



SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY!



**THE EFFECT OF SUPPLY CHAIN MANAGEMENT PRACTICES ON
PERFORMANCE OF ETHIO AGRI CEFT P.L.C. TEA PROCESSING
AND PACKAGING FACTORY**

BY

BEHAILU ASMAMAW

ADVISOR: BERHANU DENU (PhD)

**A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY SCHOOL OF
COMMERCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE MASTER OF ARTS DEGREE IN LOGISTICS AND SUPPLY
CHAIN MANAGEMENT**

JUNE, 2019

ADDIS ABABA, ETHIOPIA

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

**THE EFFECT OF SUPPLY CHAIN MANAGEMENT
PRACTICES ON PERFORMANCE OF ETHIO AGRI CEFT
P.L.C. TEA PROCESSING AND PACKAGING FACTORY**

By

BEHAILU ASMAMAW

APPROVED BY BOARD OF EXAMINERS

Dr. BERHANU DENU

ADVISOR

SIGNATURE

DATE

Dr. TADIWOS MENTA

EXTERNAL EXAMINER

SIGNATURE

DATE

Dr. SHIFERAW MITIKU

INTERNAL EXAMINER

SIGNATURE

DATE

DECLARATION

I, Behailu Asmamaw declare that this thesis is my original work prepared under the title of; The Effect of Supply Chain Management Practice on Performance of Ethio Agri CEFT Tea Processing & Packaging Factory. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis is not submitted at any university for the purpose of earning any degree.

Declared By;

Name: Behailu Asmamaw

Signature: _____

Date: _____

ENDORSEMENT

This thesis is submitted to Addis Ababa University School of Commerce; I certify that Behailu Asmamaw has carried out his research under the title of, The Effect of Supply Chain Management Practice on Performance of Ethio Agri CEFT Tea Processing & Packaging Factory under my supervision and approval as a thesis.

Advisor: Berhanu Denu (PhD)

Signature: _____

Date: _____

ACKNOWLEDGEMENT

First and foremost, I would like to thank almighty God for giving me the strength to finish this study. Next, I would like to thank my advisor Berhanu Denu (PhD) for his comments & suggestions that led me on the right track of the study. I would like to give special thanks with my heart to Ato Wondwosen Biruk, production division head of Ethio Agri CEFT Tea processing and packaging factory, for supporting me starting from my initial survey until the end of final output of this study by disseminating & collecting questionnaires, providing all necessary data's and information's. I would like to express my gratitude for all employees of the tea factory who gave response for my questionnaire.

At the last but not the least I would like to thank my lovely family, my wife Senait Dagne, she always supports me by facilitating things to concentrate on my study and handling all family matters. Her endless support gives me strength and my boys Adonay Behailu and Dagmawi Behailu also understand me and give their priceless support.

Behailu Asmamaw

DEDICATION

This study is dedicated to my father Asmamaw Addisa. He is always my leader for every activity of life experience, for earning an honest living for me and for supporting and encouraging me to believe in myself.

TABLE OF CONTENTS

Declaration	i
Endorsement.....	ii
Acknowledgement	iii
Dedication.....	iv
Table of Contents	v
List of Acronyms and Abbreviations.....	viii
List of Tables.....	ix
List of Figures	x
Abstract.....	xi
Chapter One: Introduction.....	1
1.1 Back Ground of the Study	1
1.2 Statement of the Problem.....	2
1.3 Research Questions	3
1.4 Objective of the Study	4
1.4.1 General Objective	4
1.4.2 Specific Objective	4
1.5 Significance of the Study	4
1.6 Scope of the Study	5
1.7 Limitation of the Study	5
1.8 Definition of Terms	5
1.9 Organization of the Study	6
Chapter Two: Review of Related Literature	7
2.1 Theoretical Literature Review	7
2.1.1 Definition of Supply Chain Management.....	7
2.1.2 Supply Chain Management Practice	8
2.1.3 Supply Chain Management Performance	9
2.1.4 Supply Chain Management Dimensions	9
2.1.4.1 Strategic Supplier Partnership	10
2.1.4.2 Customer Relationship	10

2.1.4.3 Information Sharing	11
2.1.4.4 Internal Operation	12
2.1.4.5 Organizational Performance	12
2.1.5 Summary of Literature Review	14
2.2 Empirical Literature review	14
2.3 Identified Literature Gap	17
2.4 Hypothesis Test	17
2.5 Conceptual Framework of the Study	18
Chapter Three: Methodology of The Study	20
3.1 Introduction	20
3.2 Description of Study Area	20
3.3 Research Approach	20
3.4 Research Design	21
3.5 Population & Sampling	21
3.5.1 Sampling Techniques	21
3.5.2 Sample size	21
3.6 Data Sources &Types	21
3.7 Data Collection Tools	22
3.8 Data Analysis Technique	22
3.9 Validity & Reliability	22
3.9.1 Validity	22
3.9.2 Reliability	22
3.10 Ethical Considerations	23
Chapter Four: Results, Discussion and Interpretation	24
4.1 Introduction	24
4.2 Data Processing	24
4.3 Profile of Respondents	24
4.4 Respondents Perception towards SCM Practice	26
4.4.1 Strategic Supplier Partnership	26
4.4.2 Customer Relationship	27

4.4.3 Internal Operation Efficiency	29
4.4.4 Importance of Information Sharing	30
4.4.5 Organizational Performance	31
4.4.6 Mean Summary of Variables	33
4.5 Correlation Analysis	33
4.6 Regression Analysis	35
4.6.1 Diagnostic Test	35
4.7 Model Summary	38
4.8 Summary of Hypothesis Testing	39
Chapter Five: Finding, Conclusion and Recommendation	40
5.1 Summary of Findings	40
5.1.1 Summary of Strategic Supplier Partnership	40
5.1.2 Summary Customer Relationship Practice	41
5.1.3 Summary of Internal Operation Efficiency	41
5.1.4 Summary of Information Sharing	41
5.1.5 Summary of Organizational Performance Practice	42
5.2 Conclusion	42
5.3 Recommendation	43
5.4 Direction for Future Researches	44
Reference	45
Appendices	

LIST OF ACRONYMS AND ABBREVIATIONS

SC - Supply Chain

SCM - Supply Chain Management

CRS - Customer Relationship

SSP - Strategic Supplier Partnership

CSCMP - Council of Supply Chain Management Practice

IO - Internal Operation

JIT - Just in Time

SMEs - Small and Medium Enterprises

SPSS - Statistical Package for Social Science

OP - Organizational Performance

TTPF - Tea Processing & Packaging Factor

LIST OF TABLES

Table 3.1 Reliability Test	23
Table 4.1 Gender, Education, Position and Experience of Respondents	24
Table 4.2 Descriptive Statistics of Strategic Supplier Partnership	26
Table 4.3 Descriptive data of Customer Relationship Practice	28
Table 4.4 Descriptive Statistics of Internal Operation Efficiency	29
Table 4.5 Descriptive Statistics of Information Sharing	30
Table 4.6 Descriptive Statistics of Organizational Performance	32
Table 4.7 Mean Summary of Variables	33
Table 4.8 Correlation matrix Between Variables	33
Table 4.9 Multicollinearity Test.....	36
Table 4.10 Normality Test	36
Table 4.11 Regression Analysis between Organizational Performance & SC Practice	37
Table 4.12 Model Summary.....	39
Table 4.13 Summary of Hypothesis	39

LIST OF FIGURES

Figure 2.1: Conceptual Framework developed by the Researcher	18
Figure 4.1 Normality Test	37

Abstract

Supply chain management is a means by which firms engage in creating, distributing and selling products to establish supply chain networks with unbeatable competitive advantage has developed as one of the most powerful business improvement tools to reduce cost, increase customer satisfaction, better utilization of resource & increase revenue. The purpose of this study is to assess the effect of supply chain management practice towards organizational performance of Ethio Agri CEFT tea processing and packaging factory. The study used four independent variables (strategic supplier partnership, customer relationship practice, internal operation and information sharing) with the dependent variable (organizational performance). Primary data were collected through questionnaires from respondents by Likert scale type questionnaires as measuring instruments from 94 selected respondents by purposive sampling technique and from those 94 questioners 81 questioners were collected which is 86% of response rate. The research used explanatory (Casual) research method to conduct this study and the collected data were analyzed to descriptive statistics by software called statistical package for social science students. Inferential statistic was calculated by Pearson correlation and multiple regression analysis technique & the reliability of data checked by Cronbach's Alpha with the result of 0.891. The result of descriptive statics shows majority of respondents disagreed and the correlation result shows there is positive relationship between dependent & independent variables. The regression analysis result indicates customer relationship practice, internal operation and Information sharing have significant influence on organizational performance. Whereas the influence of strategic supplier partnership on organizational performance is insignificance. The overall result of the study indicate that effective supply chain management practice has an effect on organizational performance of tea processing and packaging factory (TPPF) and the practice of strategic supplier partnership is very poor, customer relationship practice, internal operation and information sharing also needs improvement. To sustain in the dynamics business world the factory develops multi-skill working capacity, replace outdated machineries by the modern one, create collaboration with business partners and relocate the resource in proper manner.

Keywords: *Supply Chain Management Practice and Organizational Performance*

Chapter One: Introduction

The study assesses supply chain management practice & its effect on performance of Ethio AGRI CEFT tea processing & packaging factory. This section focuses on giving a highlight on the background of the study, statement of the problem, scope, objective & significant of the study. It also includes limitation of the study, definition of used terms & organization of the study.

1.1 Background of the study

A supply chain consists of all stages involved, directly or indirectly, in fulfilling a customer request. A supply chain not only includes the manufacturers and suppliers, but also includes transporters, warehouses, retailers, and customers themselves (Chopra and Meindl, 2007). Every organization, whether it is a manufacturer, wholesaler, or retailer, buys materials, to support operations. Historically, purchasing has been perceived as a clerical or low-level managerial activity charged with responsibility to execute and process orders initiated elsewhere in the organization. Robert (2015) noted that Supply chain management is a new concept involving the integration of all the value-creating elements in the supply, manufacturing, and distribution processes: from raw material extraction, through the transformation process, to end user consumption. A supply chain is a network of facilities and distribution options that performs the functions of Procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers (Ganeshan and Harrison, 1995).

The focus of supply chain management is upon the management of relationships in order to achieve a more profitable outcome for all parties in the chain. In this regard, the source of competitive advantage is traced on, first the ability to achieve a differentiated remark in the eyes of customers and competitors in the market and secondly on through operating at lower cost with implementing sound supply chain management system. (Christopher, 2011)

According to Yohannes (2014), in Ethiopia the practice of integration, collaboration, and having willingness and the trend of managing the SC from supplier to the customer is traditional. i.e., not more than just buy and sale relationship. Even if there is SC by default it is not well managed, and implemented for getting the benefits resulted from effective supply chain management. So that, each partner with in the supply chain is using their own individual efforts to improve their own competitiveness (like, quality, cost, delivery lead time, and etc.) but it is not as such effective (Yohannes, 2014).

Previous studies suggest that effective SCM practices have a direct impact on the overall financial and marketing performance of an organization (Ho, L.A., 2008). SCM practices is expected to increase an organization's market share, return on investment and improve overall competitive positions. For instance, Tan *et al.* (1998) asserted that customer relations and purchasing practices impact the effectiveness of SCM strategy and lead to financial and market performance. Merit (2015) on the other hand suggested that companies with broader supply chain integrations with suppliers and customers showed the largest performance improvement in business achievements.

Currently the Ethiopian business environment is becoming customer driven, competitive and technology based. Hence, it is unquestionable that companies should build an integrated and efficient system through which resources would flow in a seamless and instantaneous manner across the supply chain. So, this study assesses the impact of supply chain practice on organizational performance of tea processing and packaging factory.

1.2 Statement of the Problem

For the manufacturing companies, supply chain management practices play a major role on the performance given the nature of competition in the environment that they operate in both locally and internationally. The importance of adopting supply chain management in the company was further explained by Choy (2002) where in his research at multinational manufacturers, has concluded that supply chain management practices contribute more to the profitability and performance of any organization. Therefore, organizations have to understand the concepts and the practices of supply chain management for the intention of achieving competitiveness as well as for increasing profits.

The primary goal of supply chain management is to enhance competitive performance by closely integrating the internal functions within a company and closely linking them with external operations of suppliers, customers, and other channel members (Kim, 2006). According to Eyob (2017), Ethiopian manufacturing industries have serious weaknesses and facing obstacles hampering their productivity and competitiveness. Most of these manufacturing industries are plagued with the problem of low financial and managerial capacity, lack of machineries and facilities, inability to satisfy customer demands, and shortage of highly qualified workers (Eyob, 2017).

According to Belay (2011), companies operating in an oligopoly market sell their products at prices which makes them not customer focused; which is one of the problems that results in dissatisfied customer which can switch to new entrants when available. Moreover, the practice of

the supplier customer relationship is based on transactional basis instead of strategic alliances. The other problem is that most firms are organized functionally, not integrated as a chain so that there is lack of common thought within and across organizations (Hoole, 2005). It is obvious that the information technology in developing countries including Ethiopia is not developed enough to make the firm and customers communicate smoothly.

In Ethiopian context, Haliemichel (2011) explained in his research about selected leather industries the effect of supply chain management practice on the organizational performance are not considered as a problem in those firms. According to Mohammed (2017) tea is one of the most popular & lowest cost beverages in the world, and consumed by a wide range of age groups in all levels of the society.

The concern of the researcher is that there is no empirical study that is conducted in the area of supply chain management practices and firm's performance of tea industries in Ethiopia particularly on tea processing & packaging factory (TPPF). Even if there no research on SCM practice of tea factory the researcher observed some problems by initial survey in the industry still they didn't give emphasis for SCM practice.

According to the strategic plan of Ethio Agri CEFT tea processing & packaging factory for the period of 2013 to 2018, they identified problems of tea development and marketing face many challenges, such as poor marketing activities, lack of knowledge about the existing standards of tea in the world, lack of capacity to meet standards & old packaging machineries. Therefore, since the effort to achieve generalization of the causal relationship between SCM practices and Organizational performance calls for empirical confirmation in diverse environments, especially emerging economies, this paper is to contribute to the debate by testing the relationship between SCM practices and organizational performance in the factory.

Therefore, the researcher needed to answer some questions related to the supply chain management practice in tea processing & packaging factory and its impact on the performance of the organization & to placed initials for further researches in tea industry of Ethiopia.

1.3 Research Questions

Based on the above statement of the research problem, the following key questions have been addressed:

1. How does supply chain management practice affect organizational performance of tea processing and packing Factory?

2. To what extent of implementation supply chain management is being practiced at tea processing and packing factory (in terms of strategic supplier partnership, customer relationship, information sharing & internal operation?)
3. What is the relationship between supply chain management practices and the performance of tea processing & packaging factory?

1.4 Objectives of the Study

1.4.1 General Objectives

The general objective of the study is to assess supply Chain Management practices and its impact on performance of Tea Processing and Packaging Factory.

1.4.2 Specific Objectives

- I. To assess the role of supply chain management (in terms of customer relations practice, information sharing, supplier partnership and internal operation) on the overall organizational performance.
- II. To examine the level of supply chain implementation.
- III. To analyze the relationship between supply chain management practices and performance of tea processing & packaging factory.

1.5 Significance of the study

First this study plan to add a well understanding of the supply chain management concepts and future challenges that may soon come in the factory. The study helps tea processing & packaging factory & other packaging firms on which supply chain management practices they should focus and aware of the effect of these practices on their respective organizational performance. The study obtain details on how can effectively implement supply chain practice in the face of numerous challenges facing them from both within and outside the factory. The contribution of the Ethiopian tea industry to the country's economy is now increasing.

This study was given the below listed benefits:

- Owners and managers of tea plantations, tea blending and packing factories will use the findings of this study to evaluate and determine their competency needs and integrate supply chain management practice with their business strategy.
- This study will use for researcher and academician for further study and as reference.

- Generally, the researcher believes that the study will create awareness about the concept, principles, and benefits of supply chain management for tea processing & packaging factory.

1.6 Scope of the Study

The scope of the study is limited to Ethio Agri CEFT tea processing & packaging factory Addis Ababa Plant. Supply chain management practice is a very wide field of area; it is difficult and unmanageable to study in all areas. Therefore, the scope of this study was limited to specific context that is on SCM practices in tea processing & packaging factory and their impact in its organizational performance.

The subject scope of this study is also defined to the company's point of reference towards strategic supplier partnership, customer relationship practice, information sharing, internal operations and organization performance (which includes market share, the growth of sales and overall competitive position) of the factory.

1.7 Limitations of the study

The major limitations of this study are respondents not reply within the fixed time period allocated and respondents give their answer with negligence. Due to time limitation other tea factory practices and variables are not included in the research. Other limitation of this study is the researcher not found any research on the practice of tea industry for reference. The findings of this study limited on one selected tea factory, so the result of this research not generalized the whole companies available in the same industry and will not be adequate representation of the performance of supply chain management of all areas; hence the results cannot generalize to all.

1.8 Definition of Terms

Supply chain is a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer (Charles *et.al.* 2014).

Supply chain management is the coordination of production, inventory, location, and transportation among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served (Simchi and Kaminsky, 2000).

Supply Chain Management Practices: is a set of activities, describes the latest evolution of SCM practices, which include supplier partnership, outsourcing, cycle time compression, continuous process flow, and information technology sharing (Charles *et.al.* 2014).

Strategic supplier partnership is 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 (Li *et al.* 2006).

Organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals (Li *et al.* 2006).

1.9 Organization of the Study

The study was organized by five chapters. The first chapter shows the general background of the study, statement of the problem, basic research question, objective, significance, and scope of the study, limitation of the study and definition of terms. The second chapter included reviews of literature & conceptual frame work. The third chapter presents the research methodology used in the study. Data analysis and findings is presented in chapter four. Conclusions and possible recommendation provided in the last chapter of chapter five.

Chapter Two: Review of Related Literature

This chapter includes two parts. The first part is review of literature provide definitions of supply chain management and discuss the essential concepts and practices focusing on dimensions of supply chain management. The second part includes empirical reviews assess from different journals, articles of SCM, dependent & independent variables shows on the conceptual frame work of study.

2.1 Theoretical Literature Review

A theoretical part focused on the adoption theories and concepts that were presented by distinguished authors in relation with supply chain management practices implementation and organizational performance.

2.1.1 Definitions of Supply Chain Management

Supply chain encompasses the companies and the business activities needed to design, make, deliver, and use a product or service. Businesses depend on their supply chains to provide them with what they need to survive and thrive. Every business suitable into one or more supply chains and has a role to play in each of them. The pace of change and the uncertainty about how markets will evolve has made it increasingly important for companies to be aware of the supply chains they participate in and to understand the roles that they play. Those companies that learn how to build and participate in strong supply chains will have a substantial competitive advantage in their markets (Michiel Hugos, 2003).

The practice of supply chain management is guided by some basic underlying concepts that have not changed much over the centuries. Several hundred years ago, Napoleon made the remark, “An army marches on its stomach.” Napoleon was a master strategist and a skillful general and this remark shows that he clearly understood the importance of what we would now call an efficient supply chain. Unless the soldiers are fed, the army cannot move (Grew *et al*, 2010).

Supply chain management refers to the effort to coordinate suppliers, manufacturers, warehouses, stores and transportation intermediaries so that the merchandise the customer wants is produced in the right quantities and sent to the right locations at the time the customer wants it. Supply chain management was defined by different authors, Simchi and Kaminsky (2000) define supply chain management as the integration of key business processes among a network of interdependent suppliers, manufacturers, distribution centers, and retailers in order to improve the

flow of goods, services, and information from original suppliers to final customers, with the objectives of reducing system-wide costs while maintaining required service levels. The Council of Supply Chain Management Professionals (CSCMP, 2004) defines SCM as: SCM encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities, including coordination and collaboration with suppliers, intermediaries, third-party service providers, and customers. (Cooper *et al.* 1997)

Supply chain management is the integration of the activities that procure materials and services transform them into intermediate goods and final products, and deliver them to customers. These activities include purchasing and outsourcing activities, plus many other functions that are important to the relationship with suppliers and distributors. (Jay Heizer *et al.* 2011)

Jay Heizer *et al.* (2011) further explains that as firms strive to increase their competitiveness via product customization, high quality, cost reduction and speed to market added emphasis is placed on the supply chain. Effective supply chain management makes suppliers partners in the firm's strategy to satisfy an ever-changing market place. A competitive advantage may depend on a close long-term strategic relationship with a few suppliers.

From these definitions, it is clear that supply chain management comprises all those activities, processes and relationships that include the flow of material, finance and information from end to end through the supply chain.

2.1.2 Supply Chain Management practice

SCM practices as a set of activities carry out in any organization to promote effective management of its supply chains; From this we can see that components of SCM practices includes supply and material management issues, operations, information technology and sharing (Information Communication Technologies) and customer service. Other components such as cost, inventory management, competitiveness and external regulations, according to needs to be managed effectively to achieve to business goals of each supply chain members. It also leads to value creation to end customer (Charles *et.al.* 2014).

SCM practices are a fundamental to firm performance; in today's globalized business all firms get their competitive advantage by managing various challenges within the country and internationally and this devote substantial attention. As effective SCM provides benefits that go beyond the entities or the organization itself on both of its upstream and downstream sides and those firms may comprehend their potential of integrating their external relationship that is the firms external suppliers, the firm itself and the firms customer and also the firms internal operational practices

with a view to enhancing their level of competitiveness and performance as well as customer satisfaction. (Haque, 2013)

SCM involves the coordination and configuration of different process that is necessary to make products available in a timely, reputable, and suitable condition. The distinctiveness of SCM could be achieved by identifying and making use of SCM practices, in organized way. SCM practices involve a set of activities undertaken by the organization to promote effective management of their supply chain. (Faisal, 2011)

2.1.3 Supply Chain Management Performances

Supply chain performance is a two-dimensional definition which consists of effectiveness & efficiency. Effectiveness is about ‘doing the right things’ & efficiency is about ‘doing things right’. Supply chain effectiveness relates to the preference of the end-consumer & the sole indicator is consumer satisfaction (David *et al.* 2006). Therefore, customer satisfaction is coming from meeting customer requirements, fitness for use, continuous improvement, elimination of waste, customer support, flexibility to meeting demands, design and engineering, quality assurance and inventory (Eyong, 2009). Empirical studies by Ross (1998), confirmed the theory that, SCM practices considerably improve companies’ performance. Moreover, the results specifically highlight that IT and information sharing significantly contributes to more performance measures than supplier and customer relationship practice. With regard to the relationship between SCM strategies and operational performance, Tan *et al.* (2002) observed that the following SCM-related strategies were significantly related to overall product quality and overall customer service: namely determination of customer’s needs, reduction in response time and supplier delivery time, improvement of integration activities, trust among supply chain members, communication of future needs, use of information sharing, and assistance of suppliers in JIT (just in time) capability. The supply chain performance is now increasingly perceived as critical means for attaining a competitive edge over others competitors. The traditional way of measuring performance based on cost alone has giving way to more innovative approach incorporating non-cost performance measures like quality, flexibility, time, and the need for customer satisfaction (Ashish, 2006).

2.1.4 Supply Chain Management Dimensions

According to Li *et.al.* (2006), effective supply chain management has become a potentially valuable way of securing competitive advantage and improving organizational performance since competition is no longer between organizations, but among supply chain channels. Some sub sections of supply chain management activities are:

2.1.4.1 Strategic Supplier Partnership

Strategic supplier partnership is a long-term relationship between the organization and its suppliers. Strategic supplier partnership emphasizes direct and long-term relationship and encourages mutual planning and efforts to resolve problem. Supplier and organizations can work together more closely and eliminate useless time and effort. Effective partnerships with suppliers can be critical factor to guide supply chain management (Li *et al.* 2006).

Strategic partnership between organizations promote shared benefits and ongoing collaboration in key strategic areas like technology, products, and market (Yoshino and Rangan, 1995). Strategic partnerships with suppliers lead organization working closely and effectively with a few suppliers rather than many suppliers that have been selected on the basis of cost efficient. Many advantages of consisting supplier early in the product-design process are that suppliers can offer cost effective design alternative, assist in selecting better components and technologies, and aid in designing assessment (Tan *et al.* 2002).

An effective supplier partnership can be a critical component of a leading-edge supply chain (Noble, 1997). The main objective of strategic partnerships with suppliers is increasing the functional capability desired supplier (Rosenzweig, 2003). Therefore, strategically managed long-term relationship with supplier has positive impact on a firm's supplier performance (Cooper and Ellram, 1993). SCM suggests that firms need to integrate with their suppliers and customers to achieve both financial and non-financial growth objectives (Tan, 2001). Stank *et al.* (2001) asserted that, the industry leaders increasingly build competencies to integrate with suppliers and customers and find that, these competencies lead them to supply chain excellence. Coordinating operational activities through joint planning with suppliers also results in inventory reduction, smoothing production, improve product quality, reducing supply uncertainty and lead time reduction (Lee, 2002).

2.1.4.2 Customer Relationship

Customer relations is related to the company's ability to communicate to the delivery of appropriate products and services to customers locally and globally in the right time, right place, and appropriate of quantity and quality. Customer linkage especially sharing product information with customers, receiving customer orders, interact with customers to manage demand, after placing the order system, share the status of orders with customers on scheduling orders, and product delivery stage (Lee, *et al.* 2007). Good relationships with trading partners, including customers are a key to successful SCM efforts by organizations (Moberg *et al.* 2002).

Customer relationship has long been recognized as an internal component of an organization's marketing strategy to increase sales and profits (Bommer *et al.* 2001). Close customer relationship allows product differentiation from competitors, helps sustain customer loyalty, and elevates the value provided to customers. Immediate customer relationship activities have played a crucial role in developing effective SCM strategies (Wisner, 2003). Lambert *et al.* (2000) 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. According to Day *et al.* (2000), committed relationships are the most sustainable advantage because of their inherent barriers to competition.

Niknia (2007), explain the main customer relationship goals are identifying new business opportunities, reduce missed opportunities, reducing customer defection, creating customer loyalty, improve customer service, improve organization performance, reduce costs, and increase revenue. (Tat, 2010) Low price, short lead-time and accurate delivery dates are three important areas that are important for a customer.

2.1.4.3 Information Sharing

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

The way companies share information whatever the confidential level or not; determines the success of the collaboration. The nature of information to be across the supply chain differs based on the degree of integration, institutional trust and availability of infrastructure that facilitate the practice (Lazarevic, *et al.* 2007). Companies need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion (Li *et al.* 2006). Having, different interests & opportunities by supply chain participants affect the quality of information. Given these predispositions ensures that, the quality of the shared information becomes a critical aspect of effective supply chain practice (Feldmann and Muller 2003). Therefore, organizations need to view their information as a strategic asset & ensure that it flows with minimum delay & distortion (Feldmann and Muller 2003). Therefore, an informatics perspective is vital in the supply chain since information flow is an integral part of SCM and material flow is closely dependent on information flow.

2.1.4.4 Internal Operation

Internal operation is all activities related to production system and internal logistics flow (Handfield and Nichols, 1999). To judge the SCM practice as an effective and value adding the internal operation should be flexible in responding to changing market needs, which is expressed on the basis of agility principles. This means that, a production system must be able to perform rapid change over in both order patterns and mass customization (Lambert and Cooper, 2000). In addition to the upstream and downstream integration, SCM also emphasize on the importance of both effectiveness and efficiency of firm's internal operations on its performance. On the hand the company ability to use its resource & relocate it efficiently & effectively is the other factor. The company production system, capacity of available machines, capability of workers, flexibility of production system & integration with other departments are other indicators of good internal operation system.

2.1.4.5 Organizational Performance

Performance measures can determine the level of progress of the organization and determine the necessary action needed for improving the organization. Organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals (Li *et al.* 2006). The short-term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain (Tan *et al.* 1998). 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. Organizational performance is defined as how a company achieving their market goals, and also its overall goals (Yamin, *et al.* 1999). Major findings found from these studies justified presence of positive relationship between SCM practices and Organizational performance therefore the higher levels of SCM practice implementation can lead to higher levels of organizational performance and vice versa is true. Companies have understood that for competing in continuously changing environment, it is necessary to monitor and understand firm performances. Measurement has been recognized as a crucial element to improve business performance sited in (G. P. Kurien *et al.* 2011).

Market Share

Market share represents the percentage of an industry, markets total sales, that is earned by a particular company over a specified time period. Market share is a measure of consumer's preference for a product over other similar product. A higher market share usually indicates, greater sales, lessor effort to sales more and a strong barrier to entry for other compotators. Market share is calculated by taking the company sales over the period and dividing it by the total sales of the industry over the same period. A competitive supply chain in the market characterized by efficient use of chain resources which would lead to lower product cost, better product quality, faster response for customer demand and therefore eventually higher market share (Koh *et. al*, 2007 cited by Eyob).

Changes in market share have a larger impact on the performance of companies in mature or cyclical industries where there is low growth. In contrast, changes in market share have less impact on companies in growth industries. In these industries, the total pie is growing, so companies can still be growing sales even if they are losing market share. For companies in this situation, the stock performance is more affected by sales growth and margins than other factors. Companies with the highest market share in their industries almost invariably have the most skilled and dedicated employees. Bringing best employees on board reduces expenses related to turnover and training, and enables companies to devote more resources to focus on their core competencies. The factory market share indicates there no stability of growth for the past few years.

Sales Growth

Sales growth is the percentage increase in sales the current year compared to the previous year. Sales growth is considered positive for the company survival and profitability. It may result in increased dividends for shareholders and/ or high stock prices. If industry leader position is still far reaching bench marking supply chain performance against the best practice in the industry would provide incentives for further improvement that will eventually lead to increase sales (Koh *et. al*, 2007 cited by Eyob).

Various comparisons of Sales Growth can determine various approaches that a company can take to increase its sales. The type of Sales Growth analysis followed by a company determines their position in the market. A further detailed analysis like analyzing customer sales growth will further determine the reason for the increase or decrease in sales growth. A good sales growth can always be used for the benefits of the employees and company in terms of providing salary raise, acquiring new assets, an expansion of the company or the product line. A negative growth is an undesirable

outcome, hinting a wrong strategy or decisions. The factory experience of sales growth indicates there is unstable sales performance in the market.

2.1.5 Summary of Literature Review

From theoretical perspective the study assesses different books & articles that discuss the relationship between supply chain management practice & organizational performance. These literatures indicate supply chain management practices are a fundamental to firm performance in today's globalized business all firms get their competitive advantage by managing various challenges. Effective SCM provides benefits that go beyond the entities or the organization itself and those firms may comprehend their potential of integrating their external relationship with external suppliers, customer and also the firm's internal operational practices.

Strategic supplier partnership is creating a long-term relationship with suppliers, collaborating & working together for mutual benefit. Good customer relationship practice is the ability of a company to communicate with customer deliver the product or service in the right time & right place. So, strategic supplier partnership & customer relationships are main components in supply chain management practice (La *et. al.* 2006).

Information sharing is an important aspect in achieving seamless integration in the supply chain. Good practice of information follow leads a company towards a success, on the other hand poor practice of information sharing leads to many serious problems. The practice of internal operation is the other component of organizational performance. To develop good organizational performance & to increase market share & sales growth internal operation is pillar point.

2.2 Empirical Literature Review

Kennedy O.Moenga, (2016) conducted a study on practice & challenges of supply chain management practices on SMEs in Kenyan Tea Industry. The study was focused the nature of supply chain management practices and challenges that SMEs, which comprise of about 90% of businesses in the developing countries, face in Africa and more specifically in Kenya. The paper identified important areas that need to be addressed in order to increase the SMEs long term survival and competitiveness in the business environment.

A case study involving a supply chain network of the Small-Scale tea Sector in Kenya was studied. Data was collected from 48 respondents using semi-structured interviews, a structured questionnaire and examination of documents. Stratified random sampling technique was used to obtain the required data and a sample was selected using a simple convenient stratified random sampling technique. Out of a total number of 100 respondents targeted for this study, only 48 completed and returned the survey instrument.

The study found out that the SME sector appreciates good supply chain management practices, but has not put the same into practice. The sector has not established long term relationships with its suppliers. The sector was found to face several challenges which threaten its long-term growth and survival, the most worrying challenge being the continued rising operating costs, adverse climatic changes and unpredictable working environment.

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

Makena Naomi, (2016) conduct a study on the Impact of Supply Chain Management Practices on Organizational Performance: A Case Study of Haco Industries Limited (Kenya). The study observed that all the supply chain management practices studied had a positive effect on the organization's performance. The study concludes that the organization performance of Haco industries has improved with the implementation of the said practices as compared to before implementation. To 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 Kenyan Industry, and should have the correct mix of practices that would lead to improved performance as the combined effect is greater than for one practice.

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

The findings also showed that flexibility influences supply chain performance through delivery. Information sharing affects supply chain performance directly and has also an indirect impact on

supply chain performance through flexibility. This study elaborates the significant effect of the design of the supply chain on its performance while considering the impact of information sharing. *Eyob* (2017) conducted study on SCM Practices of Modern Building Industries in Ethiopia. The general objective of the study was to assess SCM practices implementation in MBI and its effect to the overall organizational performance. Key dimensions of SCM practices as well as operational and market-oriented performance indicators were used for the purpose of investigating the real scenario. Whereas, valid and reliable instruments for assessing study variables were used with the help of scientific methods such as chi square test, Spearman's correlation and Kruskal Wallis test. Thus, from such analysis, the study had empirically justified and provided a proof to support the conceptual and prescriptive statements made in the previous studies regarding the role of supply chain management practices in enhancing organizational performance.

The results of the survey show that the implementation of modern SCM practices is weak in MBI. Similarly, except degree and quality of information sharing and lean practices, even though in a weak level, no positive relationship was observed between the other SCM practices and organizational performance in this firm. It can, therefore be concluded that the firm is doing business as usual and no attention was given to modern SCM theories and practices in the firm yet. However, the existing literature advocates that the implementation of SCM practices can considerably improve organizational performance.

Suhong et al. (2004) conducted research on the impact of supply chain management practices on competitive advantage and organizational performance in USA. The paper provides empirical justification for a framework that identifies five key dimensions of SCM practices and describes the relationship among SCM practices, competitive advantage, and organizational performance. The research examines questions and investigating these issues a comprehensive, valid, and reliable instrument for assessing SCM practices was developed. The instrument was tested using rigorous statistical tests including convergent validity, discriminate validity, reliability, and the validation of second-order constructs. This study provides empirical evidence to support conceptual and prescriptive statements in the literature regarding the impact of SCM practices.

Pradeepa Jayaratne (2011) conduct a study on Sustainable Supply and Supply Chain Mapping Sri Lankan Tea industry. This paper looks at the contextual references in supply chain management and the Sri Lankan tea sector. It recognizes the importance of standard supply chain management techniques and preliminary connection to sustainable supply chain management. The researcher suggests that there a huge gap in the understanding of supply chain resilience on sustainable supply chain management. Furthermore, there is a lack of research on Sri Lankan tea supply chain and

understanding of the macro level supply in this area. On the other hand, in order to identify the influencing factors on sustainable tea supply in Sri Lanka, it is essential to map the Sri Lankan tea supply chain.

The study identified that supply chain mapping has not been research extensively. This is obvious not only for tea supply chain but also for supply chains in manufacturing sector. Therefore, the research would help to fill the knowledge gap in this area, while the overall results would help to improve the tea supply chain not only in Sri Lanka but also for other tea producing countries. Furthermore, the research findings would also assist other agricultural supply chains and manufacturing sector.

The above empirical studies proof & suggested that a good supply chain management practice increase organizational performance & companies give attention to supply chain management practice for the success of any business & to compute in today's global world.

2.3 Identified Literature Gap

On the above theoretical and empirical review, the researcher observed and understand that all previous studies related to the impact of supply chain management practices on organizational performance was concentrated on the same industry of manufacturing and services organization. But still the researcher could not get any research that directly align with supply chain practice of tea industry in Ethiopia. So, the researcher encountered to fill the gaps on this industry (Tea Industry) and study the influence of supply chain management practice on organizational performance of tea industry in Ethiopia focus at tea processing and packing factory and also the researcher focused on four supply chain dimensions such as:

- Strategic supplier partnership
- Customer relationship practice
- Information sharing
- Internal operation

2.4 Hypothesis

Supply chain management practice is expected to increase an organization's market share, return on investment (shin *et al.* 2000), and improve overall competitive position (Person, 1999). previous studies have indicated that various components of supply chain management practices have an impact on competitive advantages; strategic supplier partnership can improve supplier performance, reduce time to market (Ragatz *et al.* 1997), and increase the level of customer responsiveness and satisfaction (Power *et al.* 2001). Information sharing leads to high level of

supply chain integration Jarrell JL (1998), by enabling organizations to make dependable delivery and introduce products to the market quickly.

The above point of view leads the researcher plan to identify the impact and relation of supply chain management practice in tea industry and organizational performance on tea development.

- ✓ Ha1: There is a relationship between the strategic supplier partnership and organizational performance.
- ✓ Ha2: There is a relationship between the customer relationship practice and organizational performance.
- ✓ Ha3: There is a relationship between information sharing and organizational performance.
- ✓ Ha4: There is a relationship between internal operations efficiency and organizational performance.

2.5 Conceptual Framework of the Study

The study initially selected and develops four dimensions of SCM practice strategic supplier partnership, customer relationship practice, information sharing and internal operation and tests the relationships between these SCM practices and organizational performance.

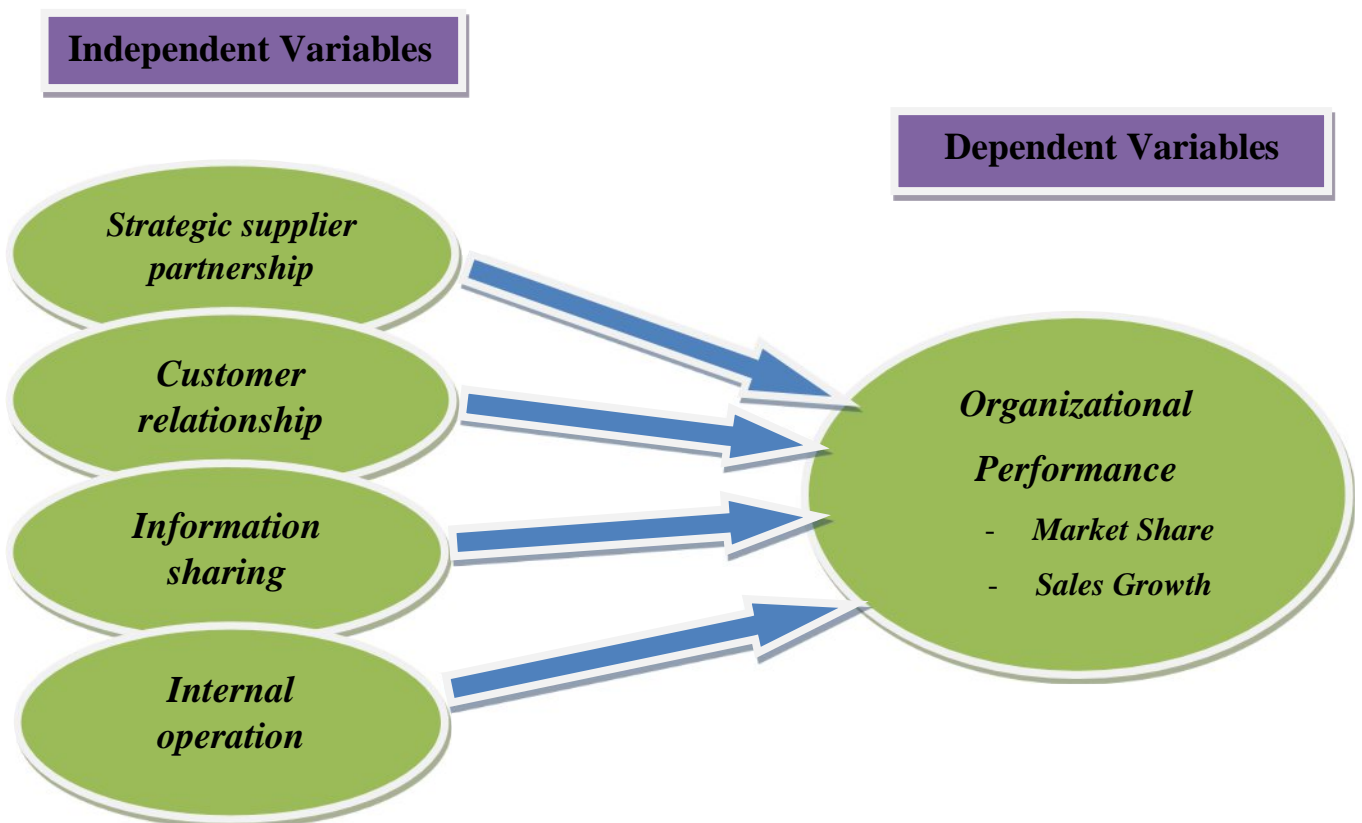


Figure 2.1: Conceptual Framework Developed by the Researcher

In the conceptual frame work, the independent variables strategic supplier partnership, customer relationship, information sharing internal operation have an influence on the performance of the factory with dependent variable organizational performance is tested by research hypothesis. Previous studies conducted by Li, et al, (2006), Yohannes, (2014), Alireza et al. (2011), Suhong et al. (2004) showed that the implementation of supply chain management practice lead to enhanced organizational performance. Therefore, based on the finding the influence of supply chain management practice on the performance of tea processing and packaging factory have been tested.

Chapter Three: Research Methodology

3.1 Introduction

Business research is the application of the scientific method in searching for the truth about business phenomena. These activities include defining business opportunities and problems, generating and evaluating alternative courses of action, and monitoring employee and organizational performance. Business research is more than conducting surveys. This process includes idea and theory development, problem definition, searching for and collecting information, analyzing data, and communicating the findings and their implications (Zikmund, 2014). Hence, this chapter discuss the research methodology of the study. It deals with the research design, population and sample data collection and analysis and ethical consideration.

3.2 Description of Study Area

Ethio AGRI CEFT PLC is one of the largest private players in the agricultural and agro-processing industries in the Federal Democratic Republic of Ethiopia, established in January 1, 1998 under MIDROC Ethiopia Investment Group Company engaged in the production and processing of various agricultural crops. Throughout its nine farms located across the country and its processing center located in the capital the Company has continued to play an important role in realizing the investment group's developmental goals. Ethio Agri CEFT, at both the head office in Addis Ababa and in the farms located in the different Regions of Ethiopia, has so far created job opportunities for 14,822 citizens out of which 2,282 are permanent, 247 are contract and 12,291 are casual workers. Tea Processing & Packaging factory is one of the branches of Ethio Agri CEFT PLC located in Addis Ababa around Mekanisa with 147 permanent staffs.

3.3 Research Approach

According to Leedy *et al* (2010) mixed approach provides a more complete picture of a particular phenomenon than either approach. Qualitative method was used in order to obtain detail information which give explanations for the relationships among the variables and constructs but also to obtain a more holistic and comprehensive study. The study exactly to ascertain the SCM practices and to show their effect on the organizational performance. According to Creswell (2003), the quantitative approach is the one in which the investigator primarily uses to developing knowledge, i.e., cause and effect relationship between known variables of interest or it employs strategies of inquiry surveys, and collect data on predetermined instruments that yield statistics data. Hence in this research mixed approach that is qualitative and quantitative was used.

3.4 Research Design

Research design provides a framework for the collection of data analysis. A good research design helps the researcher conduct a good analysis of data. According to Leedy *et al* (2010), research design provides the overall structure of the procedures the researcher follows, the data collects and the data analysis the researcher conducts. Therefore, in this study the researcher used explanatory (causal) research design. The researcher pose questions to willing participants, summarizes the responses with percentages, frequency counts, and then draws inferences about a particular population from the responses of the sample.

3.5 Population and Sampling

Population is defined as the entire set of individuals or other entities to which study findings are to be generalized (Schutt, 2011). This study focuses on Ethio AGRI CEFT tea processing & packaging factory permanent employees located at Addis Ababa around Mekanisa. The target population of this study is out of 147 permanent employees, 94 employees are particularly selected for this research employees whose educational level is grade twelve completed and above those have to understand & able to give answer about supply chain management practice questions.

3.5.1 Sampling Techniques

The study used purposive sampling technique to select the study sample. This is because purposive sampling method is used when elements are selected due to a specific purpose, usually because of their unique position (Schutt, 2011). According to this study all managers, executive or any individual within the organization of the best knowledge of SCM practices implementation was selected. Purposive sampling used because they have selected based on their educational background.

3.5.2 Sample Size

All items in any field of inquiry constitute a ‘Universe’ or ‘Population. The size of sample should neither be excessively large, nor too small. It should be optimum. An optimum sample is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility (Kothari, 2004). The researcher used for this study 94 employees of the factory.

3.6 Data Sources and Types

In this research primary data were used for the entire analysis of this study. The primary data was gathered through questionnaire from the selected sample of respondents/ employees of Ethio AGRI CEFT tea processing & packaging factory and secondary data were collected by review of

published documents provided by the company. This helps to the researcher to get some background information about the company.

3.7 Data Collection Tools

The study collected primary data that is first-hand information, data collected directly from an original source. Primary data can be collected through observation, interviews, or the use of questionnaires (Saunders *et al.*, 2009). The study used structured questionnaires to collect primary data for quantitative analysis and used secondary data of the company published documents for qualitative analysis.

3.8 Data Analysis Technique

Descriptive analytical technique was used with the aid of Statistical Package for Social Sciences (SPSS-20). The reliability of the variables was measure by Cronbach alpha. To analyze the data collected with the use of questionnaires. The questionnaires have a five-point Likert-type response scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). In addition, the data collected was analyzed by correlation and regression analysis method, because it helps to investigate the relationship between dependent and independent variable i.e. Supply chain Management practice with its effect on the independent variables and organizational performance.

3.9 Validity and Reliability

3.9.1 Validity

According to Leedy *et al.* (2010), the validity of a measurement instrument is the extent to which what it is intended to measure. Leedy *et al.* (2010) further explained the importance of validity the accuracy, meaningfulness, and credibility of the research project as a whole. The research effort will be worth the time and effort only to the extent that it allows the researcher to draw meaningful and defensible conclusions from the data. Validity calculates the extent to which the responses from the respondents reflect the same attributes. The questionnaires were validated before inauguration of data collection. Preliminary questionnaires were issued to selected respondents to identify any difficulties that may affect the respondent's feedback. The validation exercise was aimed at identifying the unreliable questions, and to check its result.

3.9.2 Reliability

Reliability is the consistency with which a measuring instrument yields a certain result when the entity being measured has not changed. Leedy *et al.* (2010) further explained that we can measure something accurately only when we can also measure it consistently. The respondents who were

selected for this research are involved in the business and have the experience related to SCM. Hence, they have given credible answers to the questionnaires.

Cronbach's alpha is used to measure the reliability of each variable & the whole variables. Andy (2006) described the value of Cronbach's alpha greater than 0.7 is a good result. The alpha value of the overall variables of this research is greater than 0.7 which is 0.891 so; there is a good reliability of the questioner. Cronbach's Alpha is used as a standard test for questioner accuracy. Therefore, the researcher believes that this study was reliable.

Table 3.1 Reliability Test Table

Variables	No of Items	Cronbach's Alpha
Strategic Supplier Partnership	5	0.789
Customer Relationship	5	0.866
Internal Operation Efficiency	5	0.864
Importance of Information Sharing	5	0.774
Organizational Performance	5	0.887
Overall variables	25	0.891

Source: own Survey data, 2019

3.10 Ethical Considerations

According to Leedy *et al* (2010) most ethical issues fall into one of the following four categories; informed consent, confidentiality, security and honesty. Therefore, the researcher considered all these issues in the questionnaire guidelines in the following manner:

Informed consent: respondents was briefly informed about the reason of conducting such study therefore enabled them to join with full consent. Confidentiality: the researcher kept the nature and quality of participant's performance strictly confidential. No information was recorded to link respondents with their responses. Security: the researcher did not expose the participants to unusual stress, embarrassment, or loss of self-esteem. Honesty: the researcher reported the findings in complete honesty.

Chapter Four: Results, Discussion and Interpretation

4.1 Introduction

This chapter presents the result of analysis of data obtained from respondents' response through questionnaire. The data were analyzed with the help of a software statistical package for social science (SPSS-20). The target population of the study is 94 respondents were selected by purposive method based on their educational back ground & the questioners were disseminated to selected respondents. From those 94 questioners' 81 questioners were collected. So, the researcher uses only 81 questioners for analysis.

The researched faced many challenges when conducting this study; the main problem is some respondents complain they are very busy to fill the questioner and to return on time.

$$\text{Response Rate} = \frac{\text{Number of respondents that cooperated}}{\text{Total number of selected respondents}} = \frac{81}{94} = 86\%$$

4.2 Data Processing

The questioners were coded in excel sheet and inserted to SPSS version 20 to analyzed the collected data. Data processing was done by descriptive statistical analysis; it was used to summarize frequencies, means and standard deviations. Based on the descriptive statistics the collected data for each questioner were summarized and inferential statistics were used by correlation & multiple regression analysis to analyze the relationship of variables.

4.3 Profile of Respondents

This part focuses on demographic information of respondents' that are gender, educational level, job title / position & service year of the respondents. So, frequency & percentage are used for analysis & show the result by table.

Table 4.1 Gender, Education, Position & Experience of Respondents

Item	Dimensions	Frequency	Percent	Total
Gender	Male	47	58.0	81
	Female	34	42.0	
Education	High School Completed	8	9.9	81
	Diploma	26	32.1	
	First Degree	32	39.5	
	Second Degree	15	18.5	
Position	Division Head	12	14.8	81
	Manager	4	4.9	
	Other	50	61.7	
	Supervisor	5	6.2	
	Technician	10	12.3	
Experience	< 2Years	12	14.8	81
	3-5 Years	11	13.6	
	6-10 Years	32	39.5	
	Over 10 Years	26	32.1	

Source: own Survey data, 2019

Gender frequency of respondents shows from a total of 81 respondents 47 respondents are Male which is 58% and 34 respondents are Female which is 42%. This shows the difference of gender distribution between Male & Female respondents is minimum which is 16%.

As shown in the figure 4.1 educational level from a total of 81 respondent, 8 respondents were 12 grade completed which is 9.9 %, 26 respondents were Diploma holder which is 32.1%, 32 respondents were first degree holder which is 39.5% and 15 respondents were second degree holder which is 18.5%. Therefore, majority of the respondents which is 90.1% of the respondents was well educated (which is diploma & above). So, the researcher believes they are ability to understand about SCM practice & to give answer for the questioners.

Figure 4.1 also shows from 81 total respondents, 12 respondents are division heads which is 14.8%, 4 respondents are managers which is 4.9%, 5 respondents are supervisors which is 6.2%, 10 respondents are technicians which is 12.3% and 50 respondents are different section staffs & positions which is 61.7%. This shows different professional respondents included in the research.

Year of experience helps to understand the past & present company activity, challenges, problems, strength & weakness of the company. The graph shows that from a total of 81 respondents 12 respondents were below 2 years of experience which is 14.8%, 11 respondents were from 3 to 5 years of experience which is 13.6%, 32 respondents were from 6 to 10 years of experience which is 39.5% and 26 respondents were above 10 years of experience which is 32.1%. This implies majority of the respondents were above 6 years of experience which is 71.6%. When the respondents are more experienced in company, they have better opportunity to know more about the organization. So, the researcher believes that the respondents know more about the company supply chain practice.

4.4 Respondents Perception towards Supply Chain Management Practice

The response of respondents on SCM practice describe from the point of strategic supplier partnership, customer relationship practice, internal operation, information sharing & organizational performance. The respondent's response was described by Likert-type questionnaires where S.D. = strongly disagree, D = disagree, N = neutral, A = agree, S.A = strongly agree.

4.4.1 Strategic Supplier Partnership

The respondents were asked about the company practice of strategic supplier partnership describe into five variables. These variables include long term contract with suppliers, solve problems jointly with supplier, trust between the factory & supplies, include suppliers in planning & involve suppliers in product design.

Table 4.2 Strategic Supplier Partnership Practice

Strategic Supplier Partnership (N=81)							
Variables	S. D	D.	N.	A.	S.A.	Mean	Std. Deviation
Long Term Arrangement with Suppliers	5 %	44.3 %	29.6 %	14.8 %	6.2 %	2.73	.988
Solve Problems jointly with Suppliers	9.9 %	48.1 %	23.4 %	16.1 %	2.5 %	2.53	.963
There is a Trust Between our firm & Suppliers	6.2 %	34.6 %	37 %	15.8 %	6.4 %	2.81	.989
Include Suppliers in Planning & Goal Setting Activities	10.1 %	49.2 %	22.2 %	16.2 %	2.3 %	2.52	.963

Involve Suppliers in new product design & development Process	8.6 %	37 %	37.3 %	13.4 %	3.7 %	2.67	.949
Grand Mean						2.65	

Source: Own Survey Data, 2019

Table 4.2 shows the mean values of all variables are between 2.53 and 2.81. The mean value of the variable trust between supplier & the factory is 2.81 which is the highest mean value from grand mean. But it shows majority of the respondents which is 40.8 % of the respondents disagreed, 37 % of the respondents are neutral and 22.2% agreed. This shows there is no trust between suppliers and the company. The result of long-term arrangement with supplier mean value is 2.73 which greater than grand mean value. But 40 respondents were disagreed which is 49.3 %, 21% of respondents agreed & 29.6 % neutral. This indicates the company practice of long-term arrangement with suppliers is very weak. The result of Solve problem jointly with supplier shows, 47 respondents disagreed which is 58 %, 23.4% of respondents neutral and 18.6% of respondents agreed. Which shows the company practice to solve problems jointly with suppliers is weak. supplier's involvement in new product design result shows 45.6 % of respondents disagreed, 37.3% respondents neutral & 17.1% of respondents agreed. The result indicates the company practice of involving suppliers in new product design is poor.

The result of including suppliers in planning activity shows 48 respondents disagreed which is 59.3 %, 22.2% of respondents neutral and 18.5% of respondents agreed. This shows the companies practice on including suppliers in panning activity is very weak. These findings indicated that the relationship of the company & suppliers is traditional business transaction and give less concern to modern supply chain practice. As stated in the literature review section Li et al, (2006), Yoshino & Rongan, (1995), selecting the right supplier and developing strategic supplier relationship with firms are key point to organizational success. An effective supplier partnership can be a critical component of a leading-edge supply chain (Noble, 1997). The main objective of strategic partnerships with suppliers is increasing the functional capability desired supplier (Rosenzweig, 2003). Therefore, strategically managed long-term relationship with supplier has positive impact on a firm's supplier performance (Cooper and Ellram, 1993).

4.4.2 Customer Relationship

In this section the respondents were asked to give their response on customer relationship practice based on five variables. These variables access the practice of customer compliant response, measure customer satisfaction, interaction with customers, and long-term contact with reliable customers & include key customers in the planning process.

Table 4.3 Customer Relationship Practice

Customer Relationship Practice (N=81)							
Variables	S. D	D.	N.	A.	S.A.	Mean	Std. Deviation
Follow up procedure for customer compliance	7.4%	61.7 %	12.3 %	17.3 %	1.2 %	2.43	.907
Frequently measure & evaluate customer satisfaction	2.1 %	48.1 %	9.9 %	17.3 %	3.7 %	2.35	1.109
Frequently Interaction with Suppliers to achieve Reliability	8.6 %	51.9 %	19.8 %	16.2 %	3.5%	2.54	.988
Enter Long Term Contract with Reliable Customers	9.9 %	35.8 %	34.6 %	16 %	3.7 %	2.68	.985
Include Customers in planning & Goal Setting Activity	3.7 %	54.3 %	21 %	18.5 %	2.5 %	2.62	.916
Grand Mean						2.52	

Source: Own Survey Data, 2019

The above table result shows the mean values of all variable were fall between 2.35 and 2.68. The result of frequently Interaction with suppliers to achieve reliability shows 60.5% of respondents disagreed, 19.8% of respondents neutral and 19.7% of respondents agreed. This result shows the company practice of interaction with suppliers is weak. Frequently measure & evaluate customer satisfaction result shows 50.2% of respondents disagreed, 9.9% of respondents neutral and 21% of respondents agreed. The result indicates measure of customer satisfaction in the company is weak. Include customers in planning process result shows the high mean value 2.62 from grand mean. But 58% of respondents disagreed, 21% of respondents neutral and 21% of respondents agreed. This indicates the practice of include customers in planning activity is poor. Follow up procedure for customer compliance result is 69.1% of respondents disagree, 12.3% of respondents neutral & 18.5% of respondents agreed. This result shows the company practice of follow up procedure for customer compliance if very week.

Create long term contract with reliable customers results shows highest mean value of 2.68 from grand mean. But 45.7% of respondents disagreed, 19.7% of respondents agreed & 34.6% are neutral. Hence the result of descriptive statistics indicates company relationship practice with customers is very weak & it needs improvement. Customer satisfaction is a key factor for success in the computation world, but the result shows the reverse & it's difficult to stay in the market in

this contemporary world. Customer relationship goals are identifying new business opportunities, reduce missed opportunities, reducing customer defection, creating customer loyalty, improve customer service, improve organizational performance, reduce costs, and increase revenue (Niknia, 2007). 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 (Ibrahim & Hamid, 2012).

4.4.3 Internal Operation Efficiency

The respondent's response on internal efficiency were measured based on five variables. Those variables are operation system responds rapid change on demand by customers, product mix demanded by customers, relocate resource to address demand, work in coordinate with departments & consult departments for work decision.

Table 4.4 Internal Operation Efficiency

Internal Operation Efficiency (N=81)							
Variables	S. D	D.	N.	A.	S.A.	Mean	Std. Deviation
Operation System Responds Rapid Change in Demand	4.9%	29.6 %	42 %	19.7 %	3.8 %	2.88	.914
Operation System Responds Rapid Change in Product Mix	1.2 %	30.9 %	38.3 %	24.7 %	4.9 %	3.01	.901
Operation System Rapidly relocate Resource	5 %	33.1 %	37 %	18.4 %	6.5 %	2.88	.980
Our Department works close Coordination with Other Departments	3.6 %	33.4 %	28.4 %	29.5 %	4.9 %	2.99	.994
We Consult Department for Work Decisions	4.8	33.2 %	42 %	18.6 %	1.4 %	2.78	.851
Grand Mean						2.91	

Source: Own Survey Data, 2019

The respondents' result of table 4.8 shows, consult departments when making a work decision is 38 % of the respondents disagreed on it & 42 % of respondents neutral & 20% of respondents agreed. This result shows that work decision between departments in the company is very weak. The company response for customer demand of product mix result shows the highest mean value 3.01 from all variables & the grand mean. But only 29.6% of respondents agreed, 38.3 % of

respondents are neutral & 32.1 % of the respondents disagreed. This indicates the company response on rapid change in product mix is not satisfactory. Close coordination with other departments results shows high mean value 2.99 from grand mean. But 37 % of respondents disagreed, 28.4% of respondents neutral and 34.5% of respondents agreed. This result indicates close coordination of department in the company is better than from all other variables.

Rapidly relocation of its resource to address demand change 37 % of respondents were neutral, 38.1 % of respondents were disagreed & 24.9% of respondents agreed. This shows the company practice of relocation of resource is poor. The company operation system is flexible for customer demand result shows 42% of the respondents neutral, 23.5% of respondents agreed & 34.5% of respondent’s disagreed. This result shows flexibility the company production system for customer demand is weak & still it needs more concentration in this area. The factory internal operation efficiency needs additional effort to improve organizational performance. Poor internal operation can lead to failure in the company’s activity & coordinating with external partners (Handfield and Nichols, 1999).

4.4.4 Importance of Information Sharing

In this part the respondents were asked to share their practice in the importance of information sharing. The variables used for respondent’s view are inform in advance the forecast of demand, information follow is reliable & complete, used web-based data exchange, exchange information on time & information exchange is balance each other.

Table: 4.5 Importance of Information Sharing

Importance of Information Sharing (N=81)							
Variables	S. D	D.	N.	A.	S.A.	Mean	Std. Deviation
We Inform Partners in Forecasting of Demand	4.9 %	32.1 %	30.9 %	27.1 %	5 %	2.46	.822
The Information Follow is Reliable & Complete	4.7 %	34.8 %	42 %	17.3 %	1.2 %	2.52	.823
We Used Web Based Data Exchange with Partners	3.7 %	46.9 %	28.4 %	16.1 %	4.9 %	2.33	1.037
Information Exchange with Partners is Timely	6.2 %	45.7 %	27 %	16 %	5.1 %	2.32	.804
Information Exchange between partners & us is Adequate	16 %	43.2 %	21 %	12.3 %	7.4 %	2.16	.798
Grand Mean						2.36	

Source: Own Survey Data, 2019

Table 4.9 shows the result of respondents' response in the importance of information sharing fall between 2.16 and 2.52. The result of inform partners in forecasting demand 2.46 shows high mean value from grand mean. But 37% of respondents disagreed on it, 30.9% of respondents neutral & 32.1% of respondents agreed. From this the company practice of forecasting demand with suppliers is weak. Adequate information exchange result indicates 59.2% of respondents disagreed, 21% of respondents neutral & 20.1% of respondents agreed. This indicates information exchange between the company & suppliers is very weak. Timely information exchange result shows 51.9% of respondents disagreed, 27% of respondents neutral & 21.1% of respondents agreed. This result shows on time information exchange of the company is very weak. The practice of reliable & complete information follows result shows 42 % of respondents neutral, 18.5% of respondents agreed & 39.5 % disagreed. This indicates reliable information follow practice of the company is very poor.

Web based data exchange with partners result shows 50.6% of respondents disagreed, 28.4% of respondents neutral & 21% of respondents agreed. This result indicates the company practice of web-based data exchange is poor & it needs improvement. As mentioned in literature review information exchange plays an important aspect in achieving perfect integration in the supply chain & on time information exchange is a pillar for business world. Therefore, the company improves its information exchange practice. Integration and coordination across the supply chain can be well provided through information sharing (Alireza et al, 2011). Lalonde (1998), discuss that sharing of information is one of the building blocks that characterize a solid supply chain relationship.

4.4.5 Organizational Performance

In this section respondents were asked to measure their organizational performance with other competitors in terms of the listed five variables. The variables used to access includes on time delivery is better than competitors, product & service quality is better than competitors, lower operating cost, ability of quick & flexibility for change & market share growth.

Table 4.6 Organizational Performance

Organizational Performance (N=81)							
Variables	S. D	D.	N.	A.	S.A.	Mean	Std. Deviation
Our on-time Delivery is Better than Competitors	9.9 %	61.6 %	13.5 %	11.1 %	3.9 %	2.37	.941
Our Product & Service quality is Better than Competitors	8.6%	52 %	24.76%	13.5 %	1.3 %	2.47	.882
Our Operating Cost is Lower than Competitors	12.3%	48 %	23.5 %	12.4%	3.8 %	2.47	.989
Our Ability in Adapting Change is Quick & Flexible	2.4%	48.2 %	34.5 %	12.3 %	2.6 %	2.64	.826
Our Market Share is Growing	12.3 %	54.3 %	21 %	8.7 %	3.7 %	2.37	.941
Grand mean						2.46	

Source: Own Survey Data, 2019

The above table shows the result of the respondents' response is between 2.37 to 2.64. The company product & service quality is better than competitors result shows 49 respondents disagreed which is 60.6 %, 24.7% of respondents neutral and 14.8% agreed. Which indicates that majority of the respondents are not satisfied by the company product and service quality. The result of on time delivery is better than competitors shows 58 respondents disagreed which is 71.5 %, 13.5% of respondents neutral, 15% of respondents agreed, which shows the company product on time delivery is lower than competitors. Operating cost is lower than competitors result shows, 60.3% of respondents disagreed, 23.5% of respondents neutral, 16.2% of respondents agreed. This indicates the company operating cost is higher than competitors.

Ability to quick & flexible change result 2.64 shows the highest mean value from grand mean, but 50.6 % disagreed on the company practice, 34.5% of respondents neutral, 14.9% of respondents agreed. This result shows the company not give attention to adapting quick and flexible change. 54 respondent's response on market share growth which is 66.6 % disagreed, 21% of respondents neutral, 12.4% of respondents agreed on it. This result indicates that the company market share growth is very poor. According to Li et al (2006), organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals. The short-term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain (Tan *et al.* 1998).

4.4.6 Mean Summary of Variables

Table 4.7 Mean Summary Variables

Mean Summary (N=81)		
Variables	Mean	Std. Deviation
Strategic Supplier Partnership	2.3852	.71957
Customer Relationship	2.6395	.68148
Internal Operation	2.9580	.82263
Information Sharing	2.3580	.67950
Organizational performance	2.4765	.43996

Source: Own Survey Data, 2019

4.5 Correlation Analysis of Variables

Correlation is the measure of relationship between variables. According to Andy (2006), the measure of correlation value from 0.1 to 0.29 small or weak correlations, from 0.3 to 0.49 medium or moderate correlations, the value > 0.5 is large or strong correlation & the value which zero indicated there is no correlation between variables.

Table 4.8 Correlation Matrix between Variables

Correlations of Variables		
N = 81		Organizational performance
Strategic Supplier Partnership	Pearson Correlation	.362**
	Sig. (2-tailed)	.001
Customer Relationship	Pearson Correlation	.488**
	Sig. (2-tailed)	.000
Information Sharing	Pearson Correlation	.374**
	Sig. (2-tailed)	.001
Internal Operation	Pearson Correlation	.664**
	Sig. (2-tailed)	.000
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Own Survey Data, 2019

Ha1- *There is relationship between strategic supplier partnership & organizational performance*

4.5.1 Correlation between Strategic Supplier Partnership & Organizational Performance

The aim of this hypothesis is to determine whether there is a correlation between strategic supplier partnership and organizational performance in tea processing & packaging factory. In order to test this Pearson's correlation coefficient were used.

Table 4.12 indicates there is moderate relationship between strategic supplier partnership and organizational performance with a Pearson correlation coefficient of 0.362 ($r=0.362$) and the significance level 0.001 is below 0.01. This significance value tells that there is a genuine relationship between strategic supplier partnership & organizational performance. But the regression result indicates strategic supplier partnership is insignificance value. From the result we conclude that the research hypothesis is rejected.

Li *et.al* (2006) wrote effective suppliers' partnership can be critical factor to guide supply chain management & supplies play more direct role in organizations performance. The main objective of strategic supplier partnership is increasing the capability of supplies (Rozenzweig, 2003). There for create a long-term relationship & partnership with reliable supplies is a key factor for organization performance.

Ha2 – *There is relationship between customer relationship practice & organizational performance*

The aim of this hypothesis is to determine whether there is a correlation between customer relationship practice and organizational performance in tea processing & packaging factory. In order to test this Pearson's correlation coefficient were used.

The above table result of correlation coefficient value of 0.488 ($r=0.488$) shows there is moderately a good relationship between customer relationship activity & organizational performance and the significance level 0 is below 0.01. This implies that there is a genuine relationship between customer relationship & organizational performance. From this result we can conclude that the research hypothesis is accepted.

Nobel (1997), discuss Customer relationship management is an important factor in supply chain management practice. Customer relationship have been recognized as an internal component of an organizations marketing strategy to increase sales & profit (Bommer *et.al.* 2001).

Ha3 – *There is relationship between information sharing & organizational performance*

The aim of this hypothesis is to determine whether there is a correlation between information sharing and organizational performance in tea processing & packaging factory. In order to test this Pearson's correlation coefficient were used.

Pearson correlation test conducted between information sharing & organizational performance shown in the table 4.14 above there is positive relationship with a correlation coefficient of 0.374 ($r=0.374$) and the significance level 0.001 is below 0.01. Hence the significance value indicates there is genuine relationship between information sharing & organizational performance. From the result we can conclude that the research hypothesis is accepted.

Information sharing is an important factor in achieving perfect integration with in the supply chain. Delivery of on time information by all the functional elements in the supply chain is consider as a competitive factor and distinctive (Ahmadi, 2005). Li *et.al.* (2006) also notes that information sharing must be accurate, so that the best supply chain management solution will be obtain on time

Ha4 – There is relationship between internal operation Efficiency & organization performance

The aim of this hypothesis is to determine whether there is a correlation between internal operation efficiency and organizational performance in tea processing & packaging factory. In order to test this Pearson's correlation coefficient were used.

Table 4.15 indicates a correlation coefficient value of 0.664 ($r=0.664$) shows there is strong positive relationship between internal operation & organizational performance and the significance level 0.000 is below 0.01. This significance value tells that there is genuine relationship between internal operation & organizational performance. from this result we can conclude that the research hypothesis is accepted.

Internal operation summarizes all activities related to production system & internal activities including logistics flow (Handfield & Nicholas, 1999). When supply chain management is effective, internal operation should flexible and respond change for market need. Means able to perform rapid change for order pattern & mass customization (Lambert & cooper, 2000).

4.6 Regression Analysis of Variables

Kothari (2004), explain regression analysis is a statistical method deals with the formulation of mathematical model relationship among variables which can be used for predicting the value of dependent variable. The mean variation of organizational performance on the dimension of strategic supplier partnership, customer relationship practice, internal operation & information sharing was conducted by multiple regression analysis. This can answer organizational performance of tea factory measured by strategic supplier partnership, customer relationship practice, information sharing & internal operation.

4.6.1 Diagnostic Test

4.6.1.1 Multicollinearity Test

Saunders *et.al.* (2007) explain multicollinearity refers to the situation in which the independent variable is highly correlated in a way that has undesirable implication on the outcome of regression analysis. Multicollinearity exists when there is a strong correlation between two or more predictors in regression model. To proceed the regression analysis the data must not show multicollinearity problem. According to Williams (2015) Tolerance and Variance Inflation Factor (VIF) values were calculated to check multicollinearity in the below table. The tolerance value below 0.2 & VIF value above 10 poses a multicollinearity problem. The result of the below table shows multicollinearity is not a problem in this study.

Table 4.9 Multicollinearity Test

Coefficients			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Strategic Supplier Partnership	.862	1.160
	Customer Relationship	.835	1.197
	Internal Operation	.826	1.211
	Information Sharing	.953	1.050
a. Dependent Variable: Organizational performance			

Source: Own Survey Data, 2019

4.6.1.2 Normality Test

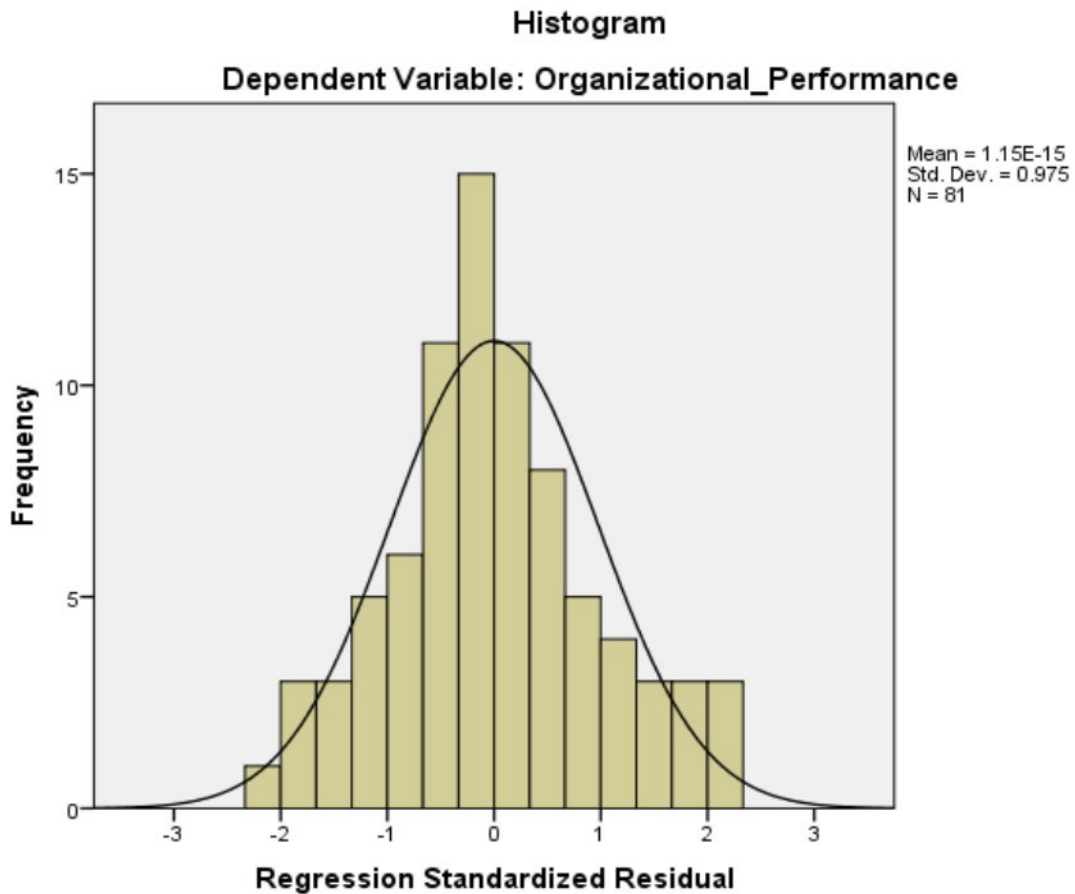
Normality test helps to check the distribution of data symmetrically around the center of all scores. The value of normality checked by Skewness & Kurtosis with the value of between -2 & +2 are considered as acceptable (George & Mallery, 2010). The table & graph shows normality of data.

Table 4.10 Normality Test

Descriptive Statistics					
Variables	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Strategic Supplier Partnership	81	.934	.267	.670	.529
Customer Relationship	81	.989	.267	.711	.529
Internal Operation	81	.165	.267	-.840	.529
Information Sharing	81	.777	.267	-.146	.529
Organizational performance	81	.876	.267	1.047	.529
Valid N (listwise)	81				

Source: Own Survey Data, 2017

Figure 4.1 Normality of the data



Source: Own Survey Data, 2019

Table 4.11: Regression Analysis between Organizational Performance & Supply chain management practice

Coefficients						
Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.745	.182		4.090	.000
	Strategic Supplier Partnership	.062	.049	.101	1.263	.210
	Customer Relationship	.161	.052	.249	3.070	.003
	Internal Operation	.271	.044	.506	6.197	.000
	Information Sharing	.152	.049	.235	3.099	.003

a. Dependent Variable: Organizational Performance

Source: Own Data Survey, 2019

From the table 4.18 un standardized coefficients and p-value for strategic supplier partnership on organizational performance were 0.062 and 0.210 respectively. This value indicates that strategic supplier partnership increased by 1% organizational performance increased by 0.062 % based on this study which is weak result & the significance value indicates $0.210 > 0.05$ from result we reject H_a . The table also shows unstandardized coefficients and p-value for customer relationship on organizational performance was 0.161 & 0.003 respectively. This indicates that customer relationship practice had increase organizational performance by 16.1%. The p-value 0.003 is less than the significance value 5% which shows accept H_a .

From the table of un standardized coefficients and p-value for internal operation on organizational performance were 0.271 and 0.000 respectively. This value indicates that internal operation increases organizational performance by 27.1%. Since the p-value 0.000 which is less than the significance value 5% from this result we accept H_a . Unstandardized coefficient and p-value of information sharing & organizational performance were 0.152 & 0.003 respectively. It shows information sharing increased organizational performance by 15.2 % & the p-value 0.003 is less than the significance value 0.05 from this result we accept H_a .

Form thus the model provide by the research finding is expressed by the following formula:

$$Y = 0.745 + 0.101X_1 + 0.249X_2 + 0.506X_3 + 0.235X_4$$

Where:

Y- Organizational Performance

B- Constant (0.745)

X1- Strategic supplier partnership

X2- Customer relationship

X3- Internal operation

X4- Information Sharing

4.7 Model Summary and Autocorrelation Test

The following table of model summary shows the value of R - Square to explain the model and it shows 56 % of the variation of dependent variable (organizational Performance) is explained by independent variables (Information sharing, Customer relationship practice, Strategic supplier partnership & Internal operation).

Autocorrelation assumption of Durbin-Watson statistics is a number that test in the residuals from a statistical regression analysis. The Durbin-Watson result value closer 2 means there is no

autocorrelation problem, value approaching 0 indicates positive autocorrelation & value towards 4 indicates negative autocorrelation (Bryman, 1988).

Table 4.12 Model Summary

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.763 ^a	.582	.560	.29184	1.678
a. Predictors: (Constant), Information Sharing, Customer Relationship, Strategic Supplier Partnership, Internal Operation					
b. Dependent Variable: Organizational Performance					

Source: Own Data Survey, 2019

From the above table assumption of autocorrelation shows, the value of Durbin-Watson results 1.678 indicates there is no autocorrelation problem in the data.

4.8 Summary of Hypothesis Testing

Hypothesis test results find from correlation analysis were summarized by the below table.

Table 4.13 Summary of Hypothesis Testing

	Hypothesis	Results
Ha1	There is a relationship between strategic supplier partnership and organizational performance.	Reject
Ha2	There is a relationship between customer relationship practice and organizational performance.	Accept
Ha3	There is a relationship between internal operation and organizational performance.	Accept
Ha4	There is a relationship between information sharing and organizational performance.	Accept

Chapter Five: Findings, Conclusion & Recommendation

This study was aimed to analyze the impact of supply chain management on organizational performance among Ethio Agri CEFT tea processing & packaging factory. The study had two objectives; to analyze the impact of supply chain management practice in terms of strategic supplier partnership, customer relationship, information sharing, internal operation & to analyze the relationship between supply chain management practice & organizational performance. Based on the findings recommendation & conclusion were made & also direction for future research are indicated.

5.1 Summary of Findings

The summary of findings of each variable from descriptive analysis & the result of inferential analysis is discussed below.

5.1.1 Strategic Supplier Partnership

As discuss in literature review section strategic supplier partnership enables companies to work more effectively with few important suppliers who are willing to share responsibilities for the success of the product. Suppliers participating early in the product design process can offer more cost-effective design, select best component and technology (Tan *et al.* 2002). An effective supplier partnership can be a critical component of a leading-edge supply chain (Nobel, 1997). The result of descriptive data analysis & qualitative method intervals indicates that the strategic supplier partnership practice among in the tea factory is weak and they are still doing business in traditional way. The variables tasted in the research result of descriptive statistics indicates majority of the respondents which is more than 45% disagreed on long term arrangement with suppliers, solve problem jointly with suppliers, trust between firms & suppliers, include suppliers in planning & involve suppliers in new product design were given a little attention in the factory. The inferential statistics result indicates the hypothesis test on regression analysis of strategic supplier partnership have no significance influence on organizational performance ($P\text{-value} = 0.210 > 0.05$), but the correlation results ($r = 0.362$) shows there is moderately positive relationship between strategic supplier partnership & organizational performance. This implies that the company practice in terms of supplier partnership is very weak and they did not give attention supply chain management plays a great role for organizational performance success.

5.1.2 Customer Relationship Practice

Applying good customer relationship practice helps organizations build long term relationship with their customers. Close customer relationship allows organizations differentiate their product from competitors, sustain customer loyalty and extend the value it provides to customers (Bratic, 2011 cited by Eyob). However, the result of descriptive data in terms of follow up procedure for customer compliant, measure customer satisfaction, enter long term contract with reliable customer & include customers in goal setting activity shows a mean value 2.68 which is highest mean value from grand mean. Whereas more than 50 % of respondents disagreed on it. The inferential statistics result shows customer relationship have significance influence on organizational performance ($P\text{-value}= 0.003 < 0.05$) and the correlation analysis result indicates independent variable customer relationship practice have positively genuine relationship with organizational performance ($r=0.488$). The above result shows the company practice for customer relationship is poor.

5.1.3 Internal Operation Efficiency

The company production system, capacity of available machines, capability of workers, flexibility of production system & integration with other departments are other indicators of good internal operation system. The analyzed data of descriptive statistics shows close coordination of departments is better than others variables which is 34.4 % of respondents agreed. But the variable rapid change for customer demand, rapid change for product mix, consult departments for work decision & relocate resource for demand change shows a weak result which is only blow 30 % of respondents agreed on it. The correlation between internal operation and organizational performance is ($r=0.664$) indicates there is strong positive relationship & the regression analysis result shows internal operation have a significance influence on organizational performance ($P\text{-value}=0.000 < 0.05$). So, the result shows the company performance is highly affected by poor practice of internal operation.

5.1.4 Importance of Information Sharing

Information exchange is very important for coordinating actions of supply chain members. Increase information follow can reduce uncertainty & lead the company to effectiveness of every action. The descriptive statistics result of the extent of the company information sharing practice in terms of inform partners in forecasting demand, reliable information flow with partners, web-based data exchange, on time information exchange & adequate data exchange result indicates very weak, which is agreed respondents is below 25 %. The correlation result ($r=0.374$) indicates information sharing have moderately positive correlation with organizational performance & the

regression analysis shows information sharing have significance influence on organizational performance with a value ($P\text{-value}=0.003<0.05$). The above result shows the practice of information sharing in the factory is very weak.

5.1.5 Organizational Performance Practice

Effective supply chain management has become a potentially valuable way of securing competitive advantage and improving organizational performance (Li *et.al.* 2006). The descriptive result of the respondent's response in terms of better performance than competitors, better quality than competitors, lower operating cost than competitors, ability to change in business environment & market share growth shows poor result which is more than 60 % of respondents disagreed. The factors find from secondary data shows the main problem of the company is lack of training for staffs, effectiveness of production machines, old packaging machines, effectiveness of procurement activity & on time delivery of raw materials due to supply chain integration problem. On the other hand, the factory financial report from the year 2016 to 2018 shows the factory annual sales growth & annual profit margin shows there is a variation from year to year. Based on the above result & related discussion it considers that organizational performance result is weak due to poor supply chain practice.

The variance inflation factor of all variables indicates there is no multicollinearity problem on the study & the coefficient of beta result shows strategic supplier partnership lower effect on organizational performance which is 0.101 & internal operation highly affect organizational performance of TPPF which is 0.506 from other independent variables.

5.2 Conclusion

Even if the tea industry practice in Ethiopia have got more than 40 years still it's found in an infant stage. The general objective of this research is to assess supply chain management practice and its impact on the performance of the company. The study used four dimensions of independent variables (strategic supplier partnership, customer relationship practice, internal operation & information sharing) with one dependent variable of organizational performance & for the purpose of this issue a comprehensive, valid & reliable instruments used for accessing supply chain practice. The study was conducted by using quantitative method, descriptive survey & questioners were disseminated. Instruments were used to support by scientific methods such as Pearson correlation & multiple regression analysis and support by empirical reviews.

The result of the study showed that the practice of supply chain management in TPPF is weak and creating partnership with suppliers, good customer relationship, internal operation efficiency & information sharing also not well implemented & give attention in the factory. The correlation

result of all variables is moderately positive & internal operation shows the highest correlation result, which indicates the performance of the factory is highly affected by internal operation activity. The regression result also shows customer relationship; internal operation & information sharing have significance relationship with organizational performance. The company experience that is close coordination of departments is a good experience than from other variables. The practice of information exchange, lower operating cost & flexibility with business environment is very low. So, the company give attention to modern supply chain management practices to sustain in comptitive business world.

5.3 Recommendation

Based on the findings of overall assessment the following points could be recommended;

- Strategic supply chain partnership of tea processing and packaging factory will improve the company involves suppliers in continuous improvement program, on planning and goal setting activities and in new product development program.
- The factory improves its relationship with suppliers from simply buy and sale relationship to a modern supply chain relationship through establishing strategic or long-term relationship and continuous information sharing in order to minimize supply uncertainty which resulted in demand and supply difference and to avoid customer dissatisfaction.
- In modern highly comptitive markets supply chain management practice towards collaboration with supply chain partners, strategic supplier partnership and strong relationship with customers are an important way of sustaining in comptitive tea industry. An integrated supply chain comprising tea plantation, the processer & packer, whole sellers & transporter can increase the competitiveness of the tea sector. So, Ethio Agri CEFT tea processing and packaging factory must broaden the area of strategic analysis & decision making not only on internal process but also at the whole supply chain process.
- The factory recruit supply chain management professionals, develop and establish supply chain department to practice supply chain activities, to improve and to get benefit from supply chain management performance.
- Applying good customer relationship practice is used to build long term relationship with customers. Tea processing and packaging factory customer practice needs additional effort to create customer satisfaction, give attention for customers demand, develop flexibility of resource utilization based on the demand of customers, ready for immediate response of customer compliance & work with customers for mutual benefit. So, the factory customer service unit must develop good customer service practice.

➤ Effective use of relevant and timely information in the supply chain considered as a core element for the performance of any organization. Hence tea processing and packaging factory should improve the level of information sharing practice. Supply chain integration emphasizes effective and efficient flow of information and physical item to meet customer needs starting from the source of raw material to produce & deliver it to end customers. Managing this whole process requires collaboration between different parties in the supply chain and to succeed this TPPF implement fast & reliable information system.

➤ The current information technology practice of the factory is poor and affects effective communication and integration of data with in the factory. The factory should improve and invest on information technology facilities to enhance information sharing both internally and externally. This can be done through hiring IT specialists and professionals.

➤ Internal operations efficiency is the core element for developing the capability of organizational performance before embarking into external relationship. To increase internal operation efficiency Ethio Agri CEFT tea processing and packaging factory develop multi-skill working capacity, replacing outdated machinery by modern one, prepare training each time for employees to develop their skill, collaboration with business partners, give immediate response for customers requirement, reallocate the resource in proper manner and use flexible production system based on customer demand leads a tea factory to dominate the industry and its competitors.

In general, Ethio Agri CEFT tea processing & packaging factory (TPPF) can improve organizational performance by applying quality supply chain management practice, evaluating and proactively implementing change in dynamics business environment.

5.4 Direction for Future Research

The concept of supply chain management is very wide due to its multidisciplinary origin covering the whole concepts in one study is impossible. Future researches expand supply chain management practice by considering additional concepts, variables and factors of supply chain. This research focuses only in the internal operation practice of the factory activities. So, the practice of supply chain management and supply chain integration starting from the tea farms to the factory compound & other supply chain concepts are open for future research. Future studies can also examine the proposed relationship by bringing some contextual variables into the model in order to fill the observed gap.

References

- Ahmadi H. (2005) *Supply Chain management*, Teheran, Iran Industrial Research Center
- Bereket T. (June, 2014) *Management Consultancy Service Tea Processing and Packing Factory; Expansion Project Study*
- Charles et.al. (2014) *Assessment of Supply Chain Management Practices and its effect on the performance of Kasapreko Company Limited in Ghana*, European Journal of Logistics Purchasing and Supply Chain Management, 2(1), 1-16
- Chopra and Meindl, (2007) *Supply Chain Management Strategy Planning and Operation*; Upper Saddle River, Nj: Prentice Hall.
- Choy, K. (2002). *The development of a case-based supplier management tool for multinational manufacturers*, Pearson International, New Jersey, USA Measuring Business Excellence; Vol, 6(1): pp.15-22
- Cooper M. C. and Ellram L. M. (1993) Characteristic of supply chain management and the implications for purchasing and logistics strategy, *International Journal of Logistics Management*, 4(2): 13-24.
- Creswell, J. W. (2003) *Research Design: Qualitative, Quantitative, and Mixed methods Approaches*; SAGE Publications
- Dereje A.W. (2012) *The impact of supply chain management practices on the organizational performance of basic metal and engineering industries in Ethiopia*. University of S.A.
- Ethio Agri-CEFT Tea Plantation and Factory. Available on <http://www.ethioagriceft.com>. (2014)
- Eyob, M. (2017) *An Assessment of the Effect of Supply Chain Management Practices on Organizational Performance* in the case of Modern Building Industries PLC
- Eyong, M. (2009) *Creating a competitive Supply Chain: evaluating the impact of lean & agile supply chain*.
- 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.
- Fawcett, S.E., Calantone, R., and Smith, S.R. (1997). Delivery capability and firm performance in international operations. *International Journal Production Economics*, 51, pp. 191-204.

- Gunasekaran, A. (2006) Supply Chain management: *Theory and applications*. *European Journal of Operational Research*, 159: 265–268.
- Gunasekaran, A. Patel, C. and Tirtiroglu, E. (2001) Performance Measures and Metrics in a Supply Chain Environment, *International Journal of Operations and Production Management*, 21(1/2), pp. 71-87.
- Hailemichel, (2011) *Supply Chain Performance of Selected Leather Footwear Firms in Addis Ababa*, Addis Ababa University School of Commerce, Unpublished Thesis
- Handfield, R.B. and Nicholas, E. L. (1999) *Introduction to Supply chain Management*. New Jersey: Prentice Hall, Inc
- Haque, R. I. (2013). *Effects of Supply Chain Management Practices on Customer Satisfaction: Evidence from Pharmaceutical Industry of Bangladesh*. *Global Business and Management Research*, Vol. 5(No. 2), 120-136.
- Hill, CWL. (2011) *International Business Competing in the Global Market Place*, 8th edition
- Kim, W. (2006) Effects of Supply Chain Management Practices, Integration, and Competition Capability on Performance. *An International Journal*, Vol. 11(3), 241–248
- Lambert, D.M. and Copper, M.C. (2005) Research Methodologies in Supply Chain Management Framework. *Journal of Business Logistics*, 26: 25-51
- Kothari, C.R. (2004) *Quantitative Techniques*. New Delhi, Vikas Publishing House Pvt. Ltd.
- Leedy, P.D. and Ormrod J.E. (2010) *Practical Research Planning and Design*, 9th edition, Pearson Education, Inc., New Jersey.
- Lee and Whang (2000) Information Sharing in Supply Chain. *International Journal of Technology Management*, Vol, 20 no, 2 PP. 373-387
- Lenny et al. (2007) *An Integrated Model for Supply Chain Management Practice, Performance and Competitive Advantage*, Doctoral Dissertation, University of Toledo
- Li, S. Ragu -Nathan, T.S. and Rao, S.S. (2006) The Impact of Supply Chain Management practice on competitive advantage and organizational performance. *The International Journal of Management Science*
- Mesele H. (2017) *The Effect of Supply Chain Management Practice on Organizational Performance: the case of BGI Ethiopia*

- Michel, H. (2003) *Essentials of supply chain Management*, John Wiley and Sons
- Monczka, R.M., Peterson, K.J., Handfield, R.B. and Ragatz, G.L. (1998) *Success factors in strategic supplier alliances: the buying company Perspective*, *Decision Science*, Vol 29 no.3, PP. 5553-5577
- Nobel D. (1997) Purchasing & Supplier management as a Future Competitive Edge, 5; 23-27
- Richard, P.J., Devinney, T.M., Yip, G. and Johnson G. (2009) Measuring organizational performance as a dependent variable: towards methodological best practice. *Journal of Management*. 35: 718-804
- Robert E. Speakman, John W. Kamauff Jr and Niklas Myhr, (1998) ‘*An empirical investigation into supply chain management Distribution & Logistics Management: A perspective on partnerships*, 28 (8): 630-650 MCB University Press
- Ronald M. Salazar (2012). *The Effect of Supply Chain Management Processes on Competitive Advantage and Organizational performance*: Graduate School of Engineering and Management, Air Force Institute of Technology; Air University, USA
- Ross, D.F. (1998). *Competing through chain management: creating market winning strategies through supply chain partnership*. New York: Chapman and Hall
- Salem, M.A. (2011) Supply Chain Management and Business Process Integration– the *Implication of Confucian Dynamism*, *European Journal of Marketing*, Vol. 45, Issue 3.
- Simchi-Levi, D., Kaminsky, P., and Simchi-Levi, E. (2000), *Designing and managing the supply chain*, Irwin McGraw-Hill, New York, NY
- Schutt, R. K. (2011). *Investigating the social world: the process and practice of research*. 7th Ed. SAGE Publications, Inc.
- Tan, K. C., Lyman, S. B. & Wisner, J. D. (2002). Supply chain management: a strategic perspective. *International Journal of Operations and Production Management*, 22(6), 614-631.
- Yohannes, A. (2014). *An Assessment of Supply Chain Management Practices and its Challenges on Competitiveness: The Case of Mughher Cement Factory*: graduate studies, School of Commerce, Department of Logistics and Supply Chain Management, Addis Ababa University, Unpublished paper.

Appendix - A

Research Questionnaire

Addis Ababa University

School of Commerce

Masters of Art in Logistics and Supply Chain Management

Dear respondents, this questionnaire have been designed for gathering data on;

***The Effect of Supply chain management practices on performance of Ethio
AGRI CEFT tea processing & packaging factory***

The data collected shall be for academic purpose only and thus not affects you in any case. So, your genuine, frank and timely response is vital for successfulness of the study.

Your response will be kept absolutely confidential. To this end, name, phone number or e-mail address is not required on this questionnaire.

Therefore, kindly request you to respond to each items of the question very carefully for a maximum of 15 minutes.

Thank you for giving your time in advance!

With Regards,

If you have any unclear issue please contact me.

Behailu Asmamaw

Cell phone: 251-913-586176

Email; beaihailu@gmail.com/beaias@yahoo.com

Please tick (✓) or provide your own answers where applicable

Part I.

General Information and Demographic Background of Respondents of the Selected Samples

1. Gender

Male Female

2. What is your educational level?

High School completed _____ College _____
First degree _____ Second degree and above _____

3. Job Title/Position

Please indicate _____

4. The years you have worked for this company

Under 2 year's _____ 3 to 5 years _____
6 to 10 years _____ Over 10 year's _____

Part II. Research Questions and general instruction

1. General Instructions and Information

➤ Indicate to what extent your company experiences the following supply chain management practices. Please provide more information in the comments block if you wish to clarify something that is very important to my research.

➤ Most of the questions can be answered by simply making a circle on **only one best Answer** for each question.

➤ Please answer **all** questions. There is no right or wrong answer.

➤ The number represents the following:

1 = strongly disagree **2 = Disagree**

3 = Neutral **4 = Agree**

5 = Strongly Agree

1. Questionnaires

1. Strategic Supplier Partnership	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Strategic Supplier Partnership is the long-term relationship between the organization and its suppliers.					
We entered into long term contract arrangement with suppliers					
We regularly solve problems jointly with our suppliers					
There is trust between our firm and suppliers					
We include our key suppliers in planning and goal- setting activities					
We actively involve our key suppliers in new product design and development processes					
2. Customer Relationship					
Customer Relationship is the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationship with customers to improve customer satisfaction.					
We employees follow-up procedures for customer inquiries and complaints					
We frequently measure and evaluate customer satisfaction and retention					
We have frequent interaction with our customers to achieve reliability, the responsiveness, and improving basic standards for our organization					
We entered into long term contract arrangement with reliable customers					
We include our key customers in our planning and goal- setting activities					
3. Internal Operations Efficiency					
Operational efficiency is the capability of an enterprise to deliver products or services to its customers in the most cost-effective manner possible while still ensuring the high quality of its products, services and support.					
Our operations system responds rapidly to changes in product volume demanded by customers					
Our operations system responds rapidly to changes in product mix demanded by customers					
Our operations system rapidly reallocates resources to address demand changes					

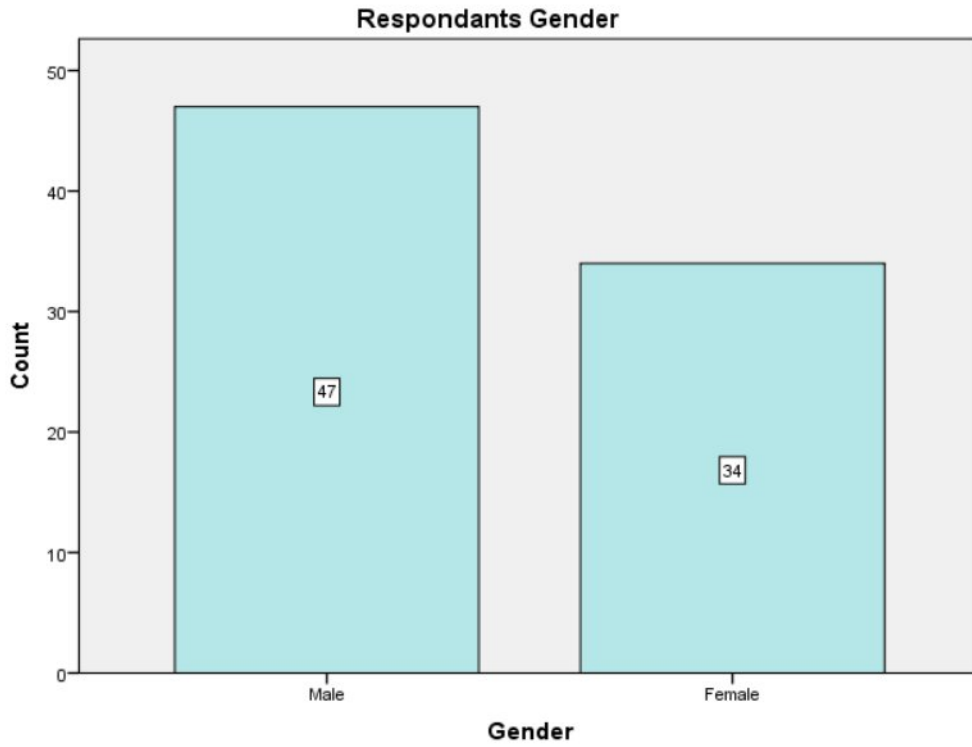
Our department works in close coordination with other departments						
We consult other departments when making our work decisions						
4. Importance of Information Sharing	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Information sharing is the extent to which critical and proprietary information is Communicated to one's supply chain partner.						
We inform supply chain partners in advance of forecast of demands						
The information flow between our firm and supply chain partners is reliable and complete						
We used web-based data exchange with our supply chain partners						
Information exchange with our supply chain partners is timely						
Information exchange between our supply chain partners and us is adequate						

5. Organizational Performances	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Organization performance refers to how well an organization achieves its financial goals as well as market-oriented goals.						
Our on-time delivery performance is better than our competitors.						
Our product and service quality is better than our competitors.						
Our operating costs are lower than our competitor.						
Our firm's ability to adapt changes in the business environment is quick & flexible.						
Our market share is growing.						

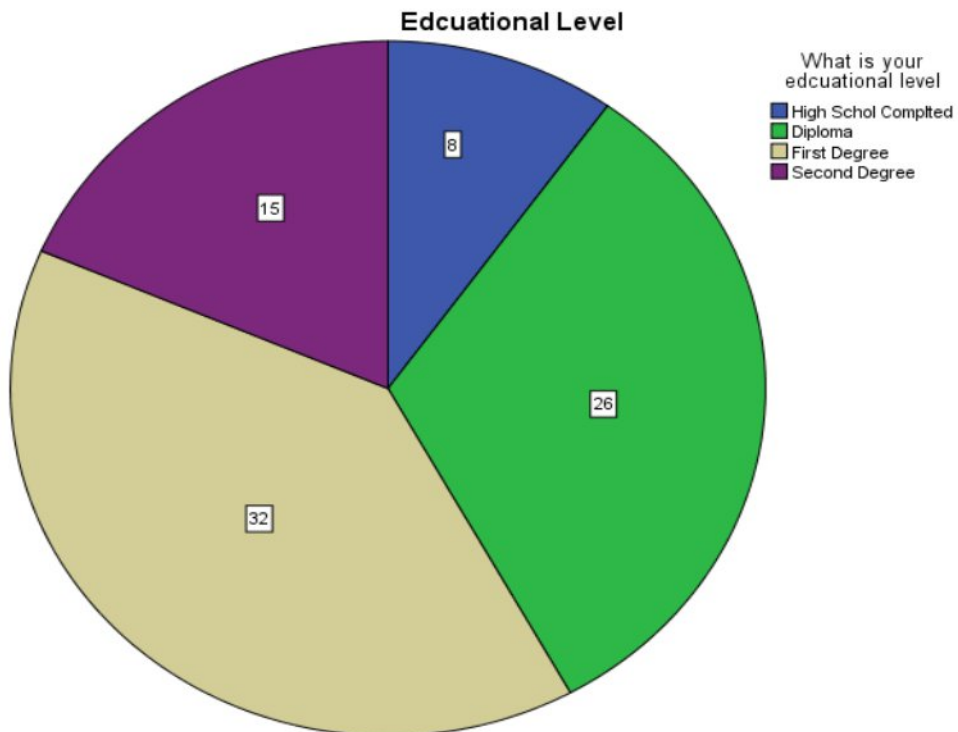
Other Comments:

Appendix – B

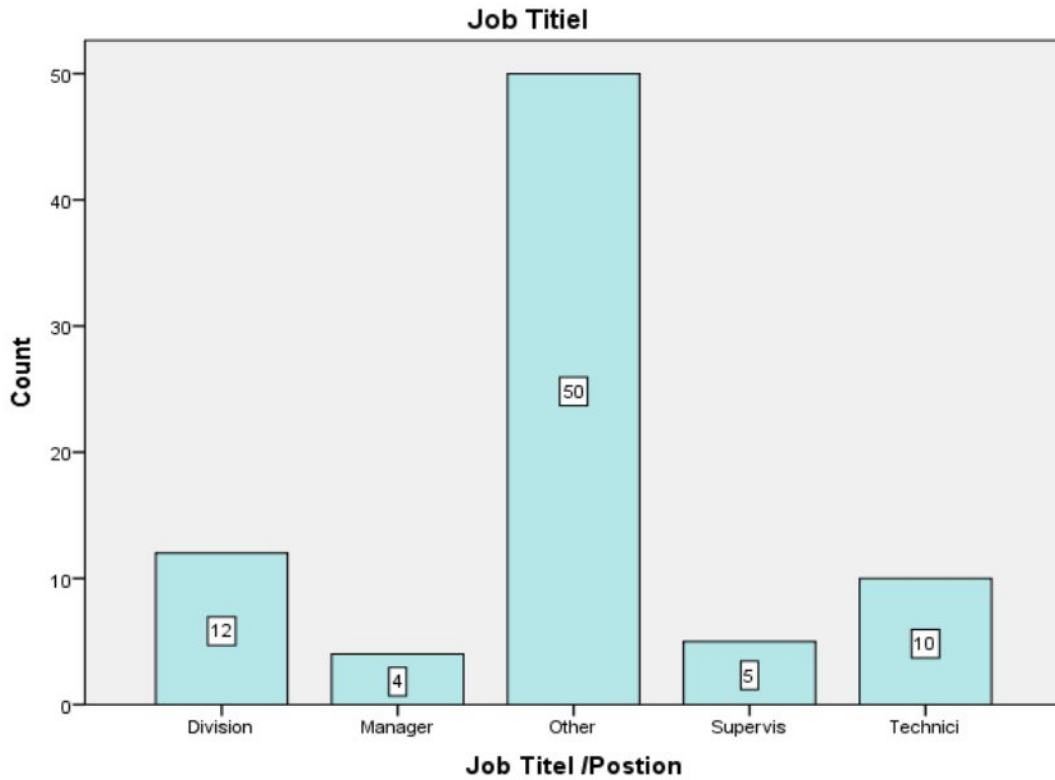
Appendix - 1 Histogram for Gender of Respondents



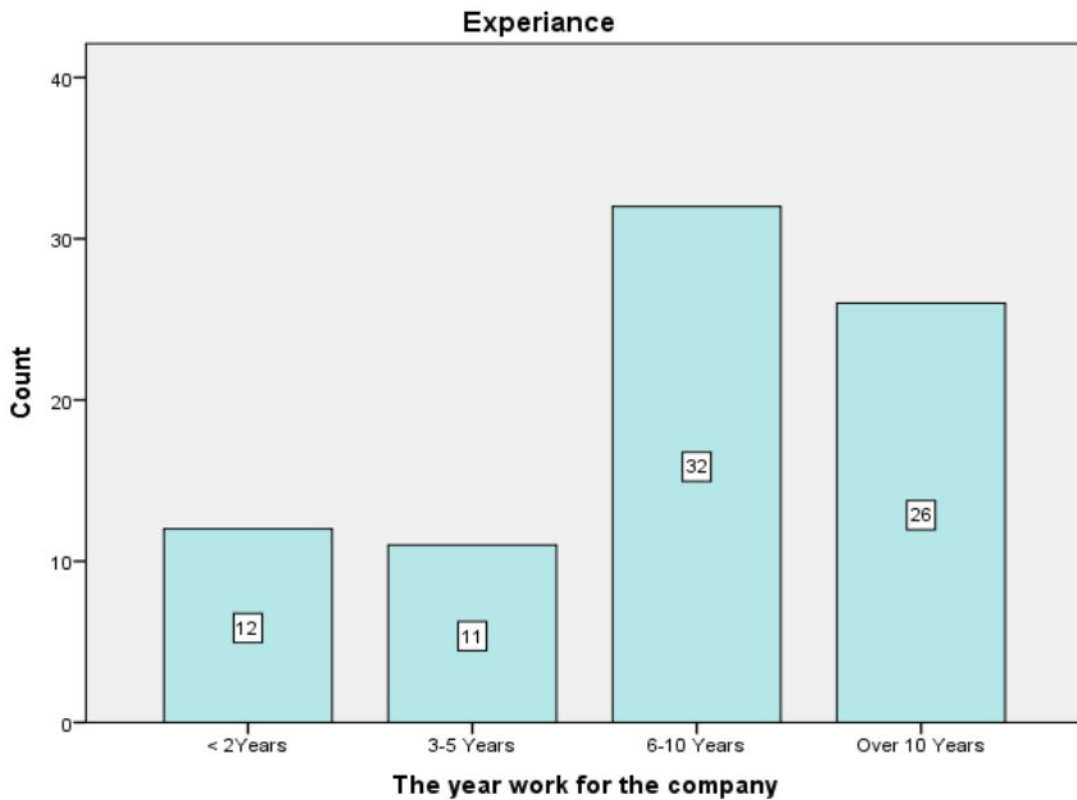
Appendix - 2 Pie Chart for Educational Levels of Respondents



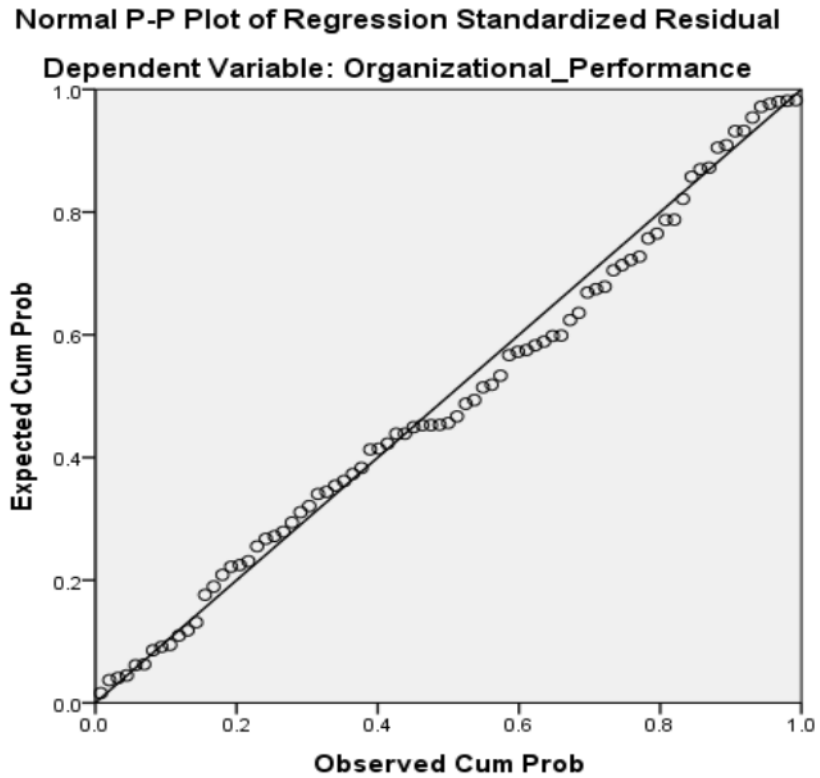
Appendix - 3 Histogram for Position of Respondents



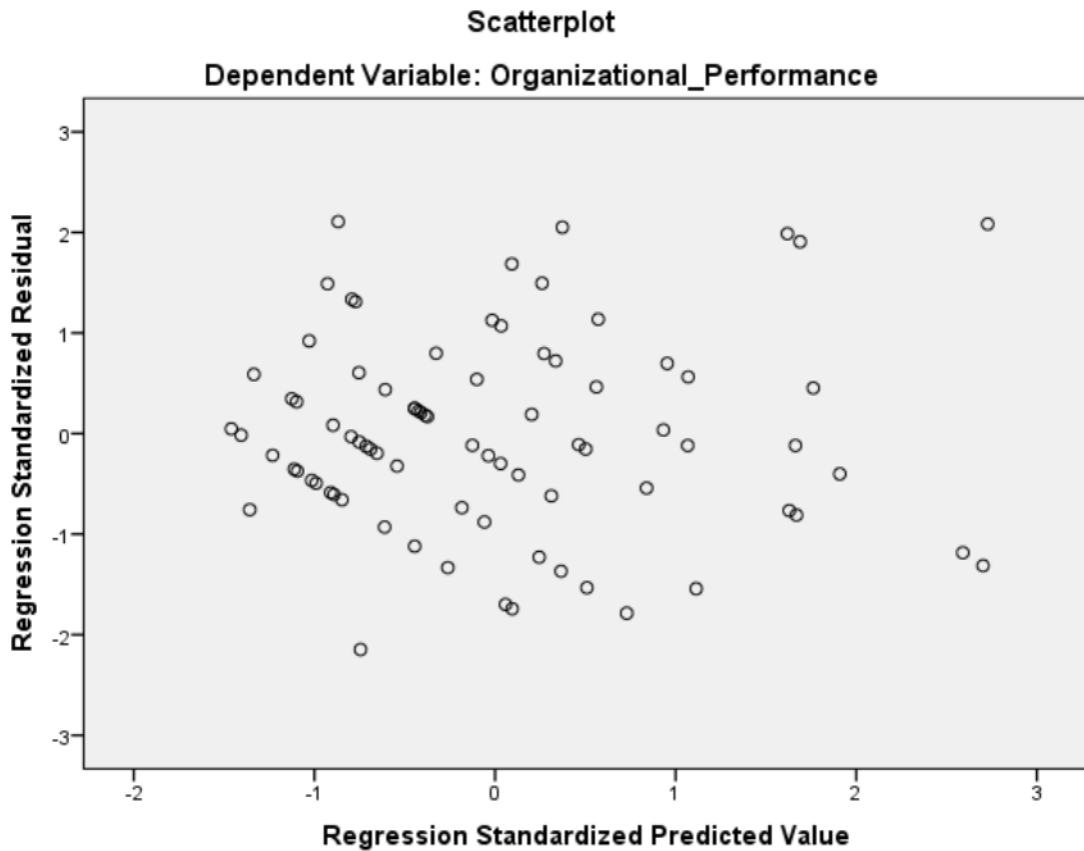
Appendix - 4 Histogram for Work Experience of Respondents



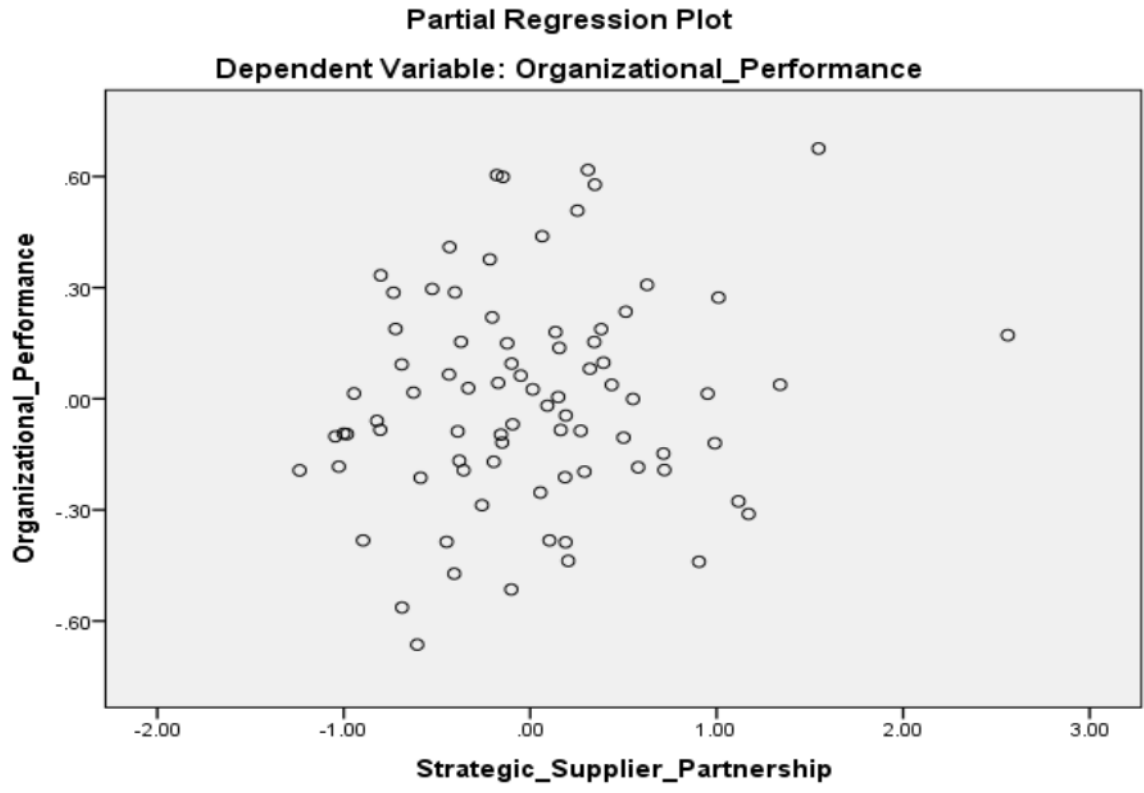
Appendix – 5 Linearity Test



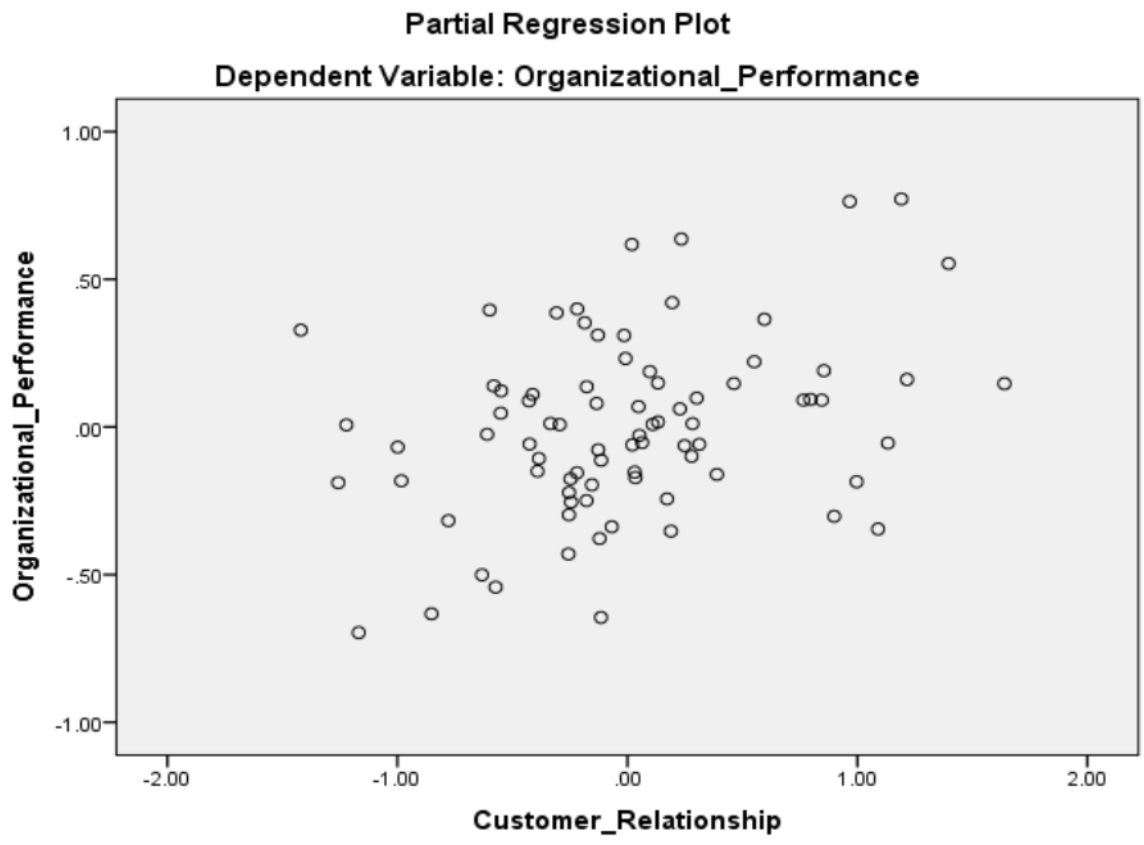
Appendix – 6 Regression Standardized Residual for Organizational Performance



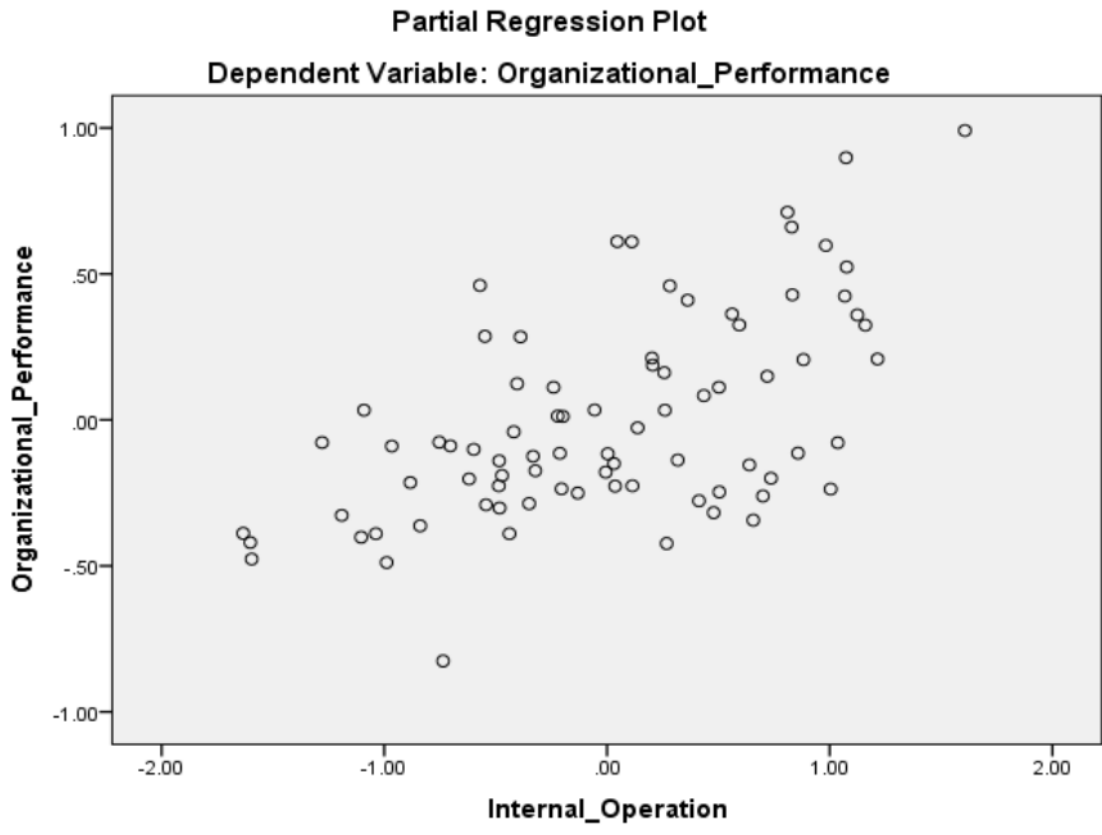
Appendix – 7 Regression Standardized Residual for Strategic Supplier partnership



Appendix – 8 Regression Standardized Residual for Customer Relationship



Appendix – 9 Regression Standardized Residual for Internal Operation



Appendix – 10 Regression Standardized Residual for Information Sharing

