strategically aligned organizations can work closely together and eliminate wasteful time and effort. An effective supplier partnership can be a critical component of a leading edge supply chain.

2.6.2 Customer Relationship

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

2.6.3 Level of Information Sharing

Information sharing has two aspects: quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies (Romano, 2001). Level (quantity aspect) of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner (Monczka, 1998). Shared information can vary from strategic to tactical in nature and from information about logistics activities to general market and customer information (Mentzer, 2000). Many researchers have suggested that the key to the seamless supply chain is making available undistorted and up-to-date marketing data at every node within the supply chain (Child House and Towill, 2003). By taking the data available and sharing it with other parties within the supply chain, information can be used as a source of competitive advantage (Jones, 1997).

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. Moreover, (Tompkins and Ang, 1999) consider the effective use of relevant and timely information by all functional elements within the supply chain as a key competitive and distinguishing factor. The empirical findings of (Child house and Towill,2003) reveal that simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain.

2.6.4 Quality of Information Sharing

Quality of information sharing includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged (Moberg, 2002). While information sharing is important, the significance of its impact on SCM depends on what information is shared,

when and how it is shared, and with whom (Holmberg, 2000). Literature is replete with example of the dysfunctional effects of inaccurate/delayed information, asinformation moves along the supply chain (lee, 1997). Divergent interests and opportunistic behavior of supply chain partners, and informational asymmetries across supply chain affect the quality of information (Feldmann, 2003). It has been suggested that organizations will deliberately distort information that can potentially reach not only their competitors, but also their own suppliers and customers (Mason, 1997). It appears that there is a built in reluctance within organizations to give away more than minimal information since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM (Feldmann, 2003). Organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion.

2.6.5 Lean practices

According to Lean Enterprise Institute (2009) the term lean was coined by Krafcik in the late 80`s, even though the philosophy came to the Western world`s attention in the early 80`s as a result of competition from Japan automobile industry which offered low prices and quality products. To precisely define lean is hard and it is likely that every company exercising lean will follow their own unique course (Lewis, 2000). It is the process of removing all of the wasted time and resources in the production process. Lean can be considered a philosophy, a work culture, a technique, a management concept, a value, a methodology or an ethos (Mark, Wilson and Ram, 2009). Today, lean is evolving into a management approach that improves all the processes at each level of an organization (Womack et al., 1990; Liker, 1998).

According to Bhasin and Butcher (2006) some of the common lean procurement methodologies are; Kaizen, Kanban systems and Supplier development. A long term philosophy, processes, people and right culture are essential to convert an organization into a lean enterprise (Liker, 2004; Henderson et al., 1999). Long term relationships with suppliers are important elements of lean supply (Handfield, 1993). According to Liker (1996); Lathin, (2001); Ferch, et al., (1998) today`s demand driven supply chains require lean procurement methods whose goals are: to eliminate waste in all procurement cycles, prevent shortages,

reduce inventory investment, reduce procurement lead time and cost,increase inventory turnover and ensure customers satisfaction. These methods ensure greater efficiency and standardization of procedures.

2.7 Organizational Performance

Organizational performance refers to how well an organization achieves its market- oriented goals as well as its financial goals (Yamin, 1999). 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, 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 represented by constructs like, Price/Cost. "The ability of an organization to compete against major competitors based on low price" (Li, 2006). Quality. "The ability of an organization to offer product quality and performance that creates higher value for customers" (Koufteros, 1995), delivery dependability. The ability of an organization to provide on time the type and volume of product required by customer(s) (Li et al, 2006), Product Innovation.

2.8 Supply Chain Management Practices and Organization Performance

SCM practices impact not only overall organizational performance, but also 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 (Hanfield, 1997), and increase the level of customer responsiveness and satisfaction (power, 2001). Information sharing leads to high levels of supply chain integration 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,1999).

Postponement strategy not only increases the flexibility in the supply chain, but also balances global efficiency and customer responsiveness (Van, 1999). 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, 2001).

2.9. Empirical Review of Studies

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

Salazar, (2012) conducted a study Effect of SCM process on competitive advantage and organizational performance. This research conceptualizes and develops three dimensions of SCM practice (supplier relationship management, manufacturing flow management, and product development and commercialization) and tests the relationships between these SCM practices, competitive advantage, and organizational performance. Data for the study was collected from prominent organizations and the relationships proposed in the framework were tested using rigorous statistical techniques. The results indicate that higher levels of SCM practice can lead to enhanced competitive advantage and improved organizational performance.

A study on Supply chain performance measurement in the manufacturing industry was conducted bySillanpää, (2010). The main aim of this study is to create a supply chain

measurement framework for manufacturing industry, define what data should be measured and verify the measurement framework in the case company's supply chain. This study presents the main theory framework of supply chain performance measurement. The key elements for the measurement framework were defined as time, profitability, order book analysis and managerial analysis. The measurement framework is tested by measuring case supply chain performance. The measurement framework is a valid framework for supply chain performance measurement in manufacturing industry. It is stated that supply chain performance measurement is extremely important in developing supply chain. The measurement framework in this study offers guidelines for measuring the supply chain in manufacturing industry but the measurement framework could be used in different areas of industry as well.

Klemencic. (2006) conducted a study on management of Supply chain the case of Denmark manufacturing company called Danfoss Heating District Business Area by viewing the supply chain as a strategic asset the study tried to highlight theoretical frameworks that improve supply chain performance especially in service level and logistics cost. The study analyzed SCM practice dividing them in to building blocks a described in Cohen (2004) Model it continued with evaluating SC strategies, process, organization, Collaboration model and also evaluated the performance of SC on the basis of the current performance indicators by dividing in to four critical success areas time, service, quality and cost. The analysis of good supply chain strategy the researcher concluded that all building blocks, as defined by Cohen (2004), are present in the supply chain strategy today and the actually support overall Vision very well, but they have not been revised and structured in one document. The Study also concluded from the analysis of collaboration model with external partners that it is also an area for improvement especially in terms of defining key collaboration partners, to whom operational activities can be outsourced or in sourced (talking about joined demand planning efforts with key customers) or better utilization of e-commerce to improve efficiency of operational processes (e.g. order placement). In general, the researcher concluded that implemented concepts and strategies are contributing significantly to the business result.

Supply Chain Management, Product Quality and Business Performance in case of Malaysian manufacturing companies conducted by Arawati (2011) and the study specifically

investigates relationships between SCM, product quality and business performance and these associations are analyzed and the result demonstrates that SCM dimensions namely appear to be of primary importance and exhibit significant effects on product quality and business performance. Generally, from above literature reviews it can be easily understandable that the work on supply chain management measurements/ practices and its influences on different perspectives of the organization and overall supply chain partners increasing and yields good backgrounds. 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 definitionand dimensionality of the SCM construct, use of different units of analysis, and different approaches to performance measurement.Some of these researches finding there methodologies are summarized as follow

Table 2.2: List of literatures Used and Their Findings

Number	Topic of the research	Researcher's Name, Year, Place and Country	Research findings
1	to assess the impact of supply chain management practices on performance	(Li, et al., 2006)	Higher levels of SCM practice can lead to enhanced competitive advantage and improved organizational performance • Competitive advantage can have a direct, positive impact on organizational performance.
2	to assess the impact of supply chain management practices on performance of pharmacies in governmental health facilities in Addis Ababa/Ethiopia	(Addis, 2015)	SCM Practices have an impact on their operational performance. And also SCM related organizational Performance is impacted by

			SCM Practice directly and through Operational performance (indirectly)
3	Supply chain management plays pivotal role in the effectiveness and efficacy of sugar factories.	(Wendimu et al, 2015).	Research finding indicate that plays pivotal role in the effectiveness and efficacy of sugar factories.
4	to determine the underlying dimensions of supply chain management (SCM) practices and to empirically test a framework identifying the relationships among SCM practices, operational performance and SCM-related organizational	(Mustefa, 2014)	It is concluded that there is strong relationship between SCM practices, operational performance and organizational performance
5	to assess the level of implementation of SCM practices in Haco Industries Ltd, and (2) to study the relationship between SCM Practices and organizational performance in the same industries	Mohammed, (2014).	There is a high level of practical implementation of SCM practices in Haco Industries ltd and that they all had a positive effect on organization's performance

2.10. Literature gaps and summary

From the literature study, the researcher identified the following gaps and it can be summarized as follow:

Even though the measures of organizational performance and supply chain management vary from organization to organization, they are essential for effective management of any

organization. Supply chain management practices are affected by the global operations, the real challenge for managers of this new enterprise environment is to develop suitable performance measures and metrics to make right decisions that would contribute to an improved supply chain practices, competitiveness of the organization and its operational performance. Some of the empirical studies only focus on upper tier supply chain i.e. suppliers (Addis, 2015) and some only focus on the lower level supply chain i.e. customers. Some studies like Suhong, Li, et al., (2004), Mutuerandu, (2014), Karimi&Rafiee, (2014), and Mustefa, (2014) focus on both supplier and customer but the variables used as supply chain practices are varied depending on the organization selected on their study. However, it is absence of complete agreements using the supply chain practice variable and its effect on the performance of the organization. Most of the literature survey shows and suggests for future research on the selected topic which show the antecedences and consequences of supply chain practice.

Even though there is numerous research works conducted on supply chain management performance practices of different industries in emerging countries like china, and Brazil, and developed countries, very few published research works conducted in similar developing countries like Ethiopia were found. The literature review indicates that Supply chain management performance practices in Europe or other developed nations is much different from that of developing nations' like Ethiopia.

From different literature sources, different kinds of supply chain management performance practices problems and challenges were identified. These are: high cost associated with SCM, lack of appropriate information systems for SCM, lack of collaboration, lack of communication and lack of support between reverse supply chain partners, lack of strategic planning to include SCM, shortage of high level managers for SCM, lack of top management awareness and commitment towards SCM, lack of departmental collaboration and communication, resistance to change and the need for new approaches, lack of communication with customers and rule enforcement, as well as customers' expectations and dissatisfaction.

The frame works discussed in the literature review can help organizations to better understand the concepts of SCMP, to identify problems and challenges. It also provides

general possible solutions to the problems and challenges in SCMP. However; the frame works are general, i.e., not designed specifically for TCSC.

Among other frameworks, based on overall review of related literature and particularly from the work of (Sillanpää, 2010), (Klemencic, 2006), (Salazar, 2012) and (Mohammed, 2014) the following conceptual framework in which this specific study governed was developed conceptual frameworks are used to develop strategic level decision aiding framework.

2.11. Conceptual Framework

Conceptual frameworks are used to explain the research problems. Supply chain performance is highly influenced by Customer relationship, internal lean practices, level of information quality, level of information sharing, strategic supplier partnership, organizational performance and industries need to understand these to reach peak performances so as to take timely measures either to take advantage of them or to combat the challenges. Based on overall review of related literature and particularly from the work of (Sillanpää, 2010, Klemencic, 2006, Salazar, 2012, Mohammed, 2014) the following conceptual framework in which this specific study governed was developed: This relationship is shown in Figure 2.1

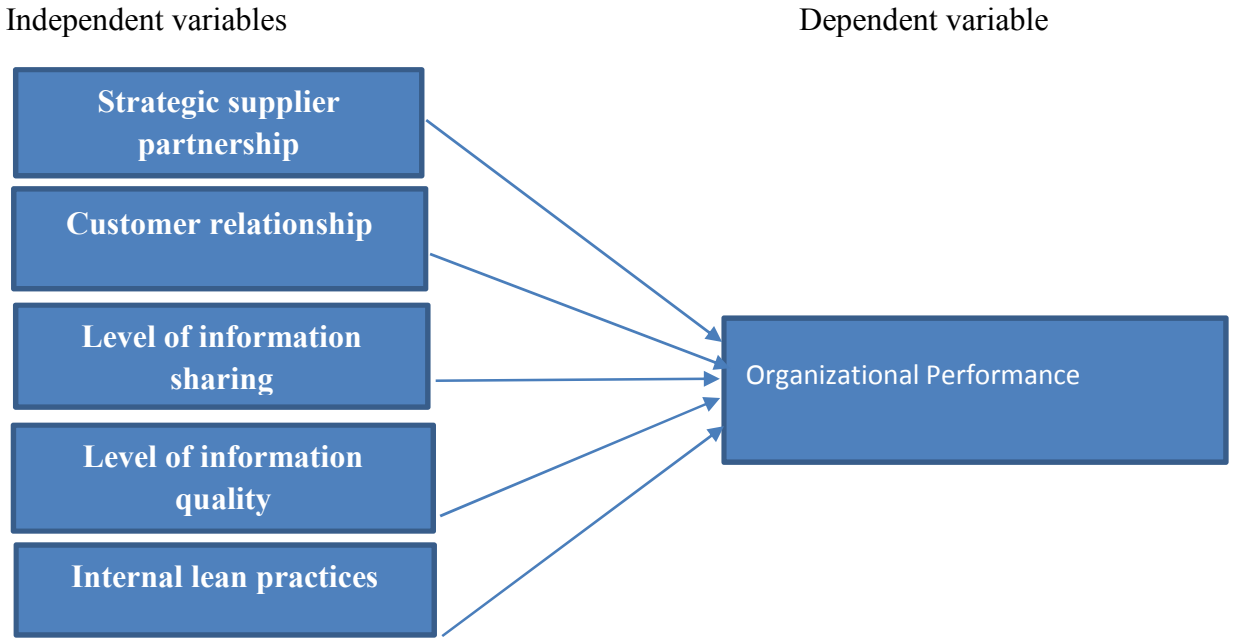


Figure 2.7: Conceptual Framework of the Study (Sillanpää, 2010),(Klemencic, 2006,(Salazar, 2012) and(Mohammed, 2014).

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

The main purpose of the research methodology is to explain how the research is accomplished, what knowledge is required, what information is needed and how information is collected. Research methodology consists of research approach, sample design-sampling technique, sample size, source and instruments of data collection, methods of data analysis, ethical issues, validity and reliability of the study.

3.1. Research design

The study employed descriptive and explanatory research design. Since explanatory research design is the best if the research objective is to identify factors associated or to understand the best predictors of the dependent variable (Oleary, 2004). Moreover, the researcher used quantitative type of research approach. This approach refers to the type of data being collected from quantitative data involve numeric scores, metrics, and so on. The quantitative approach helps to quantify or objectively measure certain variables in numeric terms, which makes descriptive analysis easy and manageable. Therefore, throughout the study, the researcher used quantitative research approach to compute and interpret numerical data.

3.2. Sources of data

The required data for the study collected using both primary and secondary data collection methods.

Primary data: - collected from employees of the company by using a self- administered questionnaire that consist both open and more of closed ended questions that is designed to collect responses for qualitative and quantitative analysis respectively. Different empirical studies used five point Likert scales for measuring effects of supply chain on firmperformance (Sabry 2015, Koh et al 2007, Benito 2010). It is an ideal measurement approach since it helps to ask respondents to rate their opinion for the items of various dimensions. The questionnaire is used to collect the necessary information regarding the study is adopted from the work of other studies fromSalazar, (2012) and Mohammed,

(2014). The source of secondary data for this research is annual report and journals as a stepping board for the research.

3.3. Data gathering tools/instruments

The study employed questionnaire as data collection tool. The questionnaire is prepared based on the review of the related literature. Because the numbers of respondents are large, this tool is appropriate to gather the necessary data. The items are close ended supplemented with few open-ended items to get more opinions of the respondents. The questionnaire carefully developed in a way that measure the impact of the proposed independent variables on the dependent variable. The type of questions, form, wording and sequences considered carefully.

3.4. Sample design

3.4.1 Target population

The target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. Therefore, for this study, the target populations are employees of Tabor Ceramic Products S.C and management staff, particularly those 750 employees of the company are the target of the study.

3.4.2. Sampling technique

For the purpose of this study, the researcher used probability sampling particularly stratified sampling technique since the total population of the study is large and heterogeneous in type stratified sampling technique was preferred. The target population for the study was classified into six strata based on the departments and section in the firm. Then the samples are 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 strategy/dimensions, performance and organizational performance of the firm, stratified sampling technique is used to have the right proportion of people from every concerned department or section.

3.4.3. Sample Size

The target population for this study is all permanent employees of the Tabor Ceramic Products S.C who work in Hawassa City. The nature of the population, sample determination method developed by (J Carvalho,1984), "Archival application of mathematical sampling techniques", (1984). According to the information obtained from Tabor Ceramic Products S.C, the total number of the target population of the study is 750. In order to determine the sample size for the study, three key factors such as confidence interval (it is also called level of precision or sampling error), confidence level, and the population size are considered. The study considers a 95% confidence level and a 5% confidence interval. Using the above portrayed statistical formula, the sample size of the study is determined as follows:

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

$$n = \frac{750}{1 + 750(0.05)^2}$$

$$n \approx 261$$

Where n= is the sample size

N= is the population size, and

e =is the level of precision

Therefore, the sample size for targeted population of the study is 261 employees. Then 261 survey questionnaires were distributed using stratified random sampling techniques. Stratified random sampling ensures that each subgroup of a given population is adequately represented within the whole sample population of a research study.

$$n = \frac{N}{750} \times 261$$

Where n= is number of Questioner

N= is the Total population

Table 3.1: Summary of key actors of Questionnaires

Department	N	N
Top management	5	2
Purchasing department	190	66
Marketing department	250	87
Production department	305	106
Total	750	261

3.5 Methods of data collection

There is no one data collection method that best fit for all situations. Researchers can appraise different data collection methods that best fit to their situation, considering the time and cost limitations of the study in order to achieve the best results. In quantitative research, the researchers identify one or few variables they intend to study and then collect data explicitly relating to those variables (Leedy&Ormrod, 2010).The data collection process in this research started with obtaining the contact information of the sample that the researcher had chosen for the study. Regarding data collection from Tabor Ceramic Products Share Company, the focus of contact was on either the general managers of the companies or the manager responsible for the logistics operations or functions.

This research was conducted using both primary and secondary sources of data. Primary data for this study was collected through questionnaires, interviews, and observation.In accordance with these approaches, multi research methods were developed, including questionnaires, interviews, observation and secondary data gathering. This mix of methods was used to allow for method and data triangulation so as to increase the strength of the study findings. The research methods are explained in the next section.

3.5.1. Questionnaires

The procedure for the data that was collected using questionnaires was first the respondents are communicated to get their consent. Once their consent was known, the prepared questionnaires are distributed to each participant by appreciating their participation and devoting their precious time for the research. The questionnaires were collected by checking the completeness of the data. Finally, the activities were accomplished by appreciating the

respondents. In this study, the researcher identified questionnaire as an appropriate instrument to take representative and reliable data from Tabor Ceramic Products Share Company involved in different staff. They are developed to get answers for the research questions identified.

3.5.2. Interview

This data collection technique helps to get detail information from the respondents. The data that was collected using structured interview; first the interviewees were communicated and appointment was arranged to take the interview. The interviews were started by appreciating the interviewee for giving their precious time.

In order to gather quantitative data from each department to use for measuring the performance, the proposed conceptual framework containing all performance measurement factors were shown to respondents. Those charts could assist them to answer related questions. The researcher also advised them while answering those questions. Finally, the interview questions, which were first designed in English, were subsequently translated into Amharic.

A respondent was asked if they were willing to allow the interviews to be recorded. All respondents agreed to this procedure. The sequencing of the questions was also considered to be important for the interviewees. Thus, the background information questions were placed at the start of the interview, with these questions considered to help build a positive relationship with the respondents. In other words, these early questions encouraged the respondent to feel more comfortable and relaxed to talk. This led to greater openness and helped to build a level of trust between the respondents and the researcher.

When we see the result of respondents of the organizational structure shows that there is board of directors at top then general manger and under him four major department like management office, purchasing department, marketing department and production department

Interviewees group	Interviewer	Number of interviewers
Top management	**Managing director**	**1 Interviewer**
Purchasing department	**Manager** **Deputy Manager** **Assistant manager** **Officers**	**4 Interviewer**
Marketing department	**Manager** **Deputy Manager** **Assistant manager** **Officers**	**4 Interviewer**
Production department	**Manager** **Deputy Manager** **Assistant manager** **Officers**	**4 Interviewer**
Total number of interviewees 13		

Table3.2: Summary of key actors who interviewees Analysis

3.5.3. Observation

Observations were carried out by the researcher to get firsthand information by directly observing Tabor Ceramic Products Share Company and processes carried out there, solid waste disposal sites, transportation means, storage practices and unsafe Tabor Ceramic

In this study, observation was chosen as one of data collection approaches during the interview period. Observation assisted in the building of holistic picture of the various stakeholders. The researcher noted these.

3.5.4. Secondary data sources and documents

The collection of secondary data relevant to the research was also undertaken. Together with the other data collection, this helped the researcher to gain a holistic overview, and in some instances helped he to clarify information collected in the interviews with the respondents. According to Yin (2014), it is necessary to pay considerable attention to the contextual

conditions affecting the phenomenon being studied. Secondary data is useful because it can provide additional evidence or arguments, particularly about the wider context. In this study, the secondary data used included work process documents, handouts and reports from the case study companies, plus other public documents and notifications from the different Industries. These documents were widely used in the case study context chapter and also to an extent in the results chapters. The types of secondary sources used in this study are:

- Journal articles are shorter than books and written about very specific topics. A journal is a collection of articles (like a magazine) that is published regularly throughout the year. Journals present the most recent research, and journal articles are written by experts, for experts. They may be published in print or online formats, or both.
- Thesis and dissertations a dissertation embodying results of original research and especially substantiating a specific view especially: one written by a candidate for an academic a proposition to be proved or one advanced without proof: hypothesis.a dissertation embodying results of original research and especially substantiating a specific view *especially* **:** one written by a candidate for an academic degree.
- Company web pages are a simple document displayable by a browser. Such documents are written in the HTML language (which we look into in more detail in other articles). A webpage can embed a variety of different types of resources such as: style information controlling a page**'s** look-and-feel etc. A website or site is a virtual location on the World Wide Web. It contains several webpages and data files that Internet users can access through a browser. Explorer, for example, is a browser. Firefox, Chrome, and Safari, are also browsers.
- Books, reference materials and conference proceedings

Most of the sources were found by using the internet through internet search engines and electronic global databases. Secondary documents were analyzed and interpreted to provide a base line data with which the collected primary data results can be compared, to get back ground information and generally to enrich the research paper with second hand data.

3.6. Methods of Data Analysis

Data which was collected through questionnaire was coded, entered, edited and analyzed using SPSS software version 21. Descriptive statistical analysis such as frequency,

percentage, mean and standard deviation were used to assess the level of SCMP and organizational performance. Inferential statistics such as correlation analysis was employed to examine the relationship between SCMP and organizational performance and multiple linear regressions were used to examine the effect of SCMP on organizational performance.

3.7. Ethical Clearance

A formal letter was obtained from Hawassa University, School of Mechanical and Electromechanical Engineering, Department of Industrial Engineering to Tabor Ceramic Products S.C and concerned authorities of the company. The data collection only started after getting consent from the parties mentioned above. In addition to this, the names of the employees (selected for the sample) were not included to maintain confidentiality.

3.8. Validity and Reliability

Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure while reliability has to do with the accuracy and precision of a measurement procedure (a measuring instrument is reliable if it provides consistent results. As multiple items in all constructs were used, the internal consistency/reliabilities of Supply chain management practice 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 ideal (Pallant 2005). The following table shows the summary of reliabilities of all constructs.

Table 3.2: Reliability of constructs

Variables	Cornbrash's Alpha	Number of items
Strategic Supplier Partnership	.762	6
Customer Relationship	.790	5
Level of Information Sharing	.865	6

Level of Information Quality	.855	5
Internal Lean Practice	.890	5
Performance	.769	10

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.

3.9 Case study on Manufacturing ceramic in Ethiopia

Tabor ceramic factory was planted by Ethiopian government for the purpose of manufacturing ceramic products and begun operation in 1987 E.C with a capital of 240 million birr. The plant is located in Hawassa, the capital city of southern nation nationalities and people's regional state at 270km, south of Addis Ababa; the factory's total land is 206,250 m2, of which 140,000 m2 is covered by buildings comprising of plants, offices and social rooms. The manufacturing ceramic industry is an important sector in Ethiopia as it makes a substantial contribution to the country's economic development. Ceramic industry is one of the key economic pillar in the vision 2030 geared to make the nation a middle level income country by the year 2030. The factory is located at strategic location for the availability of raw materials from inside and outside of the country According to KAM, there are over many established multi-sector manufacturing firms in Ethiopia where this are located in Hawassa. The firms differ in terms of products that they are engaged in and in size as determined by the number of employees. The manufacturing ceramic industry has the potential to generate foreign exchange earnings through exports to diversify the country's economy and create employment. Manufacturing ceramic is an important sector in Ethiopia and it makes a substantial contribution to the country's economic development. It has the potential to generate foreign exchange earnings through exports and diversify the country's economy. This sector has grown over time both in terms of its contribution to the country's gross domestic product and employment.

Currently, the factory manufactures tiles, sanitary ware and insulators. Tableware production is halted because of market problem and produced for only private ordering and tile production is started last year, but it is under expansion. Since its establishment, Tabor Ceramic Factory is directly financed by the government till the launch privatization policy in 1992E.C. Hence, the beginning of privatization policy in Ethiopia, the factory is transferred in to share company with a capital of 208,321,000 birr. After its operation for 16 years, Tabor Ceramic Share Company is sold for private company, in 2003E.C. The factory is owned by the private company named ALTHETS PLC. Now ALTHETS PLC owned the overall activity of the factory.

CHAPTER FOUR:

RESULTS AND DISCUSSIONS

4.1. Introduction

This chapter presents the findings of the study and its discussion. The data analysis, the interpretation of the analysis, and presentation of the findings in tables and figures are presented in this chapter. Presented in this chapter hence are the findings relating to the role of supply chain management practices on the organizational performance: the case of Tabor Ceramic Products S.C.

4.2. Response rate

In survey research, response rate, also known as completion rate or return rate is the number of sampled respondents who answered the survey divided by the number of people in the sample. It is usually expressed in the form of a percentage. According to Babbie (2011), response rate of 50 percent or above for a paper-based questionnaire is adequate for a survey. The result is presented as follows:

The results of Table 4.1 showed that out of 261 questionnaires distributed to sampled respondents, 236 (90.4%) were collected while 25(9.6%) of the questionnaire remained uncollected. Therefore, analysis was made based on the responses obtained from 236 questionnaires. This indicates that there was high rate of response.

Table 4.1: Questionnaire survey response rate

Items	Response rate	
	No.	Percent
Sample size	261	100
Collected	236	90.4
Remain uncollected	25	9.6

Source: Own survey data, 2020

4.3. Results of questionnaire survey

4.3.1.Background characteristics of respondents

In this sub-section of the study, background characteristic of sample respondents such as sex, age, educational qualification, position in the company and years of worked at the organization have been discussed.

The results on the sex of respondents are presented in Table 4.2. Results established that 65.3% of respondents were male while the rest (34.7%) were female respondents. This indicated that the number of male respondents were greater than female respondents in Tabor Ceramic Products S.C.

The other background characteristic investigated in the study was the age of the respondents. The findings indicate that most of the respondents (45.8%) were dominated by respondents aged between 25-44 years. Those respondents aged between 45-54 years were 11.4% while those aged below 25 years were 38.6%. This implied that the majority of respondents in Tabor Ceramic Products S.C were youth.

Education level of sampled Tabor Ceramic employees was also enquired. Results are presented in Table 4.2 showed that 64.8% of sampled employees were first degree holders, while those employees who had certificate/diploma were 30.1%. The remaining 5.1% of sampled respondents were grade 12 completed. These results indicate that the majority of the sampled employees were bachelor degree holders.

Table 4.2: Sex, age and educational qualification of respondents

Variables	Categories	Frequency	Percentage
Sex	Male	154	65.3
	Female	82	34.7
	Total	236	100
Age	Less than 25 Years	91	38.6
	25-44 years	108	45.8
	45-54 year	27	11.4
	Above 54 years	10	4.2
	Total	236	100

educational qualification	Grade 12 completed	12	5.1
	Certificate/diplomas	71	30.1
	BSc/BA	153	64.8
	Total	236	100

Source: Own survey, 2020

Concerning respondents' position in the company, 1.3% of them were working at managerial position and 21.2% of them working at supervision position. The other 62.3% and 15.2% of sampled employees were working at operators and officer position, respectively. This indicated that larger numbers of sampled employees at Tabor Ceramic S.C were working at operators' position.

Regarding working experience of employees, 58.5% of them worked at Tabor Ceramic Company for 6 to 10 years followed by workers who worked 2-5 years which accounted for 15.3%. The other 14.8% and 11.4% of employees were worked at Tabor Ceramic S.C for less than 2 years and above 10 years, respectively. This indicated that large numbers of employees at Tabor Ceramic S.C were experienced.

Table 4.3:Position in the company and work experience of respondents

Variables	**Categories**	**Frequency**	**Percentage**
Position in the Company	Operators	147	62.3
	Manager	3	1.3
	Supervisor	50	21.2
	Officer	36	15.2
	Total	236	100
Work experience	Under two years	35	14.8
	2-5 years o 6-10	36	15.3
	Above 10 years	165	69.9
	Total	236	100

Source: Own survey, 2020

4.4. Descriptive Summary of the Study Variables

In this topic, the questions that were collected using Likert items were analyzed. The researcher used descriptive statistics such as mean and standard deviation to get the average summary of each study variable (see Subedi, 2016). The study used a mean range developed by Al-Sayaad et al. (2006) for making the interpretation easy and understandable. As can be seen from Table 4.4, the ranges of values were presented as disagreeing if the mean score is between 1.00 and 2.60, neutral if the mean score is between 2.60 and 3.40 and agree if the mean score is above 3.40. Based on these classifications the interpretations of all Likert scale item such as strategic supplier partnership, customer relationship, level of information quality, internal lean practices, level of information sharing, and organizational performance were presented as follows:

Table 4.4: Mean Score Range for Five Scale Likert's Response

Mean	Response
[1.00 - 1.80)	Strongly disagree
[1.80 - 2.60)	Disagree
[2.60 - 3.40)	Neutral
[3.40 - 4.20)	Agree
[4.20 - 5.00)	Strongly agree

Source: Al-Sayaad et al. (2006)

As it can be seen from the results of Table 4.5, the mean value of strategic supplier partnership is 2.30. And from the sub-questions asked under strategic supplier partnership, the highest mean score, 2.47 is obtained on "We consider quality as our number one criterion in selecting suppliers and We have helped our suppliers to improve their product quality" which shows that majority of the respondents were disagrees that the organization consider quality as our number one criterion in selecting suppliers and regularly solve problems jointly with our suppliers. And the lowest mean which shows the respondent disagrees that the organization include its key suppliers in its planning and goal-setting activities (Mean= 2.08). Generally, the overall average value of the strategic supplier

partnership is 2.30 with a standard deviation of 0.438. This showed that the mean value is less than 2.6 which relied on disagreement level based on Al-Sayaad et al. (2006) proposed techniques of mean score ranges for five-point Likert scale questions. Therefore, the result revealed that Tabor Ceramic Products S.C has low strategic supplier partnership. This indicated that the company did not consider enough criteria in selecting suppliers, has limitation in solving problems jointly with its suppliers, did not help suppliers to improve their product quality, has no continuous improvement programs that include our key suppliers, has limitations in including key suppliers in our planning and goal-setting activities, and the company passively involve with its key suppliers in new product development process.

Table 4.5: Perception of Respondents on Strategic Supplier Partnership

Variables	**N**	**Mean**	**SD**
We consider quality as our number one criterion in selecting suppliers.	236	2.47	1.045
We regularly solve problems jointly with our suppliers	236	2.16	.823
We have helped our suppliers to improve their product quality	236	2.47	.872
We have continuous improvement programs that include our key suppliers.	236	2.19	1.038
We include our key suppliers in our planning and goal-setting activities.	236	2.08	.876
We actively involve our key suppliers in new product development processes.	236	2.40	.947
Overall mean (SD)	2.30(.438)		

Source: Own survey, 2020

As summarized in Table 4.6, the mean value of customer relationship is 2.39. And from the sub-questions asked under customer relationship, the highest mean score, 2.44 is obtained on "Lead to increment cost of goods" which shows that majority of the respondent disagrees

that customer relationship leads to increment of cost of goods. And the lowest mean which shows the respondents were disagrees that they frequently interact with customers to set reliability, responsiveness (Mean= 2.39). The overall average value of the customer relationship is 2.39 with a standard deviation of 0.487. This showed that the mean value is less than 2.6 which relied on disagreement level based on Al-Sayaad et al. (2006) proposed techniques of mean score ranges for five-point Likert scale questions. Therefore, the result revealed that the Tabor Ceramic Products S.C has less commitment on customer relationship.This indicated that the company rarely interacts with customers to set reliability, responsiveness, and measure and evaluate customer satisfaction,anddetermine future customer expectations. Likewise, a company leader has low commitment to improve the organization's ability to match demand and supply and to reduce cost of goods.

Table4.6:Perception of Respondents on Customer Relationship

Variables	N	Mean	SD
We frequently interact with customers to set reliability, responsiveness	236	2.39	.927
We frequently measure and evaluate customer satisfaction.	236	2.40	.986
We frequently determine future customer expectations	236	2.35	1.314
Leads to reduces organization's ability to match demand and supply	236	2.35	.940
Lead to increment cost of goods	236	2.44	.950
Overall mean (SD)	2.39(.487)		

Source: Own survey, 2020

In connection to level of information sharing, from the sub-questions asked under level of information sharing, the highest mean score, 2.55 is obtained on "Our trading partners' keep us fully informed about issues that affect our business" which shows that majority of the respondent disagrees that their trading partners' keep them fully informed about issues that affect their business. And the lowest mean which shows respondents were disagrees that

they inform trading partners in advance of changing needs (Mean= 2.28). Generally, the overall average value of the level of information sharing is 2.38 with a standard deviation of 0.522. This showed that the mean value is less than 2.6 which relied on disagreement level based on Al-Sayaad et al. (2006) proposed techniques of mean score ranges for five-point Likert scale questions. Therefore, the result revealed that level of information sharing at Tabor Ceramic Products S.C was inadequate. This indicated that the companey had limitations to inform trading partners in advance of changing needs andshare proprietary information to its employees. There is also shortage of information exchange between trading partners and the company.

Table 4.7: Perception of respondents on level of information sharing

Variables	N	Mean	SD
We inform trading partners in advance of changing needs.	236	2.28	1.080
Our trading partners share proprietary information with us.	236	2.47	.982
Our trading partners keep us fully informed about issues that affect our business.	236	2.55	.832
Our trading partners share business knowledge of core business processes with us.	236	2.25	.867
We and our trading partners exchange information that helps establishment of business planning.	236	2.47	1.008
We and our trading partners keep each other informed about events or changes that may affect the other partners	236	2.25	.914
Overall mean (SD)	2.38(.522)		

Source: Own survey, 2020

As it can be seen from the results of Table 4.8, the mean value of level of information quality is 2.51. And from the sub-questions asked under level of information quality, the highest mean score, 2.74 is obtained on "Information exchange between our trading partners and us is adequate" and the lowest mean which shows the respondents were disagrees that information exchange between their trading partners and them is accurate (Mean= 2.38). The overall average value of the level of information quality is 2.51 with a standard deviation of 0.726. This showed that the mean value is less than 2.6 which relied on disagreement level based on Al-Sayaad et al. (2006) proposed techniques of mean score ranges for five-point Likert scale questions. Therefore, the result revealed that level of information quality at Tabor Ceramic Products S.C was less satisfactory. This indicated that information exchange between trading partners and the company was not timely, accurate, complete, adequate, and reliable.

Table 4.8: Perception of Respondents on Level of Information Quality

Variables	**N**	**Mean**	**SD**
Information exchange between our trading partners and us is timely.	236	2.45	.969
Information exchange between our trading partners and us is accurate	236	2.38	1.133
Information exchange between our trading partners and us is complete.	236	2.49	.934
Information exchange between our trading partners and us is adequate	236	2.74	1.009
Information exchange between our trading partners and us is reliable.	236	2.47	.991
Overall mean (SD)	2.51(.726)		

Source: Own survey, 2020

As summarized in Table 4.9, the mean value of internal lean practices is 2.46. And from the sub-questions asked under internal lean practices, the highest mean score, 2.61 is obtained on "Our firm produces only what is demanded by customers when needed (e.g. JIT)" and the

lowest mean is (Mean= 2.36) on statement "our firm reduces process set-up time and does not rely on inspecting products procured (six sigma). Generally, the overall average value of the internal lean practices is 2.46 with a standard deviation of 0.532. This showed that the mean value is less than 2.6 which relied on disagreement level based on Al-Sayaad et al. (2006) proposed techniques of mean score ranges for five-point Likert scale questions. Therefore, the result revealed that Tabor Ceramic Products S.C has limitation on internal lean practices. This indicated that the company did not reduce the process set-up time, limitations in producing what is demanded, fail to continually improve their own performance. Likewise, the company rarely use delayering, Downsizing, and Outsourcing.

Table 4.9: Perception of Respondents on Internal Lean practices

Variables	N	Mean	SD
Our firm reduces process set-up time	236	2.36	1.052
Our firm produces only what is demanded by customers when needed (e.g. JIT)	236	2.61	1.068
The firm continually improve their own performance with small incremental lean procurement improvements (Kaizen	236	2.46	.964
Firm practices delayering, Downsizing and Outsourcing (Lean Thinking)	236	2.54	1.061
Firm does not rely on inspecting products procured(six sigma)	236	2.36	1.088
Overall mean (SD)	2.46(.532)		

Source: Own survey, 2020

As it can be seen from the results of Table 4.10, the mean value of organizational performance is 2.30. And from the sub-questions asked under organizational performance, the highest mean score, 2.89 is obtained on "Our planning (budget and optimization plan) is accurate" and the lowest mean which shows respondents were disagrees that they deliver product and service to market quickly (Mean= 1.92). Generally, the overall average value of the organizational performance is 2.30 with a standard deviation of 0.279. This showed that

the mean value is less than 2.6 which relied on disagreement level based on Al-Sayaad et al. (2006) proposed techniques of mean score ranges for five-point Likert scale questions. Therefore, the result revealed that Tabor Ceramic Products S.Chas low performance. This indicated that the companey has limitations on offering product or services at reasonable prices, deliver quality product and service to the customers whenever needed, plan accurate budget, receive product and services on time, offer product and services on time, provide dependable delivery, and respond well to new customer demand.

Table 4.10: Perception of Respondents on Organizational Performance

Variables	N	Mean	SD
We offer product or services at reasonable prices	236	2.14	.949
We are deliver quality product and service to the customers whenever needed (On reasonable response time).	236	2.40	.816
Our planning is always meet the customer need(Correct on our forecasting)	236	2.36	.965
Our planning(budget and optimization plan) is accurate	236	2.89	.889
We receive product and service on time	236	2.41	.823
We offer products and service that are highly reliable	236	1.91	.833
We deliver the kind of products and service needed	236	2.09	.913
We provide dependable delivery	236	2.46	.986
We respond well to customer demand for “new” feature	236	2.43	.850
We deliver product and service to market quickly	236	1.92	.881
Overall mean (SD)	2.30(.279)		

Source: Own survey, 2020

4.5. The Relationship between SCMP and Organizational Performance

To analyze the relationship b/n two variables at a time, the correlation coefficient was used. The possible values of correlation coefficients range from –1 to +1. A value of 0 indicates no

linear relationship between two variables (Kothari, 2004). In this section, the independent variables were analyzed one by one using correlation analysis in order to identify their individual relationship with the dependent variable. For this purpose, independent variables such as strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices were tested their degree of relationship with organizational performance. To know the strength and type of correlation between variables, the following table set as a rule of thumb for discussion of variables.

The range of correlation coefficients and its description of their strength were indicated in Table 4.11. Therefore, the individual relationships between two variables at a time were interpreted based on this Table 4.11. That means the correlation between the dependent variable such as organizational performance and independent variables such as strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices were correlated and presented in Table 4.12.

Table 4.11:Rule of Thumb for about the Strength of Correlation of Coefficient

Range of Coefficient	**Description of Strength**
±.81 to ±1.00	Very strong
±.61 to ±.80	Strong
±.41 to ±.60	Moderate
±.21 to ±.40	Weak
±.00 to ±.20	None

Source: Bhattacherjee (2012)

As presented in Table 4.12, the correlation analysis shows that strategic supplier partnership has positive and statistically significant association with organizational performance ($r = 0.567$, $p<0.001$). In the same manner, customer relationship has positive and statistically significant relationship with organizational performance ($r = 0.532$, $p<0.001$). Likewise, level of information sharing has positive and statistically significant relationship with organizational performance ($r = 0.428$, $p<0.001$). Also, level of information quality has positive and statistically significant relationship with organizational performance ($r =0.603$,

p<0.001). Equally, internal lean practices have positive and statistically significant relationship with organizational performance (r =0.560, p<0.001). Based on Bhattacherjee (2012) rule of thumb, the result implies that all the independent variables have moderate and strong relationship to the dependent variable.

Table 4.12: Correlation Analysis Result

Variables		SSP	CR	IS	IQ	ILP	OP
Strategic supplier partnership (SSP)	Correlation	1	.312**	.353**	.392**	.404**	.567**
	Sig.		.000	.000	.000	.000	.000
Customer relationship (CR)	Correlation	.312**	1	.313**	.237**	.424**	.532**
	Sig.	.000		.000	.000	.000	.000
Level of information sharing (IS)	Correlation	.353**	.313**	1	.263**	.308**	.428**
	Sig.	.000	.000		.000	.000	.000
Level of information quality (IQ)	Correlation	.392**	.237**	.263**	1	.518**	.603**
	Sig.	.000	.000	.000		.000	.000
Internal lean practices (ILP)	Correlation	.404**	.424**	.308**	.518**	1	.560**
	Sig.	.000	.000	.000	.000		.000
Organizational performance (OP)	Correlation	.567**	.532**	.428**	.603**	.560**	1
	Sig.	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level

Source: Model output, 2020

4.6. The Roleof SCMP on the Organizational Performance

4.6.1. Linearity Test

Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables. To determine whether the relationship between the dependent variable (organizational performance) and the independent variables (strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices) is linear; plots of the regression residuals through SPSS software had been used. Therefore, the results of the linearity test were presented as follows:

Figure 4.1: Frequency Distribution of Standardized Residual (Model output, 2020)

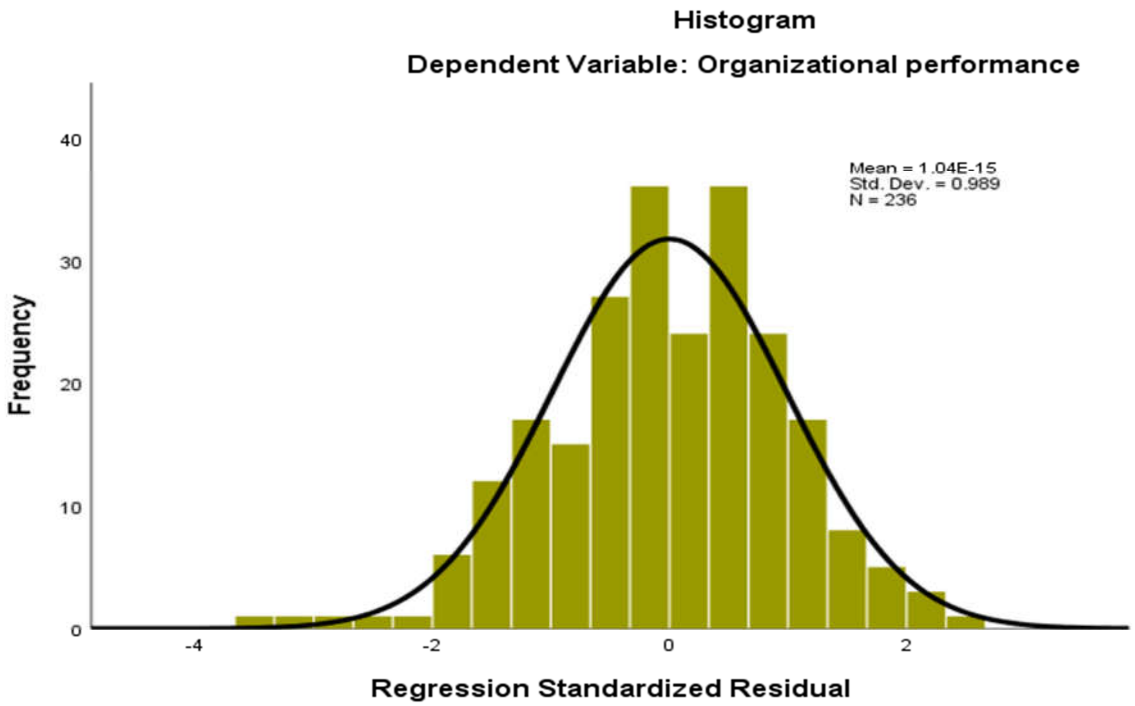
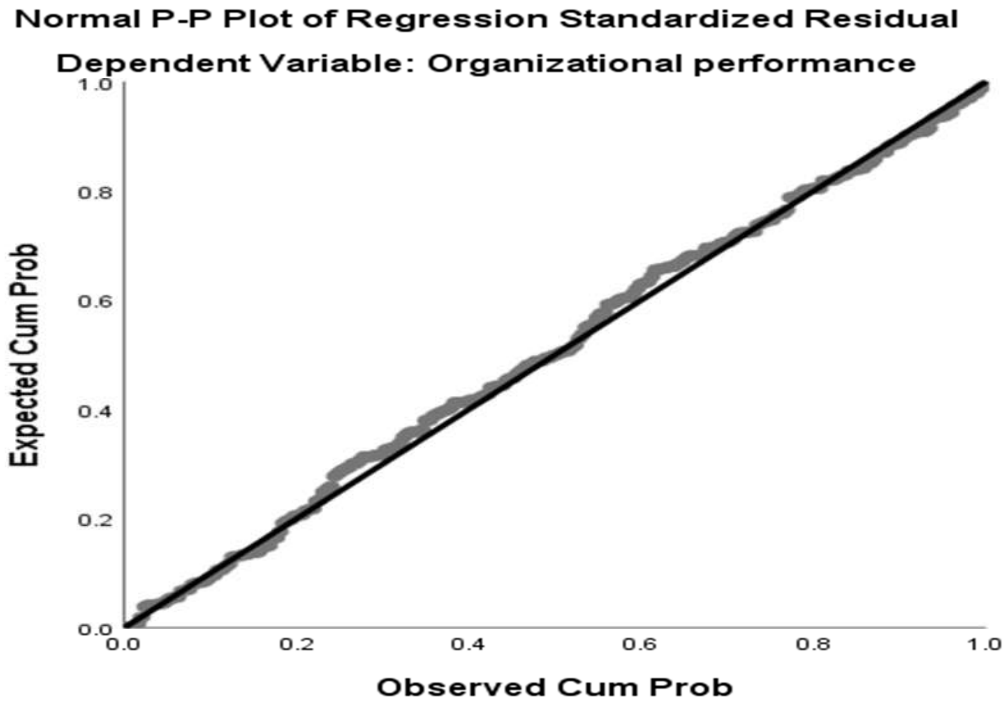


Figure 4.2: The Linearity Standardized Residual test o



Source: Model output, 2020

The scatter plot of residuals shows no large difference in the spread of the residuals as can

be seen from left to right on Figure 4.2. This result suggests that the predicted relationship is linear. Similarly, the figure shows the distribution of residuals around its mean of zero. Hence the linearity assumption is fulfilled as required based on the above figure. Therefore, it is possible to conclude that the inferences that the researcher make about the population parameter from the sample is valid.

4.6.3. Multicollinearity Test

Under this section, multicollinearity test was checked. Multicolinearity indicates a linear relationship between explanatory variables which may cause the regression model biased (Gujarati, 2004). If an independent variable has an exact linear combination of the other independent variables, then we say the model suffers from perfect Collinearity, and it cannot be estimated by regression analysis. Therefore, the following table presents the results of the multicollineaty using variance inflation factor (VIF) and tolerance.

Table 4.13: Multicollinearity assumption

Independent variables	Collinearity Statistics	
	Tolerance	**VIF**
Strategic supplier partnership	.733	1.364
Customer relationship	.771	1.297
Level of information sharing	.813	1.231
Level of information quality	.688	1.454
Internal lean practices	.609	1.641

Source: Model output, 2020

The results of Table 4.13 presented the results of multicollinearity test. If there is high correlation between any two independent variables among strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices, the regression model assumes redundancy of one of these variables that the significance of it becomes too low and its coefficient also be negatively affected. Therefore, the problem of multicollinearity is checked using Tolerance and VIF. The result showed that a tolerance of >.10 and a VIF < 10 are considered as good enough to minimize the effect of multicollinearity (Miller & Whicker, 1999). This implies that the regression model is not affected by higher correlation between two independent variables.

4.6.4. Regression analysis

This section presents the multiple linear regression result of that made to examine the role of supply chain management practices on the organizational performance: A case of Tabor Ceramic Products S. C.

Table 4.14: Results of Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.788	.621	.612	.17372

Source: Own survey, 2020

According to the model summary of multiple linear regression analysis, the R value of the model as per Table 4.14 was 0.788 which shows the highest degree of relationship between independent and dependent variables. The R^2 value of the regression model was 0.621, indicating that 62.1% of variance in organizational performance was accounted by strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices. The remaining 37.9% of variance in organizational performance was not accounted by strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices.

Table 4.15: Results of ANOVA Output

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.359	5	2.272	75.280	.000
	Residual	6.941	230	.030		
	Total	18.300	235			

Source: Own survey, 2020

The ANOVA table (Table 4.15) indicated that the multiple regression model itself is statistically significant or not significant. Because R^2 is not a test of statistical significance (it only measures explained variation in Y from the predictor Xs), the f-ratio is used to test whether or not R^2 could have occurred by chance alone. In short, the f-ratio found in the ANOVA table measures the probability of chance departure from a straight line. On results of the output found in the ANOVA table, the model is statistically significant when strategic

supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices were included (F=75.280, p<0.001). Therefore, the overall equation was found to be statistically significant.

Table4.16: Results of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	SE	Beta		
1	Constant	.902	.078		11.598	.000
	Strategic supplier partnership	.160	.030	.252	5.308	.000
	Customer relationship	.161	.026	.282	6.090	.000
	Level of information sharing	.066	.024	.124	2.742	.007
	Level of information quality	.131	.019	.341	6.961	.000
	Internal lean practices	.065	.027	.124	2.386	.018

Note: B= Regression coefficient (Estimate), Std.Error = Standard Error, Dependent variable = Organizational performance

Source: Model output, 2020

Based on Table 4.16, using "β"(unstandardized) coefficients, the regression equation of the research model becomes in the form indicated as follows.

Organizational performance (Y) = β_0+ β_1*Strategic supplier partnership + β_2 * Customer relationship + β_3* Level of information sharing+ β_4*Level of information quality + β_5*Internal lean practices + ε

Organizational performance (Y) =.902+ .16*Strategic supplier partnership + .161*Customer relationship + .066*Level of information sharing+ .131*Level of information quality + .065* Internal lean practices + .078

The regression equation is interpreted in the following few paragraphs. Five variables were included in the model and all predictors have found to be a significant effect on the organizational performance. These are strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices. Therefore, the interpretations of these variables are as follows.

Strategic supplier partnership has a significant effect on organizational performance. The results of the beta coefficient and p-value ($\beta = 0.16, p < 0.001$) indicates that the organization increases its performance by 0.16 as a result of a one unit increase in the strategic supplier partnership. The values of the beta coefficient indicated that for every unit increase in strategic supplier partnership, a 0.16-unit increase in organizational performance is predicted. In consistent with this finding, Ibrahim and Hamid (2012) stated that 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. Strategically aligned organizations can work closely together and eliminate wasteful time and effort. An effective supplier partnership can be a critical component of a leading edge supply chain.

Customer relationship has a significant effect on organizational performance. This implies that customer relationship has significant effect on organizational performance. The result of the beta coefficient indicates that a one unit increase in the availability of good customer relationship, leads a 0.161 unit increase in the organizational performance ($\beta = 0.161, p < 0.001$) .Similarly, Ibrahim and Hamid (2012) confirmed that 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.

Level of information sharing was found to be a determinant factor for organizational performance in the study area. The result of beta coefficient for Level of information sharing was found to be statistically significant at the 1% level of significance ($\beta = 0.066, p < 0.01$. The not good relationship implies that if employees have not good level of information sharing, they can have good job performance. As a result, the organization can have good performance. Furthermore, the values of the beta coefficient indicated that for every unit increase in level of information sharing, a 0.066-unit increase in organizational performance is predicted. Therefore, the result implied that level of information sharing has significant effect on organizational performance. The finding of Karimi and Rafiee (2014) also approved that 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. Moreover, someone consider the effective use of relevant and timely information by all functional elements within the supply chain as a key competitive and distinguishing factor.

As the result of Table 4.16 presents level of information quality has a significant effect on the organizational performance. The result of the beta coefficient indicates that a one unit increase in the level of information quality, leads a 0.131 unit increase in the organizational performance ($\beta = 0.131, p < 0.001$) .In supporting this finding, Karimi and Rafiee (2014) disclosed that ensuring the quality of the shared information becomes a critical aspect of effective SCM. Organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion.

Internal lean practices were found to be a determinant factor for organizational performance. The result of beta coefficient for internal lean practices was found to be positive and statistically significant at the 5% level of significance ($\beta = 0.065, p < 0.05$) . Furthermore, the values of the beta coefficient indicated that for every unit increase in internal lean practices, a 0.065-unit increase in organizational performance is predicted. Therefore, the result implied that internal lean practices positively affect organizational performance. This finding supported by so and Sun (2010) and they stated that internal lean practices have enhanced the efficiency of individual organizations; greater benefits can be obtained when considering its implementation in a supply chain context. In this regard, lean manufacturing concerns not only internal manufacturing processes, but also external operations of the supply chain.

4.7. Observations results

Two observation visits were made to Tabor Ceramics Products S.C. The first one was conducted in October 2020, and the second one in January 2021. During the visits, the researcher observed many different manufacturing processes and the capacity of improving their process. During the observation, the researcher took a close look at the organizational structure of the company, and found out the existence of problems in waste management system, warehouse management and production system. Moreover, the researcher observed the fact that the company does not use its raw materials properly. This is vividly seen in the company's compound having wastes products scattered here and there. A close observation in the production area also shows the presence of broken and defected ceramics. This

obviously shows that the company does not reuse the waste raw materials. These facts can be observed from the pictures taken from the company below in Figure 4.3. The presence of waste materials in the compound and production area, and the consequential has created uncomfortable working conditions. Therefore, this would affect the company productivity and competitiveness.

Figure 4.3-waste materials

Figure 4.4. Ceramic waste material

The company has lots of products stored in the warehouse. Because of the capacity of the warehouse, the finished products inventories are stored outside in front of the warehouse. The products are affected by weather conditions this is the one parts of effect on quality of products. So, the capacity of warehouse is not compatible for the products. Figure 4.5 and 4.6 shows that the products of ceramic stored outside of the warehouse.

Figure 4.5.Outside store the ceramic products

Figure 4.6.inbound and outbound of warehouse management system

The production system of the Tabor Ceramic Product S.C. the production is lack of continuing in the line of production which leads to delay of production time. The

transportation system which in the Tabor ceramic product S.C. the distance between the company and the raw materials one of the effects on the daily production system because of this the company can't fulfill the customers need.

4.8. Results of interview questions

The interview was conducted in February 2021. The interview took place in four departments. These are management office, purchasing department, marketing department and production department. The researcher selected these departments based on their relevance. The management office is crucial in that the fate of the company rests in their hands. The purchasing department is responsible for continuous supply of raw materials as well as cost and profit analysis of the raw materials. The marketing department is responsible for maintaining regular customers as well as looking for new customers and marketing opportunities. The production department is responsible for creating conducive working environment as well as producing quality products.

The top management officials said that their company gets its production materials from national and international sources. Nationally, there are two suppliers. The raw materials are supplied from Kenticha and Bombawaha sites in Oromia National Regional State. The officials said that ball clay and glaze are imported from the United Kingdom. The officials explained that the company does not get the raw materials from the suppliers according to the demand of the company. Their reason is that the local suppliers are no having much more capacity to supply their products to fulfill the company need. Thus, we learn that the company has to expand its local supply sources, negotiate with regional officials, and, where possible, try to go for backward integration.

The respondents from the purchasing department expressed that the suppliers do not provide raw materials as much as the company needs. In this respect, their response is the same as that of the top officials. The respondents in the purchasing department also expressed that their company sometimes faces hard currency supply for the spare parts imported from the United Kingdom companies. This also causes delay in the production of some ceramic products.

The respondents from the marketing department expressed that the company sells its products only in their sales shops located in Hawassa and Addis Ababa. They added that existing customers also come to the company and purchase their products. The respondents recommended that the company needs opening up new shops in other cities and towns, attract new customers, and facilitate options for distributors and retailers. They further added that the company has to conduct research in order to know new designs that may attract existing as well as new customers.

And also, indicates the availability of Tabor Ceramic Products S.C, there is shortage comparing with its customers 'demand. Accordingly, many customers could not get the right amount and on time of the company's products. In addition, the customers are dissatisfied with the services of Tabor Ceramic Products S.C, due to Lack of proper handling ordered recording, lack of delivering its products timely, shortage of warehousing are the main limitations.

Respondents in the production department expressed that there is no continuous production process because of disruption in the supply of raw materials during political and social unrests. The respondents recommended that the company needs storing raw materials for time of crisis. They also added that there is a high level of staff turnover due to unattractive salary. They further explained that there are cases where the supplied raw materials become below standard. As mentioned in the observation, the production department is not conducive for work. When respondents were asked about this, they explained that the company has to build a separate store, and implement Kaizen principles.

4.9. Triangulation on questionnaire, obeservation and interview results

Triangulation generally has been considered a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation (Stake, 2018). Triangulation helps to identify similar and different realities (Stake, 2018). Triangulation can also allow the researcher to gain a better assessment of the validity and generality of the explanations that the researcher develops and give the researcher's conclusions more credibility (Maxwell, 1996).

Results from this study shows that, during the observation, the researcher took a close look at the organizational structure of the company, and found out the existence of problems in waste management system, warehouse management and production system. Moreover, the researcher observed the fact that the company does not use its product materials properly. This is vividly seen in the company's compound having wastes products scattered here and there. A close observation in the production area also shows the presence of broken and defected ceramics. This obviously shows that the company does not reuse the waste raw materials. In the rampant presence of waste materials in the compound and production area, and the consequential uncomfortable working conditions, the company can't be productive and competitive.

Results from this study shows that, the interview took place in four departments. These are management office, purchasing department, marketing department and production department. The researcher selected these departments based on their relevance. The management office is crucial in that the fate of the company rests in their hands. The purchasing department is responsible for continuous supply of raw materials as well as cost and profit analysis of the raw materials. The marketing department is responsible for maintaining regular customers as well as looking for new customers and marketing opportunities. The production department I s responsible for creating conducive working environment as well as producing quality products.

Results from this study shows that, the questioner indicated that the multiple regression model itself is statistically significant or not significant. Accordingly, it is found that the model is statistically significant when strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices were included ($F=75.280$, $p<0.001$). Therefore, the overall equation was found to be statistically significant.

Results from the data collected, the Tabor Ceramic Products S.C has focused this questioner, and observations were combined with the interview respondents and other data sources for the result. With regards to the effect of the level of information quality on organizational performance, the finding of the study indicates that when there is not well a timely, accurate,

complete, adequate as well as reliable exchange of information between Tabor Ceramic Products S.C and its trading partners, the Company would have improved its performance.

The study result indicated that strategic supplier partnership has significant effect on organizational considers quality as the number one criteria in selecting suppliers, solve problems jointly with its suppliers, help suppliers to improve quality, engaging in continuous improvement programs that include its key suppliers, as well as involving its key suppliers in new product processes. This is an indication that Tabor Ceramic Products S.C would have improved its performance.

CHAPTER FIVE

FRAMEWORK DEVELOPMENT

5.1. Introduction

As the main aim of this study is to find possible solutions/ways that show how to investigate the supply chain management practices and organizational performance of the Tabor Ceramic Products S.C, development of conceptual frameworks is discussed in this chapter. This allows the main objective of the study to be met. As presented in chapter four, this studies to investigate the supply chain management practices and organizational performance of the Tabor Ceramic Products S.C.

Hence, one of the possible solutions for the identified problems, this paper proposes, are strategic level decision support conceptual framework (Framework-1) and investigate the supply chain management practices and organizational performance of the Tabor Ceramic Products S.C, (Framework -2). Figure 5.1 and 5.2 describes Framework-1 and Framework-2 respectively.

To develop these two frameworks, first, previous literatures were studied and gaps were identified as it is discussed in the last section of chapter two. Then, the finding of the survey study conducted in Tabor Ceramic Products S.C, which is discussed in Chapter -4, is combined with the literature study's findings. The literature review provided basic information to the study. This study used the following existing frameworks as a base developed by Based on overall review of related literature and particularly from the work of (Sillanpää, 2010, Klemencic, 2006, Salazar, 2012, Mohammed, the second is a framework that shows adopted from (Mustafa, 2014) modified by the researcher is illustrated on the following diagram. And the third is Container Deposit and Refund Legislation (CDRL) framework that was developed by Ibrahim & Hamid, (2012).

As their gaps are discussed in chapter two, the previous frameworks do simply suggest "investigate the supply chain management practices and organizational performance" as a solution but that is too general and do not show how to integrate and what kind of

relationship to maintain between organizational performance Using the above methods and processed data, this paper proposes two conceptual frameworks.

5.2 Tabor ceramics supply chain

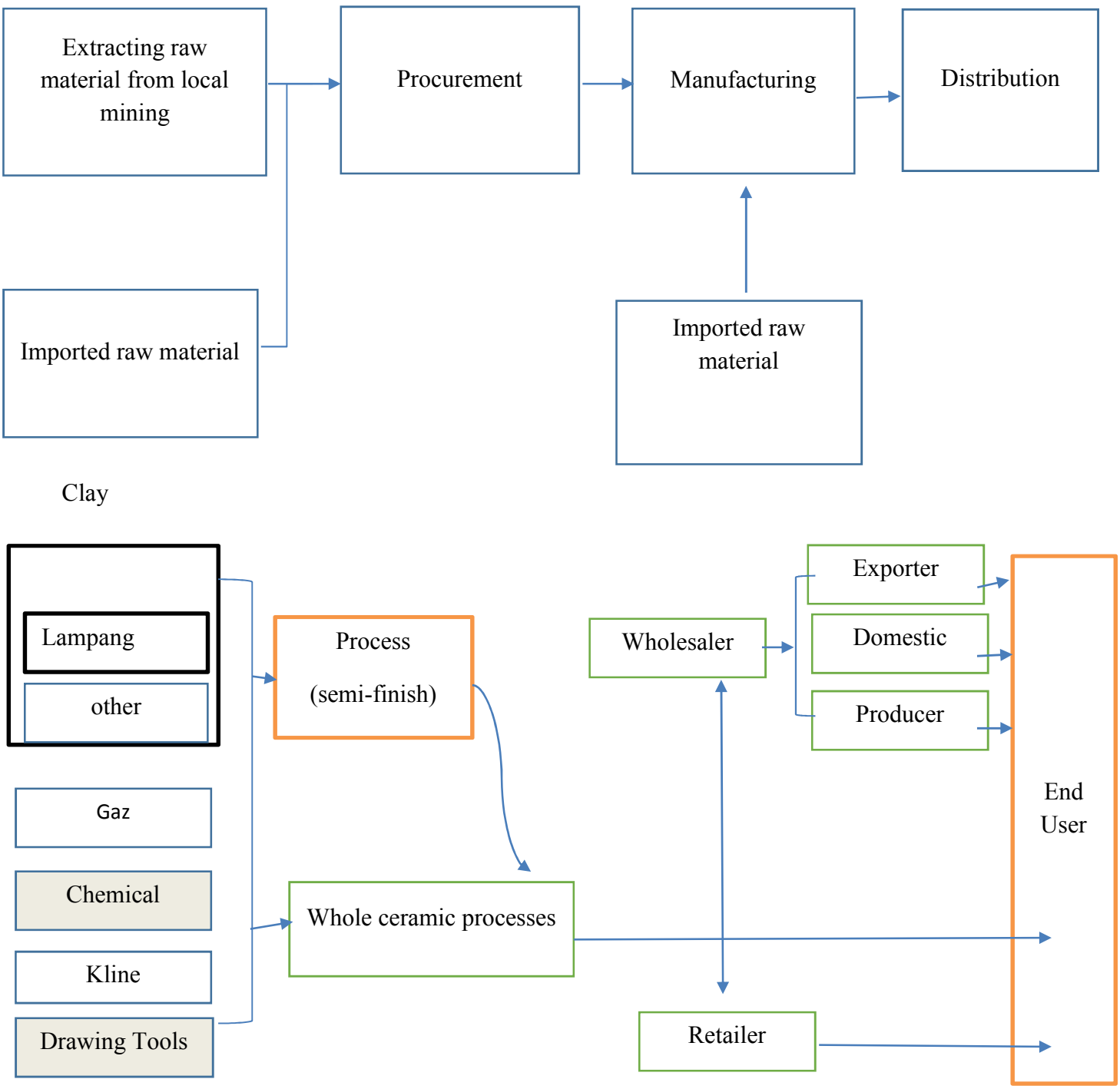


Figure 5.1 Framework-1 Tabor ceramics supply chain

Conceptual frameworks are used to explain the research problems. Supply chain performance is highly influenced by Customer relationship, internal lean practices, level of information quality, level of information sharing, strategic supplier partnership, organizational performance and industries need to understand these to reach peak performances so as to take timely measures either to take advantage of them or to combat the challenges. Based on overall review of related literature and particularly from the work of (Sillanpää, 2010, Klemencic, 2006, Salazar, 2012, Mohammed, 2014) the following conceptual framework in which this specific study governed was developed: This relationship is shown in Figure 5.1

In the conceptual framework, the independent variables which are believed to have impact on the performance of the selected company are strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practices. Whereas, the operational performance is considered as dependent variable. The previous empirical studies conducted by (Ibrahim & Hamid, 2012), (Karimi & Rafiee , 2014), (Li, et al., 2006), (Mustefa, 2014), (Mutuerandu, 2014), (Suhong, Li, et al., 2004), (Yohannes, 2014) , (Wagnera, S.M., et al., 2012) and (Fantazy KA, Kumar V & Kumar U, 2010) has showed that the higher level of supply chain practices implementation can lead to enhanced operational performance of the organization. Therefore, based on this research finding how much is the influence of effective implementation of supply chain practices on organizational performance of the Tabor Ceramic Products S.C. will be tested.

According to Alan S. Kaufman and Nadeen L. Kaufman, (2005) a Conceptual Framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/synthetically aspects of a process or system being conceived. This study has one dependent and five independent variables. The dependent variable; organizational performances and the independent variables are; Strategic supplier partnership, Customer relationship, Level of information sharing, Quality of information sharing and Internal lean practice. The model demonstrates that a number of challenges are associated with the supply chain performance. The variables of each are outline in the framework as follows.

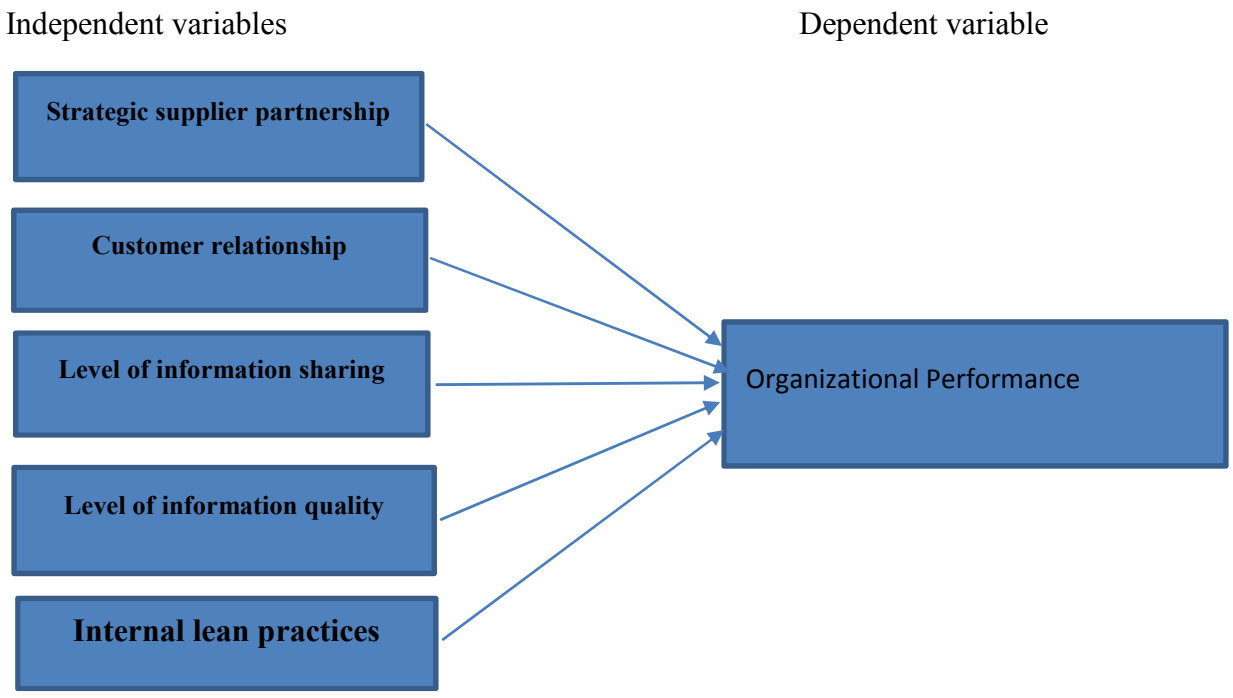


Figure 5.2: Framework-2 Conceptual Framework of the Study

(Source: Sillanpää, 2010, Klemencic, 2006, Salazar, 2012, Mohammed, 2014).

5.3 The Relationship between SCMP and Organizational Performance

To analyze the relationship b/n two variables at a time, the correlation coefficient was used. The possible values of correlation coefficients range from –1 to +1. A value of 0 indicates no linear relationship between two variables (Kothari, 2004). In this section, the independent variables were analyzed one by one using correlation analysis in order to identify their individual relationship with the dependent variable. For this purpose, independent variables such as strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices were tested their degree of relationship with organizational performance. To know the strength and type of correlation between variables, the following table set as a rule of thumb for discussion of variables.

The range of correlation coefficients and its description of their strength were indicated in Table 5.1. Therefore, the individual relationships between two variables at a time were interpreted based on this Table 5.1. That means the correlation between the dependent variable such as organizational performance and independent variables such as strategic supplier partnership, customer relationship, level of information sharing, level of

information quality, and internal lean practices were correlated and presented in Table 5.1.

Table 5.1*: Correlation Analysis Result*

Variables		SSP	CR	IS	IQ	ILP	OP
Strategic supplier partnership (SSP)	Correlation	1	.312**	.353**	.392**	.404**	.567**
	Sig.		.000	.000	.000	.000	.000
Customer relationship (CR)	Correlation	.312**	1	.313**	.237**	.424**	.532**
	Sig.	.000		.000	.000	.000	.000
Level of information sharing (IS)	Correlation	.353**	.313**	1	.263**	.308**	.428**
	Sig.	.000	.000		.000	.000	.000
Level of information quality (IQ)	Correlation	.392**	.237**	.263**	1	.518**	.603**
	Sig.	.000	.000	.000		.000	.000
Internal lean practices (ILP)	Correlation	.404**	.424**	.308**	.518**	1	.560**
	Sig.	.000	.000	.000	.000		.000
Organizational performance (OP)	Correlation	.567**	.532**	.428**	.603**	.560**	1
	Sig.	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level

Source: Model output, 2020

As presented in Table 5.1, the correlation analysis shows that strategic supplier partnership has statistically significant association with organizational performance ($r = 0.567$, $p<0.001$). In the same manner, customer relationship has statistically significant relationship with organizational performance ($r = 0.532$, $p<0.001$). Likewise, level of information sharing has statistically significant relationship with organizational performance ($r = 0.428$, $p<0.001$). Also, level of information quality has positive and statistically significant relationship with organizational performance ($r =0.603$, $p<0.001$). Equally, internal lean practices have positive and statistically significant relationship with organizational performance ($r =0.560$, $p<0.001$). Based on Bhattacherjee (2012) rule of thumb, the result implies that all the independent variables have moderate and strong relationship to the dependent variable.

5.4 Proposed research framework

To suggest a new framework the Relationship between SCMP and Organizational Performance, (Koh *et al.*, 2007; Davies and Kochhar, 2002; Ungan, 2004).

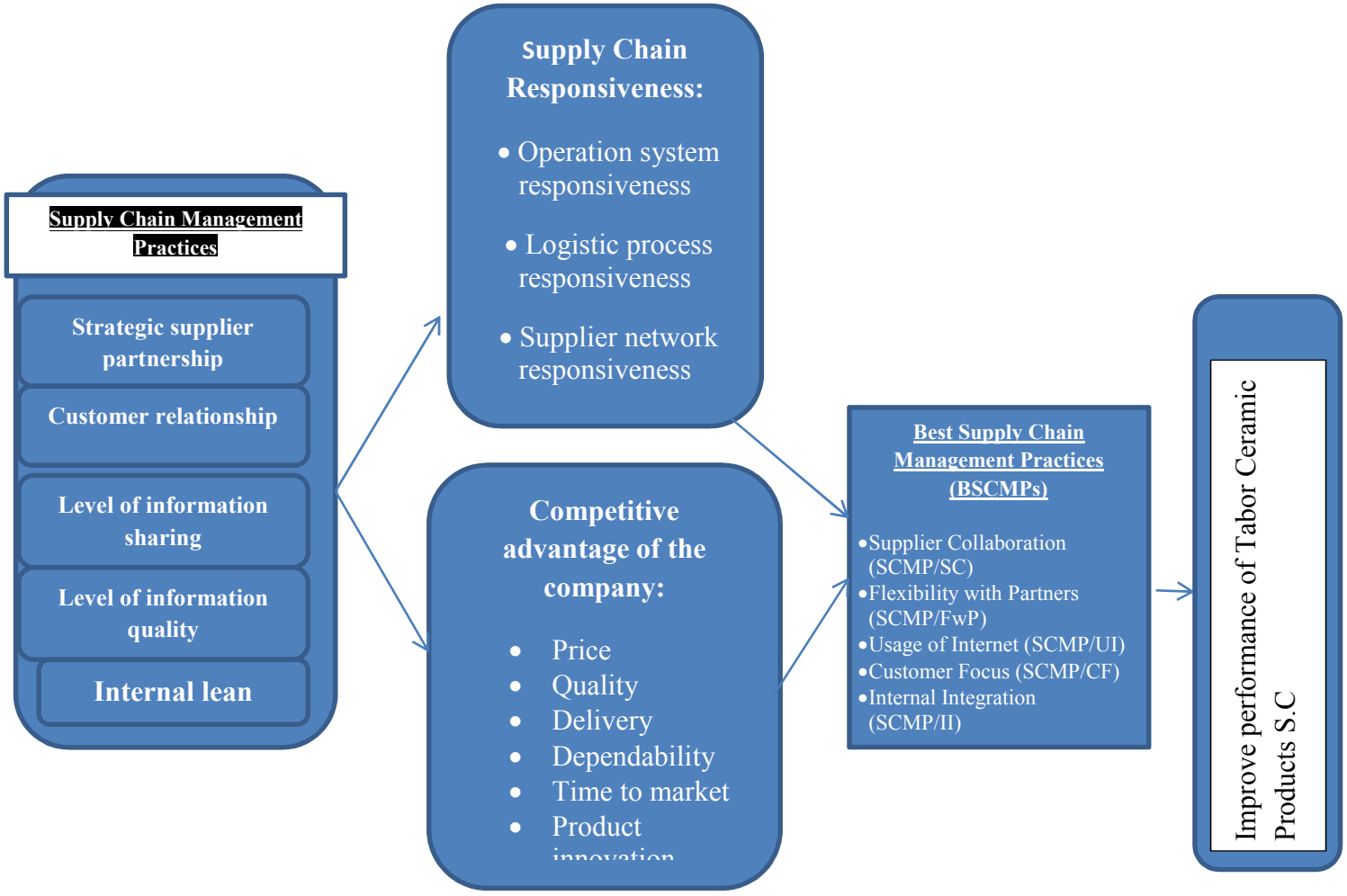


Figure 5.3: Proposed research framework

Supply Chain Management Practices (SCMPs)	Best practice	Remarks
Supplier Collaboration (SC)	Yes	Strong manufacturing performance effects
Flexibility With Partners (FwP)	Yes	Strong manufacturing performance effects
Usage of Internet (UoI)	Yes	Has strongly positive significant effect on market share performance; no significant effects from other performance combinations.
Customer Focus (CF)	Yes	Strong manufacturing performance effects
Internal Integration (II)	Yes	Strong manufacturing performance effects
Quality Management (QM)	Yes	Strong manufacturing performance effects

CHAPTER SIX:

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter includes summary of the major findings, conclusion, and recommendations of the study. It begins with a summary of the major findings followed by presentation on conclusion. Finally, it forwards recommendations for the identified gaps by this study.

6.1. Summary of Major Findings

The main purpose of this study is to examine the role of supply chain management practices on the organizational performance: A case of Tabor Ceramic Products S.C.A total of 236respondents were participated in responding the questionnaire and the collected data was analyzed using frequency, percentage, mean, standard deviation, correlation, and multiple linear regressions. Based on what the result shows, the following summaries are made:

- The ranges of values were presented as disagreeing if the mean score is between 1.00 and 2.60, neutral if the mean score is between 2.60 and 3.40 and agree if the mean score is above 4.20. Therefore, the interpretations of all Likert scale items such as strategic supplier partnership, customer relationship, level of information quality, internal lean practices, level of information sharing, and organizational performance were done based on these classifications.

- Based on the result, respondents were tended to the idea of disagreement on strategic supplier partnership (M =2.30, SD = 0.438), customer relationship (M =2.39, SD = 0.487), level of information sharing (M =2.38, SD = 0.522), level of information quality (M =2.51, SD = 0.726), internal lean practices (M =2.46, SD = 0.532) and organizational performance (M = 2.30, SD = 0.279).

- The results of the correlation analysis indicated that strategic supplier partnership ($r = 0.567$, $p<0.01$), customer relationship ($r = 0.532$, $p<0.01$), level of information sharing ($r = 0.428$, $p<0.01$), level of information quality ($r = 0.603$, $p<0.01$), and internal lean practices ($r = 0.560$, $p<0.01$), has statistically significant relationship with organizational performance.

- The result of the model summary of multiple linear regression analysis indicated that the overall relationship between the dependent and independent variables is strong (R= 0.788).

- The adjusted R^2 value of the regression model was 0.621, indicating that 62.1% of variance in organizational performance was accounted by strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices. The remaining 37.9% of variance in organizational performance was accounted by other variables not included in this study.

- The ANOVA table indicated that the multiple regression model itself is statistically significant or not significant. Accordingly, it is found that the model is statistically significant when strategic supplier partnership, customer relationship, level of information sharing, level of information quality, and internal lean practices were included ($F=75.280$, $p<0.001$). Therefore, the overall equation was found to be statistically significant.

- The result of the multiple linear regression models indicated that five variables were included in the model and all predictors have found to be a significant effect on the organizational performance. These are strategic supplier partnership, customer relationship, level of information sharing, level of information quality and internal lean practices.

- The level of information sharing has significant effect on organizational performance at Tabor Ceramic Products S.C. In relation to this assumption, the researcher rejects the null assumption and accepts the alternative assumption. This indicated that level of information sharing has significant effect on organizational performance at Tabor Ceramic Products S.C.

6.2. Conclusion

It is evident that Tabor Ceramic Products S.C would not perform well if supply chain management practices are improved and practiced properly. This however can be accomplished, if the company not performs well in strategic partnerships, customer relationship, high level of information sharing, information quality, as well as internal lean practices.

The study result indicated that strategic supplier partnership has not significant effect on organizational considers quality as the number one criteria in selecting suppliers, solve problems jointly with its suppliers, help suppliers to improve quality, engaging in continuous improvement programs that include its key suppliers, as well as involving its key suppliers in new product processes. This is an indication that Tabor Ceramic Products S.C, improve its performance.

Also, customer relationship has significant effect on organizational performance. This is also an eye opener to the managers of the Tabor Ceramic Products S.C that customer relationship can be improved if they frequently interact with their customers, measure their customer satisfaction, determine future customer expectations as well as evaluate the importance of their relationship with their customers.

The level of information sharing also has effect on organizational performance. This is also an indication that Tabor Ceramic Products S.C will be able to enhance its performances if it shares propriety information with its trading partners, inform trading partners in advance of changing needs, as well as its trading partners also sharing business knowledge of core business processes with them.

With regards to the effect of the level of information quality on organizational performance, the finding of the study indicates that when there is not a timely, accurate, complete, adequate as well as reliable exchange of information between Tabor Ceramic Products S.C and its trading partners, the Company would have improved its performance.

Finally, an internal lean practice has significant effect on organizational performance in Tabor Ceramic Products S.C. This implies that the company provides products and services whenever needed by the customer. However, the company has limitation in equipment set up time for delivering product and service to the customer.

In conclusion as the research see to study the effect of supply chain management practices on the organization performance, it was observed that all the supply chain management practices studied had a significant effect on the organization's performance. To improve organization performance, the supply chain management focuses on operational time, cost, response, customer service and profitability or margins.

However, it was noted that some of the respondents were not well versed with some of the practices like Customer relationship and hence had missing values. It was noted that some respondents disagreed with implementation of training and this is a very crucial practice as it will improve the individual's performance and morale which will translate into improved organization performance. From the study we can conclude that the organization performance of Tabor ceramic products S.C has improved with the implementation of the said practices as compared to before implementation. For an organization is not achieve a competitive advantage in the global environment, then it has to embrace supply chain practices as its culture. For instance, training of employees should be core and this would not be possible without communication within the organization. Based on research findings, the researcher recommended that managers should take a serious attention on the relationship among Supply chain management practices, and performance improvement in the Tabor ceramic products S.C and should have the correct mix of practices that would lead to improved performance as the combined effect is greater than for one practice.

6.3. Recommendations

In order to improve Tabor Ceramic Products S.C performance at, the researcher forwarded the following recommendations based on the major findings and conclusion of the study.

- Strategic supplier partnership has significant effect on organizational performance. Therefore, Tabor Ceramic Products Share Company should deliver quality product for its suppliers. Additionally, in order to improve its performance, the company should include its key suppliers in its planning and goal-setting activities.

- Customer relationship was found to be a significant factor that influences organizational performance. Good relationships with supply chain members, including customers are needed for successful implementation of SCM programs.

Therefore, Tabor Ceramic Products S.C should frequently measure and evaluate customer satisfaction.

- Level of information sharing had effect on organizational performance. Therefore, in *-order to increase the organization performance, Tabor Ceramic Products S.C should share business knowledge of core business processes with trading partners. Additionally, the company should exchange information that helps establishment of business planning with trading partners

- The level of information quality has effect on organizational performance. Therefore, Tabor Ceramic Products S.C should exchange reliable and accurate information timely and adequately with our trading partners.

- Internal lean practices were found to be a significant factor that affects the performance of Tabor Ceramic Products S.C. Therefore, the company should improve its own performance with small incremental lean procurement improvements. Likewise, the Company should rely on inspecting products procured.

REFERENCES

Adebayo, I. Toyin, (2012) „Supply Chain Management (SCM) Practices in Nigeria Today: Impact on SCM Performance European", Journal of Business and Social Sciences, 1(6):107-115.

Al-Sayaad, J., Rabea, A., &Samrah, A. (2006).*Statistics for Economics and Administration Studies*. Dar Hafez, Jeddah: Kingdom of Saudi Arabia.

Alvarado UY, Kotzab H., (2001) „Supply chain management: the integration of logistics in marketing", Journal of Industrial Marketing Management.

AnantDeshpande, (2012) Supply Chain Management Dimensions, Supply Chain Performance and Organizational Performance: An Integrated Framework, International Journal of Business and Management.

Arawati A., (2011), „Supply chain management, product quality, and business performance", International Conference on Sociality and Economic Development, 10: 98-102.

Arkebe O., (2015), Made in Ethiopia – Industrial Policy in Ethiopia, Oxford University Press.

Azevedo S.G, Carvalho H. and Machado V.C, (2011), A proposal of Large Supply Chain Management Practices and a Performance Measurement System, International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 1, No. 1.

Babbie, E. R. (2011). *Introduction to social research*.Wadsworth Cengage learning.

Bagchi, PV Skjoett and Larsen T. (2005): Supply Chain Integration, in: International journal of Logistics Management, Vol. 16, No. 2, S. 275-294.

Bechtel C.andJayaram. (1997): Supply Chain Management a Strategic Perspective, in: International Journal of Logistics Management, Vol. 8, No. 1, S. 15-34

Benito J.G, (2010), Supply Chain Strategy and Business Performance, An Analysis based on the Relative Importance Assigned to Generic Competitive Objectives, International Journal of Operations and Production Management, Vol. 30 No. 8, pp. 774-797,

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices.* University of South Florida: Scholar Commons.

Boddy, D., Macbeth, D., and Wagner, B. (2000), "Implementing Collaboration between Organizations: An Empirical Study of Supply Chain Partnering", Journal of Management

Charles et.al, (2014), Assessment of Supply Chain Management Practices and IT Effects on the Performance of KASAPREKO Company limited in GHANA. European Journal of

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

Cooper M.C., Lambert D.M., Pagh, J.D. (1997), Supply Chain Management - More than a New Name for Logistic, in: International Journal of Logistics Management, Vol. 8, No. 1, pp. 1-14.

Cousins, P. D., Lawson, B. and Squire, B. (2006) „Supply chain management: theory and practice the emergence of an academic discipline", International Journal of Operations &Production Management, 26: 697-702.

Donald J. Bowersox, David J. Closs, M. Bixby Cooper, (2002), Supply Chain Logistics Management, Michigan State University, McGraw-Hill Higher Education, Donlon JP. (1996) „Maximizing value in the supply chain", Chief Executive, 117:54–63.

DrDewei Lu (2011), Fundamentals of Supply Chain Management, Ventus publishing aps.

DrMatiwosEnsermu (2013), Logistics and Supply Chain Management, Addis Ababa University School of commerce.

Dr. BelghisBavarsad, Dr. AbdolHadiDarzianAzizi, FatemehJavidiAlesadi (2013), Study of relationship between supply chain management strategy with logistics performance and organizational performance, Institute of Interdisciplinary Business Research, Vol. 4, No.9

Edward Frazelle (2002), Supply Chain Strategy: The Logistics of Supply Chain Management, MC-Graw Hill Companies, New York.

Faisal, T. (2011). A study of total quality management and supply chain management practices. International Journal of Productivity and Performance Management, Vol. 60(No. 3), pp. 268-288.

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.

Frohlich, M.T. and Westbrook, R. (2001), "Arcs of Integration: An International Study of Supply Chain Strategies", Journal of Operations Management,

FugateB. S., Mentzer J. T. and Stank T. P, (2010). Logistics Performance: Efficiency, Effectiveness and Differentiation, Journal of Business Logistics31: 43-61.

G. P. Kurien, M.N. Qureshi (2011) Study of performance measurement practices in supply chain management International Journal of Business, Management and Social Sciences Vol. 2, No. 4, pp. 19-34.

Gammelgaard B. and Larson P.D. (2001), "Logistics skills and competencies for supply chain management", Journal of Business Logistics, Vol. 22 No. 2, pp. 27-50.

Goldhar J. D. and Lei D. "The Shape of Twenty-First Century Global Manufacturing, "The Journal of Business Strategy (12:2), 1991, pp. 37-41.

Green K.W., Whitten D. and Imman R.A. (2008).The Impact of Logistics Performance on Organizational Performance in a Supply Chain Context. Supply Chain Management: An International Journal13: 317-327

Groves G. and Valsamakis V. "Supplier-Customer Relationships and Company Performance," International Journal of Logistics Management (9:2), 1998, pp. 51-64.

Gujarati, D. N. (2004).*Basic econometrics* (ed.) McGraw-Hill: Irwin, a business.

GunjanSoni and RambabuKodali (2011) The strategic fit between „„competitive strategy"" and „„supply chain strategy"" in Indian manufacturing industry: an empirical approach, Emerald Group Publishing Limited VOL. 15 NO. 2, pp. 70-89 http://cscmp.org/AboutCSCMP/Definitions/Definitions.asp

Holmberg S. (2000) „A system perspective on supply chain measurement", International Journal of Physical Distribution & Logistics 30(10): 847-68. IPEDR vol.5 © (2011) IACSIT Press, Singapore.

Hult, G. T., Ketchen, D. J., and Slater, S. F. "Information Processing, Knowledge Development, and Strategic Supply Chain Performance," Academy of Management Journal (47:2), 2004, pp. 243-253.

Ibrahim, D. S. B., & Hamid, A. A. (2012). Supply Chain Management Practices and Supply Chain Performance Effectiveness. *International Journal of Science and Research (IJSR),* 3(354), pp. ISSN (Online): 2319-7064.

ILKKA SILLANPÄÄ (2011) Sillanpää, Ilkka, Supply chain performance measurement in the manufacturing industry. University of Oulu, Faculty of Technology, Department of Industrial Engineering and Management, University of Oulu, Finland Acta University.

Jie Ferry Parton and Kevin Cox Rodney (2007) Supply Chain Practice, Supply Chain Performance Indicators and Competitive Advantage of Australian Beef Enterprises, AARES 51st Annual Conference.

Julia Wolf (August 2011), Sustainable Supply Chain Management Integration: A Qualitative Analysis of the German Manufacturing Industry, Journal of Business Ethics, Vol. 102, No. 2, pp. 221-235

Julie Pallant (2005) SPSS Survival manual a step by step guide to data analysis using SPSS for Windows (Version 12), Allen &Unwin

K. Ohmae, "The Triad World View," Journal of Business Strategy (Spring 1987): 8-19.

Kalwani M. U. and Naravandas N. "Long-Term Manufacturer Supplier Relationships? Do They Pay Off for Supplier Firms," Journal of Marketing (59:1), 1995, pp. 1-16.

Karimi, E., &Rafiee, M. (2014). Analyzing the Impact of Supply Chain Management Practices on Organizational Performance through Competitive Priorities (Case Study: Iran Pumps Company). *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(2225-8329), pp. 1-15.

Kenneth W. Green Jr, Dwayne Whitten and R. Anthony Inman (2008), The impact of logistics performance on organizational performance in a supply chain context Supply Chain Management: An International Journal13/4, pp 317–327.

Koh L. S.C, Demirbag M., Bayraktar E., Tatoglu E. and Zaim S., (2007), The Impact of Supply Chain Management Practices on Performance of SMEs, Industrial Management & Data Systems, Vol. 107 No. 1, pp. 103-124, Emerald Group Publishing Limited.

Kothari W., (2004), Research Methodology, 2nd Edition, New age international publisher, India.

Kothari, C. R. (2004). *Research Methodology, Methods and Techniques Revised* (2nd Ed.). New Delhi: India, New International Publishers.

Lambert D.M., Cooper M.C. and Pagh J.D. (1998), "Supply chain management: implementation issues and research opportunities", The International Journal of Logistics Management, Vol. 9 No. 2, pp. 1-19.

Lori S. Cook & Daniel R. Heiser, The moderating effect of supply chain role on the relationship between supply chain practices and performance, InternationalJournal of Physical Distribution & Logistics Management,41(2),2011, 104-134.

Li, S., et al, The impact of supply chain management practices on competitive advantage and organizational performance, Omega, Vol. 32,2006, 107–24.

Li, S. et al, Development and validation of a measurement for studying supply chain management practices, Journal of Operations Management, Vol. 23(6), 2005, 618-41.

Malhotra, A., Gosain, S., and El Sawy, O. A. (2005)"Absorptive Capacity Configurations in Supply Chains: Gearing for Partner-Enabled Market Knowledge Creation," MIS Quarterly (29:1), pp. 145-187.

Martin Christopher, (2011) Logistics and Supply Chain Management, Pearson Education Limited 2011, 4th_Edition

Mentzer, J.T., W. DeWitt and J.S. Keebler,e t al.: (2001), 'Defining Supply Chain Management', Journal of Business Logistics22 (2), 1-25.

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, 82-104.

Miller, G., & Whicker, M. L. (1999). *Handbook of Research Methods in Public Administration*. New York: M. Dekker.

Min S, Mentzer JT. (2004) „Developing and measuring supply chain concepts", Journal of Business Logistics; 25(1):63–99.

Moorman, C. "Organizational Market-Information Processes: Cultural Antecedents and New Product Outcomes," Journal of Marketing Research (32:3), 1995, pp. 318-335.

Muhammad IshtiaqIshaq, WaseemKhaliq, NaziaHussain, Muhammad Waqas, (2012), A Review on Triple-A Supply Chain Performance, School of Doctoral Studies (European Union) Journal, p 89- 94

Mullin, J. W.The Chemical Engineer (London) No 211 (Sept 1967) 176, Si Units in Chemical Engineering.

Mustefa Mohammed, (2014), Supply Chain Management Practices and Firm Performance in Case of Awash Tannery Plc, Unpublished MA., Thesis Submitted to Addis Ababa University, College of Business and Economics, Department of Management, Addis Ababa.

National Archive report (2005) The Selection of Case Files: Sampling Techniques, Richmond

Robert Ho (2006), Hand Book of Univariate and Multivariate Data Analysis and Interpretation withSPSS, Taylor&Francis Group LLC

Ronald M. Salazar, BS (2012), The effect of Supply Chain Management Process on Competitive Advantage and Organizational Performance. Degree of Master of Science thesis, Department of Systems and Engineering Management Graduate School of Engineering and Management Air Force Institute of Technology Air University.

Rui M. Mansidão&Luís A.G. Coelho (2014), Logistics Performance: a theoretical conceptual model for small and medium enterprises, CEFAGE-UE Working Paper.

S. R. HossieniBaharanchi (2009). Investigation of the impact of Supply Chain Integration on Product Innovation and quality. Research notes, vol, 16, no. 1, pp. 81-83.

Sabry, A., (2015), The Impact of Supply-Chain Management Capabilities on Business Performance in Egyptian Industrial Sector, International Journal of Business and Management; Vol. 10, No. 6, Canadian Center of Science and Education.

Samir K. Srivastava, October (2006), Logistics and Supply Chain Management Practices in India, 6th Global Conference on Business & Economics, Management Development Institute, Gurgaon, India.

Shah R, Goldstein SM. and Ward PT. (2002) „Aligning supply chain management characteristics and inter organizational information system types: an exploratory study", IEEE Transactions on Engineering Management, 49 (3): 282–92.

So, S., & Sun, H. (2010). Supplier integration strategy for lean manufacturing adoption in electronic-enabled supply chains. Supply Chain Manag.:*AnInt.J.* 15(6), 474–487.

Sotiris Zigiaris MSc, (2000) Supply Chain Management, Report produced for the EC funded project.Srivastava, S.K. (2007), 'Green Supply Chain Management: A State-of-the-Art Literature Re view', International Journal of Management Reviews9(1), 53-80.

STANLEY E. FAWCETT, STEVEN R. CLINTON (FALL 1997) Enhancing Logistics to Improve the Competitiveness of Manufacturing Organizations: A Triad Perspective, Transportation Journal, Vol. 37, No. 1, pp. 18-28

Susana G. Azevedo, Helena Carvalho, and V. Cruz-Machado, (April 2011), A proposal of Large Supply Chain Management Practices and a Performance Measurement System, International Journal of e-Education, e-Business, e-Management and e-Learning.

Tan KC, Kannan VR, Handfield RB. (1998) „Supply chain management: supplier performance and firm performance", International Journal of Purchasing and Materials Management.

Tan, K Kannan V. (1999): Supply Chain Management: An Empirical Study of Its Impact on Performance, in: International Journal of Operations & Production Management, Vol. 19, No. 9/10, S. 1034-1052.

Tan, K.C Lyman, S.B. and Wisner, J.D. (2002) „Supply chain management: a strategic perspective", International Journal of Operations and Production Management. 22(6): 614- 31.

Tan, K.C. (2001), A framework of supply chain management literature‖, European Journal of Purchasing and Supply Management, Vol. 7, pp. 39-48.

ZIKMUND, W.G. (2003) Business Research Methods (7th ed). Mason: Thomson Southwestern.

Appendix I: Questionnaire

Hawassa University

Institute of Technology

Faculty of Manufacturing,

Industrial Engineering Department

Dear respondents, the purpose of this questionnaire is to collect data on for my MSc such entitled the Role of Supply Chain Management Practices on the organizational performance: A case of Tabor Ceramic Products S.C. The study is purely for academic purpose and thus not affects you in any case. So, your genuine, frank and timely response is vital for successfulness of the study. Therefore, I kindly request you to respond to each items of the question very carefully.

Contact address

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Mobile: 0910-208206 or e-mail: gutetinaone@gmail.com')

Thank you in advance for spending your precious time!

General Instruction

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

PART I: DEMOGRAPHIC INFORMATION

1. **Gender**

   1- Male

   2- Female

2. **2.Age**

   1- Less than 25 years
   2- 26-44years
   3- 45-54 years
   4- Over 55years

3. **Educational qualification:**

   1- Grade 12 completed
   2 - Certificate/diplomas
   3- BSc/BA
   4- MSc/MA degree

4. **4. Position in the company**

   1- Operators
   2- Supervisor
   3- Officer
   4- Manager

5. **Years of worked at the organization:**

   1- Under two years
   2- 2- 2-5 years
   3- 3- 6-10 years
   4- 4- Above 10 years

PART II: INSTRUMENTS OF SUPPLY CHAIN MANAGEMENT PRACTICE

In order to investigate the Role of SCM practices on Tabor Ceramic Products S.Cperformance, the researcher prepared the following questions, please tick (√) on the appropriate question number to indicate the extent to which you agree or disagree with each

statement. The item has five-point Likert type scales; the scales have the following meaning: 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

A. Strategic supplier partnership (SSP)

No	Strategic supplier partnership (SSP)	1	2	3	4	5
1	We consider quality as our number one criterion in selecting suppliers.					
2	We regularly solve problems jointly with our suppliers					
3	We have helped our suppliers to improve their product quality					
4	We have continuous improvement programs that include our key suppliers.					
5	We include our key suppliers in our planning and goal-setting activities.					
6	We actively involve our key suppliers in new product development processes.					

B. Customer relationship (CR)

No	Customer relationship (CR)	1	2	3	4	5
1	We frequently interact with customers to set reliability, responsiveness,					
2	We frequently measure and evaluate customer satisfaction.					
3	We frequently determine future customer expectations					
4	Leads to reduces organization's ability to match demand and supply					
5	Lead to increment cost of goods					

C. Level of information sharing (IS)

No	Level of information sharing (IS)	1	2	3	4	5
1	We inform trading partners in advance of changing needs.					
2	Our trading partners share proprietary information with us.					
3	Our trading partners keep us fully informed about issues that affect our business.					
4	Our trading partners share business knowledge of core business processes with us.					
5	We and our trading partners exchange information that helps establishment of business planning.					
6	We and our trading partners keep each other informed about events or changes that may affect the other partners.					

D. Level of information quality (IQ)

No	Level of information quality (IQ)	1	2	3	4	5
1	Information exchange between our trading partners and us is timely.					
2	Information exchange between our trading partners and us is accurate					
3	Information exchange between our trading partners and us is complete.					
4	Information exchange between our trading partners and us is adequate					
5	Information exchange between our trading partners and us is reliable.					
6	Information exchange between our trading partners and us is timely.					

E. Internal lean practices

No	Internal lean practices	1	2	3	4	5
1	Our firm reduces process set-up time					
2	Our firm produces only what is demanded by customers when needed (e.g. JIT)					
3	The firm continually improve their own performance with small incremental lean procurement improvements (Kaizen)					
4	Firm practices delayering, Downsizing and Outsourcing (Lean Thinking)					
5	Firm does not rely on inspecting products procured(six sigma)					

PART III. INSTRUMENTS OF ORGANIZATIONAL PERFORMANCE

Regarding organizational performance, please thick appropriates box which best indicate your firm's overall performance. The item scales are five-point Likert scales with 1 = Significant Decrease, 2 = Decrease, 3= same as before, 4=Increase, 5=Significant increase.

No	Statement	1	2	3	4	5
1	We offer product or services at reasonable prices					
2	We are deliver quality product and service to the customers whenever needed (on reasonable response time).					
3	Our planning is always meet the customer need(correct on our forecasting					
4	Our planning(budget and optimization plan) is accurate					
5	We receive product and service on time					
6	We offer products and service that are highly reliable					
7	We deliver the kind of products and service needed					
8	We provide dependable delivery.					
9	We respond well to customer demand for "new" feature					
10	We deliver product and service to market quickly					

If you would like to provide some comments on the questioner or on the role of SCM, please below

……
……
… …….……..…….…….

አባሪ ፤ - መጠይቅ

ሀዋሳ ዩኒቨርሲቲ

የቴክኖሎጂ ተቋም

ኢንዱስትሪ ፋኩልቲ ፣

የኢንዱስትሪ ኢንጂነሪንግ ክፍል

ውድ ምላሽ ሰጪዎች ፣ የዚህ መጠይቅ ዓላማ በድርጅታዊ አፈፃፀሙ ላይ የአቅርቦት ሰንሰለት አስተዳደር ልምምዶች በሚል ርዕስ ለኤም.ኤስ.ሲ መረጃን መሰብሰብ ነው - የታቦር ሴራሚክ ምርቶች አክሲዮን ጉዳይ ጥናቱ ለአካዳሚክ ዓላማ ብቻ ነው ስለሆነም እርስዎ ውስጥ አይካም። ማንኛውም ጉዳይ። ስለዚህ ፣ እውነተኛ ፣ ግልፅ እና ወቅታዊ ምላሽ ለጥናቱ ስኬታማነት አስፈላጊ ነው። ስለዚህ ለእያንዳንዱ የጥያቄ ዕቃዎች በጣም በጥንቃቄ እንዲመልሱ በትህትና እጠይቃለሁ።

የእውቂያ አድራሻ

ማንኛውም ጥያቄ ካለዎት እባክዎን እኔን ለማነጋገር አያመንቱ እና በሚመችዎት መሠረት (በሞባይል: 0910-208206 **ወይም በኢሜል**: gutetinaone@gmail.com ')

ውድ ጊዜዎን ስላጠፉ

አስቀድመው እናመሰግናለን!

አጠቃላይ ትምህርት

ስምዎን መጻፍ አያስፈልግም

የመልስ አማራጮች ባሉበት እባክዎን (√) ን በተገቢው ሳጥን ውስጥ ምልክት ያድርጉ።

ክፍል 1 - ዲሞግራፊያዊ መረጃ

ጾታ

1- ወንድ

2- ሴት

ዕድሜ

1- ከ 25 ዓመት በታች

2- 26-44 ዓመታት

3- 45-54 ዓመታት

4- ከ 55 ዓመታት በላይ

የትምህርት ደረጃ -

1- 12 ኛ ክፍል ተጠናቀቀ

2 - የምስክር ወረቀት/ዲፕሎማዎች

3- BSc/BA

4- የ MSC/MA ዲግሪ

በኩባንያው ውስጥ ያለው ቦታ

1- ኦፕሬተሮች

2- ተቆጣጣሪ

3- መኮንን

4- ሥራ አስኪያጅ

በድርጅቱ ውስጥ የዓመታት ሥራ -

1- ከሁለት ዓመት በታች

2- 2- 2-5 ዓመታት

3- 3- 6-10 ዓመታት

4- 4- ከ 10 ዓመት በላይ

ክፍል II - የአቅርቦት ሰንሰለት አስተዳደር አሠራር መሣሪያዎች

በታቦር ሴራሚክ ምርቶች ኤስ.ሲ. አፈጻጸም ላይ የ SCM ልምምዶችን ሚና ለመመርመር ተመራማሪው የሚከተሉትን ጥያቄዎች አዘጋጅቷል ፣ እባክዎን በእያንዳንዱ ዓረፍተ ነገር የሚስማሙበትን ወይም የማይስማሙበትን መጠን ለማመልከት በተገቢው የጥያቄ ቁጥር ላይ (√) ላይ ምልክት ያድርጉ። እቃው ባለአምስት ነጥብ Likert ዓይነት ሚዛኖች አሉት። ሚዛኖቹ የሚከተለው ትርጉም አላቸው 1 = በጣም አልስማማም ፣ 2 = አልስማማም ፣ 3 = ገለልተኛ ፣ 4 = እስማማለሁ እና 5 = በጥብቅ እስማማለሁ።

ሀ.የስትራቴጂክ አቅራቢ ሽርክና (ኤስ.ኤስ.ፒ.)

ተ.ቁ	የስትራቴጂክ አቅራቢ ሽርክና (SSP)	1	2	3	4	5
1	አቅራቢዎችን በመምረጥ ጥራትን እንደ ቁጥር አንድ መስፈርት እንቆጥረዋለን።					
2	በየጊዜው ከአቅራቢዎቻችን ጋር በጋራ ችግሮችን እንፈታለን					
3	አቅራቢዎቻችን የምርት ጥራታቸውን እንዲያሻሽሉ አግዘናል					
4	ቁልፍ አቅራቢዎቻችንን ያካተቱ ቀጣይ የማሻሻያ ፕሮግራሞች አሉን።.					
5	በዕቅድ እና በግብ ማቀናበሪያ እንቅስቃሴዎች ውስጥ ቁልፍ አቅራቢዎቻችንን እናካትታለን።					
6	በአዲሱ የምርት ልማት ሂደቶች ውስጥ ቁልፍ አቅራቢዎቻችንን በንቃት እናሳተፋለን።					

ለ. የደንበኛ ግንኙነት (CR)

ተ.ቁ	የደንበኛ ግንኙነት (CR)	1	2	3	4	5
1	አስተማማኝነትን ፣ ምላሽ ሰጪነትን ለማቀናበር ከደንበኞች ጋር በተደጋጋሚ እንገናኛለን					
2	የደንበኞችን እርካታ በተደጋጋሚ እንለካለን እና እንገመግማለን።					
3	እኛ የወደፊቱን የደንበኛ ተስፋዎች ብዙ ጊዜ እንወስናለን					
4	የድርጅትን ፍላጎት እና አቅርቦት የማዛመድ ችሎታን ለመቀነስ ይመራል					
5	ወደ ሽቀጦች ዋጋ ጭማሪ ይምሩ					

ሐየሚጃመፈራትደረጃ(አይኤስ)

ተ.ቁ	የመረጃ መጋራት ደረጃ (አይኤስ)	1	2	3	4	5
1	ፍላጎቶችን ስለመቀየር ለንግድ አጋሮች አስቀድመን እናሳውቃለን።					
2	የንግድ አጋሮቻችን የባለቤትነት መረጃን ከእኛ ጋር ይጋራሉ።					
3	የንግድ አጋሮቻችን በንግዳችን ላይ ተጽዕኖ ስለሚያሳድሩ ጉዳዮች ሙሉ መረጃ ይሰጡናል።					
4	የንግድ አጋሮቻችን ስለ ዋና የንግድ ሂደቶች የንግድ ዕውቀትን ከእኛ ጋር ይጋራሉ።					

5	እኛ እና የንግድ አጋሮቻችን የንግድ እቅድ ለማቋቋም የሚረዳ መረጃ እንለዋወጣለን።					
6	እኛ እና የንግድ አጋሮቻችን እርስ በእርስ እናሳውቃለን ስለ ሌሎች ክስተቶች ወይም ለውጦች በሌሎች አጋሮች ላይ ተጽዕኖ ሊያሳድሩ ይችላሉ።					

መ.የመረጃ ጥራት ደረጃ (አይ.ኬ.)

ተ.ቁ	የመረጃ ጥራት ደረጃ (አይ.ኬ.)	1	2	3	4	5
1	በእኛ የንግድ አጋሮች እና በእኛ መካከል የመረጃ ልውውጥ ወቅታዊ ነው።					
2	በእኛ የንግድ አጋሮች እና በእኛ መካከል የመረጃ ልውውጥ ትክክለኛ ነው					
3	በእኛ የንግድ አጋሮች እና በእኛ መካከል የመረጃ ልውውጥ ተጠናቅቋል።					
4	በእኛ የንግድ አጋሮች እና በእኛ መካከል የመረጃ ልውውጥ በቂ ነው					
5	በእኛ የንግድ አጋሮች እና በእኛ መካከል የመረጃ ልውውጥ አስተማማኝ ነው።					
6	በእኛ የንግድ አጋሮች እና በእኛ መካከል የመረጃ ልውውጥ ወቅታዊ ነው።					

ሠ.የውስጥ ዘንበል ያለ ልምዶች

ተ.ቁ	የውስጥ ዘንበል ያለ ልምዶች	1	2	3	4	5
1	ድርጅታችን የሂደቱን የማቀናበር ጊዜን ይቀንሳል					
2	ድርጅታችን አስፈላጊ ሆኖ ሲገኝ በደንበኞች የሚጠየቀውን ብቻ (ለምሳሌ JIT)					
3	ድርጅቱ በአነስተኛ ጭማሪ ግዥ ግዥ ማሻሻያዎች (ካይዘን) የራሳቸውን አፈፃፀም በተከታታይ ያሻሽላሉ፡፡					
4	የጽኑ ልምዶች መዘግየት ፣ መቀነስ እና ወደ ውጭ ማሰማራት (ቀጠን ያለ አስተሳሰብ)					
5	ኩባንያው የተገዙትን ምርቶች በመመርመር ላይ አይመሰረትም (ስድስት ሲግማ)					

ክፍል III. የድርጅት አፈፃፀም መሣሪያዎች

ስለ ድርጅታዊ አፈጻጸም ፣ እባክዎን የኩባንያዎን አጠቃላይ አፈፃፀም በተሻለ የሚያመላክት እባክዎን ወፍራም የሚስማማ ሳጥን። የእቃዎቹ ሚዛኖች ባለአምስት ነጥብ የሊኬርት ሚዛኖች 1 = ጉልህ ቅነሳ ፣ 2 = መቀነስ ፣ 3 = እንደበፊቱ ተመሳሳይ ፣ 4 = ጨምር ፣ 5 = ጉልህ ጭማሪ።

ተ.ቁ	መግለጫ	1	2	3	4	5
1	በተመጣጣኝ ዋጋዎች ምርት ወይም አገልግሎቶችን እናቀርባለን					
2	አስፈላጊ በሚሆንበት ጊዜ ሁሉ ጥራት ያለው ምርት እና አገልግሎት ለደንበኞች እናቀርባለን (በተመጣጣኝ ምላሽ ጊዜ)።					
3	የእኛ ዕቅድ ሁል ጊዜ የደንበኛውን ፍላጎት ያሟላል (በእኛ ትንበያ ላይ ትክክል ነው)					
4	የእኛ ዕቅድ (የበጀት እና የማመቻቸት ዕቅድ) ትክክለኛ ነው					
5	ምርት እና አገልግሎት በሰዓቱ እንቀበላለን					
6	እኛ በጣም አስተማማኝ የሆኑ ምርቶችን እና አገልግሎቶችን እናቀርባለን					
7	የሚፈለገውን ዓይነት ምርት እና አገልግሎት እናቀርባለን					
8	እኛ አስተማማኝ ማድረስ እናቀርባለን።					
9	“አዲስ” ባህሪ ለደንበኛ ፍላጎት ጥሩ ምላሽ እንሰጣለን					
10	ምርት እና አገልግሎትን በፍጥነት ለገበያ እናቀርባለን					

ስለ ጠያቂው ወይም ስለ ኤስ.ኤም.ኤም ሚና አንዳንድ አስተያየቶችን መስጠት ከፈለጉ እባክዎን ከዚህ በታች

……
……
…… ……

Appendix II: Observation check list

Observation check list

1. How to observe about waste products in Tabor Ceramic Products S.C?
2. How to observe about production process in Tabor Ceramic Products S.C?
3. How to observe about warehouse management system in Tabor Ceramic Products S.C?
4. How to observe about the process of removing all of the wasted time and resources in the production process?
5. How to observe about inbound transportation system in Tabor Ceramic Products S.C?

Appendix III:

Interview Questions

Interviewee group: Top management

1. How many major suppliers do you have in your operations system?
2. What selection criteria do you follow during choosing a supplier?
3. Do you measure your supplier performance?
4. Who are your customers? (General customer characteristics)
5. Do you have any information or risk sharing, or any integration related issues with your supplier?
6. How do you achieve your common objective?

Interviewee group: Production department

1. What do you do to further improve your system?
2. How do you motivate your staff and worker to get best out of them?
3. Do you have any continuous development process?
4. How often do you introduce any innovative operation process?
5. What is the average time for new product development?
6. What are the constraints in your optimum capacity utilization?
7. How do you reduce material usage and waste

Interviewee group: Marketing department

1. What is your business strategy with respect to customer service?
2. How do you improve your quality of customer service?
3. Do you have any documented procedure to deal with customer complaint?
4. How do you organize information on your customer?
5. What strategy do you adopt to get to customer and for customer to get to you?
6. What kind of customer contact facility do you use?

Interviewee group: Purchasing department

1. As a customer, what do you expect from your supplier?
2. How do you ensure that you are receiving 'quality' material from your supplier?
3. What selection criteria do you follow during choosing a supplier?
4. How does your company cooperate with supplier to improve operation process?
5. How do you share your information with supplier?
6. Do you have material specification list in place to guide your supplier?