



**ANALYSIS OF SUPPLY CHAIN INTEGRATION ROLE ON  
EXPORT PERFORMANCE.**

**(EMPLOYEES PERSPECTIVE OF ANBESSA SHOE S.Co.)**

**BY**

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**Analysis of Supply Chain Integration Role on  
Export Performance  
Employees Perspective of Anbessa Shoe Share Company.**

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### ***Declaration***

I, Samson Tekie, declare that this thesis is a result of my independent research work on the topic entitled “Analysis of Supply Chain Integration Role on Export Performance Employees Perspective of Anbessa Shoe Share Company.” in partial fulfillment of the requirements for the Degree of Masters of Art in Logistics and Supply Chain Management at Addis Ababa University School of commerce. This work is original in nature and has not been presented for a degree in any other University. All the references are also properly recognized.

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***Statement of certification***

This research, entitled “*Analysis of Supply Chain Integration Role on Export Performance*” was carried out by **Samson Tekie Hailu** so as to obtain his Master’s degree from Addis Ababa University School of commerce. He conducted his original thesis under my guidance and supervision. I certify that, the study is his own original work and suitable for submission of the award of MA in Logistics and supply chain Management.

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The Researcher

### **Abstract**

*Supply chain integration practices are considered a powerful weapon to optimize varied company performance endeavors. The objective of this study was to analyze the supply chain integration role specifically on the export performance of the Anbessa Shoe Share Company. Analysis of the supply chain integration dimensions require determination of major components: internal integration, supplier integration, customer integration. The problems of uncertainty, stiff international competition, longer lead and cycle times, high inventory level, inefficiencies and ineffectiveness in the supply chain were the critical factors that initiated this study for investigation. Both descriptive and an explanatory research design was employed with a sample of 80 employees through census that was 87.5% of the response rate. A questionnaire was used as a research tool for collecting data. Available data on these factors was gathered, formatted, processed and thoroughly checked for continuity and consistency. The supply chain integration and export performance data were infilled using the Five Point Likert-Scale while the Cronbach Alpha was used to check the data for reliability of measurement scale. The relationship between independent variables (supply chain integration) and dependent variables (export Performance) are also cross-checked from Pearson correlation matrix. To predict export performance from supply chain integration dimensions, such as internal integration, supplier integration, customer integration, the multiple linear regression model was adopted. The analysis indicated that the independent variables, supply chain integration with respect to the three dimensions (internal integration, supplier integration, customer integration,) explained 23.2% variance on export performance. Internal integration and supplier integration were statistically significant with p-value of less than 0.05 whereas the customer integration was statistically insignificant with p-value greater than .05. The study concluded that internal integration and linkages with a firm's suppliers have the most effect on a firm's export performance, where it's the internal integration significantly affects export performance and competitiveness. It is recommended that all the three dimensions of supply chain (internal integration, supplier integration, customer integration) should have to be integrated at the optimal level in order to be an efficient and effective export performance.*

*Keywords: supply, chain, integration, external, internal, supplier, customer, information, measurement, and performance.*

## Contents

Board of Examiners Approval.....	I
Declaration.....	II
Statement of certification.....	III
Acknowledgement .....	IV
Abstract .....	V
Table of content.....	VIII
List of Tables and Figures .....	IX
List of Acronyms .....	XI
<b>CHAPTER ONE .....</b>	<b>i</b>
<b>INTRODUCTION.....</b>	<b>1</b>
<b>1.1 Background of the study .....</b>	<b>1</b>
<b>1.2 Statement of the Problem .....</b>	<b>2</b>
<b>1.3 Objective of the Study .....</b>	<b>5</b>
1.3.1 General Objective .....	5
1.3.2 Specific Objectives .....	5
<b>1.4 Research Questions .....</b>	<b>5</b>
<b>1.5 Significance of the study .....</b>	<b>6</b>
<b>1.6 Scope of the Study .....</b>	<b>6</b>
<b>1.7. Limitation of the study .....</b>	<b>7</b>
<b>1.8 Operational definition of terms and Concepts .....</b>	<b>7</b>
1.8.1. Conceptual Definition.....	7
1.8.2. Operational Definition .....	8
<b>1.9 Organizations of the study .....</b>	<b>9</b>
<b>CHAPTER TWO .....</b>	<b>10</b>
<b>RELATED LITERATURE REVIEW .....</b>	<b>10</b>
<b>2.1 Introduction.....</b>	<b>10</b>
<b>2.2. Theoretical Literature Review .....</b>	<b>10</b>
2.2.1. Supply Chain Management.....	10
2.2.2 Supply Chain Integration .....	12
2.2.3 Perspectives of Supply Chain Integration.....	14

2.2.4 Export Performance .....	18
2.2.5 Perspectives of Export Performance .....	18
2.2.6 Operationalization of Export Performance .....	20
<b>2.3. Empirical Literature Review .....</b>	<b>21</b>
2.3.1. Supply Chain Integration .....	21
2.3.2 Scope of integration .....	23
2.3.3 External Integration.....	23
2.3.4 Internal integration.....	24
2.3.5 Layers of Integration.....	25
2.3.6 Level of Integration.....	26
2.3.7 Supply Chain Integration and Performance .....	26
<b>2.4 Conceptual framework of the study .....</b>	<b>29</b>
<b>2.5 Identified Literature Gap.....</b>	<b>30</b>
<b>CHAPTER THREE.....</b>	<b>31</b>
<b>RESEARCH DESIGN AND METHODOLOGY .....</b>	<b>31</b>
Introduction.....	31
3.1 Description of the Study Area.....	31
3.2 Research Approach .....	32
3.3 Research Design.....	32
3.4 Unit of Analysis .....	32
3.5 Target Population, Sampling Technique and Sample Size .....	32
3.5.1 Sample Size.....	33
3.5.2 Sampling Techniques.....	33
3.6 Variables of the Study and Measurement Instrument .....	34
3.7 Data Source and Method of Collection.....	35
3.8 Method of data analysis and presentation .....	35
3.9 Ethical Consideration.....	36
3.10 Data Reliability and Validity .....	36
<b>CHAPTER 4.....</b>	<b>38</b>
<b>ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS .....</b>	<b>38</b>
<b>4.1 Introduction.....</b>	<b>38</b>
<b>4.2 Demographic Information of the Respondents .....</b>	<b>38</b>
4.2.1 Response Rate.....	38



4.2.2 Gender.....	38
4.2.3 Educational Background.....	39
4.2.4 Position in the Organization.....	39
4.2.5 Experience.....	40
<b>4.3. Descriptive Analysis of Extent of Supply Chain Integration .....</b>	<b>40</b>
<b>4.4. Supply Chain Integration and Export Performance .....</b>	<b>41</b>
<b>4.4. Regression Analysis .....</b>	<b>42</b>
4.4.1 Multiple Linear Regression Assumptions.....	42
4.7.2 The Role of Supply Chain Integration for the Export Performance .....	46
<b>CHAPTER FIVE .....</b>	<b>51</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>51</b>
<b>5.1. Summary of Major Findings.....</b>	<b>51</b>
<b>5.2. Conclusions.....</b>	<b>52</b>
<b>5.3. Recommendations .....</b>	<b>53</b>
<b>5.4 Suggestion for Further Study.....</b>	<b>54</b>
<b>References.....</b>	<b>55</b>
<b>Appendices: Appendix I.....</b>	<b>I</b>
<b>Appendix II: Research Questionnaire.....</b>	<b>IV</b>

## List of Tables

TABLE 2.1 EXPORT PERFORMANCE MEASURES USED IN PAST RESEARCH .....	33
TABLE 3.1 CARVALHO'S SAMPLE SIZE DETERMINATION.....	45
TABLE 3.2 SAMPLE SIZE DETERMINATION FOR THE STUDY.....	46
TABLE 3.3 RELIABILITY STATISTICS .....	48
TABLE 4.1 DEMOGRAPHIC INFORMATION .....	50
TABLE 4.2 SUPPLY CHAIN INTEGRATION EXTENT, AND EXPORT PERFORMANCE .....	52
TABLE 4.3 CORRELATION MATRIX .....	54
TABLE 4.4 MULTICOLLINEARITY CORRELATION MATRIX.....	56
TABLE 4.5 MODEL SUMMARY .....	59
TABLE 4.6 ANOVAA .....	60

## List of Figures

FIGURE 2.1 SUPPLY CHAIN OR SUPPLY CHAIN NETWORK .....	11
FIGURE 2.3 CONCEPTUAL FRAMEWORK OF SUPPLY CHAIN INTEGRATION .....	30
FIGURE 4.1 LINEAR MULTIPLE REGRESSION ASSUMPTION .....	43
FIGURE 4.2 HOMOSCEDASTICITY MULTIPLE REGRESSION ASSUMPTION.....	45
FIGURE 4.3 NORMALITY DISTRIBUTION HISTOGRAM .....	46

## **ABBREVIATIONS AND ACRONYMS**

<b>ASSC</b>	Anbessa Shoe Share Company
<b>CI</b>	Customers Integration
<b>EI</b>	External Integration
<b>ERBV</b>	Extended Resource Based View
<b>II</b>	Internal Integration
<b>IOS</b>	Inter Organizational System
<b>OC</b>	Organizational capability
<b>R2</b>	R Squared
<b>RBV</b>	Resource Based View
<b>RDT</b>	Resource Dependence Theory
<b>SCI</b>	Supply Chain Integration
<b>SCM</b>	Supply Chain Management
<b>SI</b>	Supplier Integration
<b>SC</b>	Supply Chain

# CHAPTER ONE

## INTRODUCTION

*This chapter present background of the study, problem statement, objective of the study, research question, scope of the study, delimitation of the study, definition of terms and organization of the study.*

### 1.1 Background of the study

A well-integrated supply chain is a major business concern for companies looking to compete in the international markets. Supply chain integration (SCI) encourages firms to reconfigure their assets and abilities internally and externally to solidify their supply chain overall with an end goal to enhance long haul performance (Huo, 2012).

Today the new source of competition lies outside the walls of organizations, and is determined by how effectively companies link their operations with their Supply Chain partners such as suppliers, distributors, wholesalers, retailers and end customers Bogale A.(2016). Each firm in a Supply Chain therefore, directly or indirectly affects the performance of other Supply Chain members, as well as the overall performance of the Supply Chain. (Sengupta, K., D.R. Heiser, L.S. Cook. 2006).

Kim (2006) measured the level of supply chain integration in terms of a company's integration with suppliers, with customers, and cross functional integration within a company and showed the potential benefits of integrating a supply chain as a basic in accomplishing performance and competitive advantages (Zhao *et al.*, 2013).

Today, the effects of supply chain integration (SCI) on firm performance have received considerable attention from scholars and practitioners, the potential benefits of SCI are widely touted, and support for its positive effects is increasing (Flynn *et al.*, 2010; Rosenzweig, 2009; Vaart and Donk, 2008). However, despite its importance, there are no commonly accepted sub-dimensions of SCI, and the relationships between different SCI dimensions are inconsistently

described in previous studies (Zhao *et al.*, 2011). In addition, there is very little empirical evidence as how different SCI dimensions simultaneously influence different types of company performance.

In this study the relationship between SCI and performance has been investigated from the perspective of organizational capability (OC). The OC perspective is related to resource-based view (RBV), which addresses how resources and capabilities achieve competitive advantages (Armstrong and Shimizu, 2007; Bharadwaj, 2000; Newbert, 2007; Peng *et al.*, 2008). Thus, SCI can be viewed as internal and external integrative capabilities that lead directly or indirectly to company performance.

Exporting, as one type of strategic company performance endeavor that provides a firm the required flexibility and a cost-effective way of penetrating new foreign markets quickly (Leonidou 1995) this study has tried to examine how supply chain factors influence export performance, particularly from the perspective of the focal company under study, ASSC.

For this study, export performance is considered in two dimensions:

(1) financial performance (example: revenues, profit margins);

(2) perceived export market performance (example: competitiveness, market share) (Zou *et al.*, 1998; Lages *et al.*, 2005).

The purpose of this study is to test the effect of supply chain integration on export performance of ASSC.

## **1.2 Statement of the Problem**

Managing the supply chain has become a way of improving performance by reducing uncertainty and improving service (Li *et al.* 2006), and many organizations continue to struggle to

understand the complex issues associated with the coordinated planning and supply chain integration among members of their supply network (Lori & Daniel 2011).

Footwear is an active product in international markets with a very stiff competitive market, where shoe producers have a range of costs to manage with a particular focus on raw material and production costs. Other important costs include regulatory compliance costs, logistics costs, general overheads (such as utilities) and marketing.

Previous studies such as Lall (1991) pointed out that logistic related barriers affect a well-designed and manufactured product not to reach the export markets safely, punctually and reliably. The transportation delays, demand fluctuations and unexpected events create shortage of the company's product abroad. Dicle and Dicle (1992) mentioned that strict and time-consuming procedures for imports of manufactured goods also constrain successful export activities. To end with, the logistic barriers significantly affect the export competitiveness of the industry.

Gebreyohannes, (2016) on his study of footwear manufacturing firms remarked weaker performance and poor managerial capabilities of channel members are adversely affecting the competence of the exporting firms at the international market. Expensive logistic costs, lack of adequate quality of raw materials, lack of ability to supply required quantity on continuous basis, high sensitivity of products to fashion, lack of export marketing research was among the principal components of export impediments.

ASSC (2009) and Tomas (2011) highlighted that the most important problems of leather footwear manufacturing firms are shortage of raw materials, long procurement lead time for imported materials, lack of demand, low quality of finished leather, weak relationship with customers and suppliers and poor managerial capabilities.

Dinh *et al.*, 2012 also remarked epic supply shortage coupled with unpredictable and low quality, the footwear sector is swallowed with poor trade logistics and long lead times affecting the competitiveness of the export firms in the foreign potential markets.

On her study Rahel (2010) has suggested, the leather value chain consisting of many interacting links need coordination between stakeholders, information sharing and technologies that support their linkage in order to successfully utilize the opportunities available nationally and internationally.

The focal company in this study, Anbessa Shoe Share Company produces different kinds of footwear products sourcing its main raw material that constitutes more than 50% of input costs, processed leather from different tanneries. A new plant at the Akaki Industrial Zone, Anbessa has expanded its operation with production of up to 80% produce brought for export market. Its performance on international context will be the subject of this study and how the current integration efforts are helping towards achievement export performance. Currently, the shoe maker has created a total of 1,578 permanent jobs and 641 temporary workers on its two production facilities. It has been able to export to Kenya, Uganda, Somalia, South Sudan, Somaliland, Australia, Canada, France, Italy and the US. It also runs 37 outlets across Addis Ababa and regional towns. (company profile, 2019) Addis Fortune wrote on its news feed that, Anbessa Shoe SC has won Africa's most admired brands of 2018, securing a third place in the category of apparel sector following Dangote Cement and MTN.

On his study Bogale Alemu (2016), identified supply and procurements process and shoe production process have low performance in ASSC hampering its international competence and ability to perform at the high level.

A preliminary interview was conducted on account of this study and the managers believed that its worth to study the topic of supply chain integration for the fact that the main challenges faced are mainly relate to supplier/partner relationship management. The responses by the managers, have shown the company relies on contact initiation from customers in its export markets, and does not have a formal SC relationship with trading partners.

Hence, the aim of this study is to put the emphasis on the relation between the implementation of supply chain integration and the export performance of ASSC mainly (on financial & perceived export market perspectives) were examined in this study.



## **1.3 Objective of the Study**

In this section, both the general and specific objectives of the study which were analyzed in the results and discussions part are separately elaborated.

### **1.3.1 General Objective**

The main objectives of the study are to analyze the role of supply chain integration on export performance of Anbessa Shoe Share Company (ASSC).

### **1.3.2 Specific Objectives**

- To examine the dimensions of supply chain integration (with respect to internal integration, supplier integration, and customer integration practices).
- To analyze the relationships between supply chain integration and the export performance with the respect to internal, supplier, customer integrations, and export performance measures (perceived export market and financial) respectively.
- To assess roles of supply chain integration on export performance (related to the internal, supplier, and customer integrations of supply chain, and on the measures of export market and financial performance of it foreign sales).

## **1.4 Research Questions**

- What is the level of adoption in terms of supply chain integration dimensions?
- What are the relationships between supply chain integration and the export performance?
- What are the roles of supply chain integration on export performance?

## **1.5 Significance of the study**

It is recognized that research on export performance is of utmost importance to managers, because it boosts corporate growth and ensures company survival in the long term (Samiee and Walters 1990; Terpstra and Sarathy 2000).

As stated above, current performance of supply chain is not yielding the planned results in terms the desired level to compete with the steady rise in global business and the emergence of global competition. The purpose of this thesis is to identify the reasons for such development and to highlight the theoretical frameworks which could improve the export performance especially in terms of export market share and profitability.

This study is important in helping the company to follow appropriate integration in order to enhance proper supply chain integration of channel members and supply partners; this will increase the chain system efficiency as well as effectiveness that have had a drawback in performance achievement. The result of this study could also be valuable to industry managers, policy makers; and other export-oriented footwear manufacturing companies. It also helps students and other scholars to gain knowledge in terms of information attained during this study. Finally, the study is a boost to the academic body of knowledge, for researchers; while scholarly, it is very helpful as a reference material on the subject, useful for further study.

## **1.6 Scope of the Study**

The topics covered under this research included role of supply chain integration dimensions, such as supplier integration, internal integration, customer integration on export performance. The other delimitation will be made on the subject of the study; the study addresses only permanent employees who work under supply chain (i.e., Procurement), logistics, administration, finance, production, and export departments; it doesn't consider the Lideta Branch employees, and other departments which are not part of supply chain. The geographical scope of the study covers the Head Quarter of the company, in Akaki sub city, Addis Ababa.

The topics covered under this research included role of supply chain integration dimensions, such as supplier integration, internal integration and customer integration, on export performance. The research sample will mainly focus on the export performance only, not on the local or domestic.

## 1.7. Limitation of the study

The study examines the role of supply chain integration for the export performance of the ASSC. The time and resource constraints have limited the researcher's investigation study subject along geographical scope as well as his dare to move beyond single organization.

## 1.8 Operational definition of terms and Concepts

In the sub-sections here under, the researcher defined conceptual definition of supply chain integration and export performance, and also operational definition of key indicators of supply chain integration respectively.

### 1.8.1. Conceptual Definition

**Supply Chain:** refers to those activities associated with the transformation and flow of goods and services, including their attendant information flows, from sources of raw materials to end users (Ronald *et al* 2000 pp 9).

**Integration:** is a process of redefining and connecting parts of a whole in order to form a new one. In traditional supply chain integration, the definitions of parts are usually limited by the boundary of the enterprises: the integration emphasizes connecting each enterprise with logistics and information communications. (Springer Boston, pp 887-891)

**Supply Chain Integration:** - is the degree in which firms strategically collaborates with is chain partners and collaboratively manages inter- and intra-organizational processes Flynn *et al.* (2010), to offer maximum value to the customer (Frohlich and Westbrook 2001).

**Firm performance:** is the comparison of an organization's goals and objectives with its actual performance. Export market and financial performance are among mostly referred that measures a company's ability to make and distribute their outputs in the most cost-effective way and to set a price that returns a reasonable amount to suppliers. (Jameadows 2017).

**Export Performance:** In this study, export performance is defined as the outcome of a firm's activities in the export market (Shoham, 1996, Katsikeas *et al.*, 2000).

### 1.8.2. Operational Definition

**Internal Integration:** - is a joint decision-making, collaboration, and information sharing across internal functions, leading to streamlined workflows and collaborative decisions (Wong *et al.* 2011; Lau *et al.* 2010). Lee, H, and whang, S. defined integration as, “the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment”

**Supplier integration:** - Supplier integration is partnership and collaboration with the suppliers in order to manage upstream organizational activities through collaborative planning, information sharing, and joint decision making (Petersen *et al.* 2003; He *et al.* 2014).

**Customer integration:** - The integration of customers in the supply chain is the opportunity of having an overview of the requirements and customer's specific needs as the advantage of serving them better (Lotfi, Z., Sahran, S., & Mukhtar, 2013).

**Export:** Export represents a viable strategic option for firms to internationalize and has remained the most frequently used foreign market entry mode (Manolova *et al.*, 2010; Lee and Makhija, 2009; Pangarkar, 2008).

## **1.9 Organizations of the study**

The first chapter provided the background to the main concepts. Relevant supply chain, supply chain management, supply chain integration and export performance theories have been discussed; and the problem statement, research questions, and objectives of the research have been presented. This chapter provided a background to the research; the research theoretical and practical significance; scope and limitation of the study also adopted.

The second chapter is the literature review carried out under this research. It provides a detailed discussion of relevant theoretical arguments on SCI (internal, supplier and customer) and export performance. Illustrates the theoretical foundation of the main concept of Supply Chain Integration which captures the research questions under investigation. The conceptual framework builds on the literature review carried out. Accordingly, the gaps in the literature will be identified and presented.

The third chapter is the methodology part that presents a discussion on the type and design for the proposed research, the sources of the data, the data collection instruments employed, the procedures of data collection and the method of data analysis.

The fourth chapter presents the result discussion and interpretation carried out under this research. This includes the data collected, managed and prepared for the initial descriptive analysis. This chapter also provides a discussion on the reliability and validity of the data. Lastly, the findings of the data descriptive analysis are also presented and discussed

The fifth and last chapter includes summary, conclusion and recommendations. This chapter underlines the research theoretical and managerial contribution. It also presents a section on the research limitations and recommendations on the direction for future empirical studies (expanding the concepts investigated under this study).

# **CHAPTER TWO**

## **RELATED LITERATURE REVIEW**

### **2.1 Introduction**

*This chapter focuses on the literature review as conducted by the researcher. It includes a review of the various studies that have been conducted by other researchers relating to the need for integration of SC partners and the performance of commercial organizations. Among the areas reviewed include: internal integration; integration with suppliers and customers, export performance, operationalization of export performance. The chapter also provides the research gaps identified and a comprehensive conceptual framework.*

### **2.2. Theoretical Literature Review**

The theories of supply chain management, performance and perspectives of supply chain integration have been reviewed in the following sub-topics of this section.

#### **2.2.1. Supply Chain Management**

Today many organizations are forced to increase their global market share in order to survive and sustain growth objectives. At the same time, these same organizations must defend their domestic market share from international competitors. The challenge is how to expand the global logistics and distribution network, in order to ship products to customers who demand them in a dynamic and rapidly changing set of channels. Strategic positioning of inventories is essential, so that the products are available when the customer wants them (Handfield, *et al.* 2002).

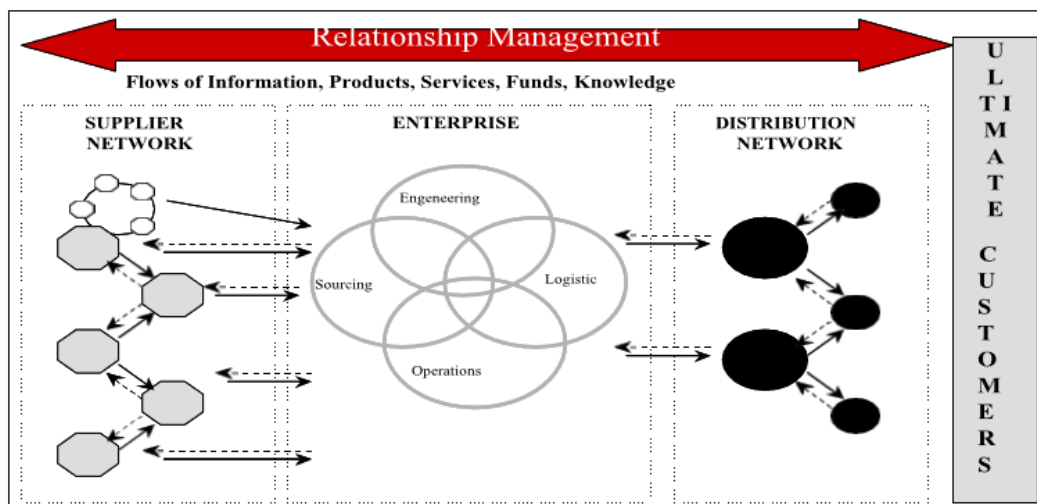
Domenica (2002) also claims that supply chain should actually be efficient and effective. In this case, efficient means to minimize resource use to accomplish specific outcomes; and effective, in terms of designing distribution channels. Efficiency is measured by delivery performance, product quality, backorders and inventory level, whereas effectiveness is measured by service quality and the service needs. Long-term competitiveness therefore depends on how well the

company meets customer preferences in terms of service, cost, quality, and flexibility, by designing the supply chain, which will be more effective and efficient than the competitors.

According to Mentzer, *et al.* (2001) the definition of supply chain is more consolidated as definition of supply chain management. In his paper, he tried to make a common definition of a supply chain, based on a comprehensive research study conducted by several co-authors. They came up with the following definition: “A supply chain is defined as a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer”.

Supply chains are essentially a series of linked suppliers and customers until products reach the ultimate customer (Handfield, 2002). Supply chain of a company consists of an upstream supplier network and its downstream distribution channel. Organizations can be part of numerous supply chains. Depending on how complex the supply network is, Mentzer (2001) has defined three types of supply chains: (1) direct supply chain, which consists of a company, a supplier, and a customer, (2) extended supply chain, which includes suppliers of the immediate supplier, as well as customers of the immediate customer, (3) ultimate supply chain, which includes all the organizations involved in all the upstream and downstream flows.

Figure 2.1 Supply Chain or Supply Chain Network



Source: Handfield, 2002.

The supply chain consists of all stages involved, directly or indirectly, in fulfilling a customer request. The supply chain not only includes the manufacturer and suppliers, but also transporters, warehouses, retailers and customers. Within each organization, such as a manufacturer, the supply chain includes all functions involved in fulfilling customer requests. These functions include new product development, marketing, operations, distribution, finance, and customer service. Supply chain management involves the management of flows between and within stages in a supply chain to maximize total profitability (Chopra, 2001).

Supply chain management is the integration and management of supply chain organizations and activities through cooperative organizational relationships, effective business processes, and a high level of information sharing to create high performing value systems that provide member organizations sustainable competitive advantage (Handfield, 2002).

### 2.2.2 Supply Chain Integration

Globalization, advances in production efficiency, shorter production lead times and the drive towards reduced inventories are prompting organizations to rapidly change their operational processes. Industries going through this rapid change need to explore strategic alliances, improved customer relationship management practices, improved information quality among business partners (Jie *et al.* 2013).

Organizations are entering a period in which independence of operations can no longer provide a competitive advantage. Market success now depends on how organizations integrate with their SC partners (Simon *et al.* 2014).

However, Bagchi and Ha (2005) caution that not all SCI are beneficial. Some SCI efforts should not focus on holistic integration, but rather on establishing a semi-integrated SC with partners who perform certain processes better than the organization. To succeed with integration, there must be a clear understanding of the material bought and the core competencies, and experience of the supplier, the customer being served and the organization itself. The integration quality is



always dependent upon a relationship between the organization and supplier (Wood and Brewster, 2005).

SCI mainly consists of information sharing and operational alignment. Information sharing entails real-time clarity and availability of information, while operational alignment involves the sharing of knowledge and decisions across the SC (Liu *et al.* 2011).

The effective sharing of information between partners is crucial for organizations to compete in an increasingly competitive market, (Tseng & Liao 2015) and customer value creation can only be realized when organizations share more than just transactional data (Moshkdanian & Molahosseini 2013:189). Exchanging information assists suppliers to align their strategic, operational and tactical decisions to improve delivery to their customers (Han *et al.* 2013), reduce the cost of inventories, highlight customer demands and react to changing market determinants (Lui *et al.* 2013).

But it is the quality of information that affect competitiveness, and management action is necessary to improve information quality and information visibility (Jie *et al.* 2013). In the rapidly changing business environment, advanced SC systems have proved to impact business and SCs in a positive manner (Jie *et al.* 2013), and information sharing between partners is the most important aspect to attaining SCI (Moshkdanian & Molahosseini 2013).

Salam (2011) defines trust as SC partners' willingness to engage with each other and share expertise. Trust thus increases dependability between SC partners and fosters the realization that the partnership can deliver long-term benefits through reliability and integrity. Commitment, in turn, refers to an agreement or promise to do something in the future. Commitment is the desire from both parties to maintain and strengthen their respective relationships.

Jin *et al.* (2013) argue that strategic organizational concerns relating to competitive advantage may reduce trust and commitment between partners if they are fighting for scarce resources and fear losing proprietary information – which means that efforts to integrate with partners will be limited.

Collaboration and long-term partnerships are viewed as the most influential factors through which organizations can achieve a competitive advantage, due to the benefits arising from SC partners sharing knowledge and resources (Vaidya & Hudnurkar 2013).

### 2.2.3 Perspectives of Supply Chain Integration

The theoretical writing on SCI effort is diversified to different point of views; varied from uncertainty reduction, transaction cost economics, resource-based view, relational view, and extended resource-based view; trust-based logic; and learning and information point of view. These different viewpoints give us experiences into the nature, forms, contents, and forces of supply chain integration effort. (M. Cao and Q. Zhang, 2013)

**1. Uncertainty Reduction Perspective:** Uncertainty has for some time been seen as a predominant possibility and is one of the basic determinants of high exchange costs (Williamson 1975). Diminishing vulnerability by means of information flow is a key target in SCI effort (M. Cao and Q. Zhang, 2013). According to M. Cao and Q. Zhang (2013), market and technological vulnerability can viably be managed through organizations where supply chain partners share data of sudden occasions and advancements. The serious correspondence between supply chain partners additionally diminishes behavioral vulnerability (e.g., advantage) (Wuyts and Geyskens 2005). On the off chance that data isn't shared between accomplices, non-straightforward request examples will cause request amplification and bullwhip impact. This prompts poor service levels, high inventories, and incessant stock-outs (M. Cao and Q. Zhang, 2013). Hence, when confronting uncertainty, firms will have a tendency to team up with accomplices in building long haul relationship.

**2. Transaction Cost Economics:** (TCE) is a standout amongst the most influential hypotheses on IOS utilize and between firm joint efforts. TCE recommends that a firm compose its cross authoritative exercises to limit generation costs inside the firm and exchange costs inside business sectors. As indicated by TCE, the choice to utilize either vertical reconciliation or market components relies upon the relative observing costs that emerge from limited reasonability and vulnerabilities because of accomplices' self-premium and advantage. SCI helps

firms diminish the advantage and checking costs that are inbuilt in advertise exchanges through process coordination and common trust, in this way lessen the likelihood that accomplices act sharply. Regardless of TCE's handiness, TCE is limited to the efficiency basis and what's more, hierarchical settings (e.g. culture, power, reliance, and trust) that may influence cooperative endeavors are accepted away. In all actuality, few SCI efforts are simply in view of the thought of economic costs (M. Cao and Q. Zhang, 2013).

**3. Extended Resource-Based View:** Traditional RBV accept firms must possess or completely control the assets to make esteem. In the broadened asset-based view (ERBV), asset availability, the privilege to utilize assets or make the most of their related benefits, empowers firms to accomplish favorable circumstances, broadens the RBV by clarifying how interconnected firms in dyadic cooperation/partnership consolidate outside assets and interior asset blessings to accomplish upper hand for the central firm. As per (David, 2015), the upper hand of a central firm partaking in an organization together/joint effort incorporates four components: (1) inside lease (2) appropriated social lease (3) inbound overflow lease, and (4) outbound overflow lease. Inside lease can be removed from the central firm's own mutual and non-shared assets. Appropriated social lease can be separated just from the mutual assets of the two accomplices. Inbound overflow lease is the lease produced from the accomplice's shared and non-shared assets through information spillage, between firm learning, relative absorptive limit, and disguise of the accomplice's practices, though outbound overflow lease comes about because of the exchange of benefits from the central firm to the accomplice. The mix of inward lease, inbound overflow lease, and outbound overflow lease frames private benefits for the central firm. Its upper hand relies upon its private benefits and appropriated social lease (i.e., appropriated regular benefits). Conversely, synergistic favorable positions are joint upper hand and originate from a social lease, a typical benefit that collects to community accomplices. This kind of lease can't be created separately by either collective accomplice. What's more, (David, 2015) demonstrate reaches out earlier research on joint esteem creation in dyadic union by considering one-sided collection of overflow leases that deliver private benefits.

**4. Resource Dependence Theory:** Asset reliance hypothesis (RDT) contends that firms must trade with their surroundings to pick up assets (M. Cao and Q. Zhang, 2013). It fixates

exclusively on assets that must be gained from outside hotspots for a firm to survive or flourish. The requirement for outer assets makes firms rely upon others. To effectively oversee conditions, RDT contends that firms must pick up control over essential assets to lessen dependence on others and increment others' dependence on them. It implies firms should attempt to expand their energy in their surroundings (M. Cao and Q. Zhang, 2013). Supply network integration effort gives such an approach to helping firms to achieve these objectives. Broadening the rationale of asset reliance hypothesis from the firm level to the inventory network level, store network accomplices all in all are less depending on their surroundings through assets sharing. Firms work together with their production network accomplices to procure indispensable assets and to expand their energy in respect to other supply chains. In any case, the power might be uneven between accomplices on account of various responsibility for. This unbalance of energy may make conflicts between accomplices if not very much oversight. Min *et al.* (2005) recommend the capable firm in the production network should address the less capable accomplice's issues in commonly beneficial courses of action to reinforce the aggressive energy of the store network in general.

In view of RDT, IOS are the instruments that, by effectively getting to accomplices' assets, increment the production network's control over different firms or chains. While RDT has its benefits, it has impediments in clarifying production network coordinated effort. RDT just contends that firms need to trade with their surroundings to get essential assets since no firm is independent. Exchange costs, skill advancement, and learning openings are not thought about (M. Cao and Q. Zhang, 2013).

**5. The Relational view theory:** Turkmen (2013) have efficiently inspected between hierarchical lease creating forms. They distinguished four sources that create social rents: Investments in connection particular resources, between firm learning sharing schedules, the consolidating of correlative assets and viable administration components. Firms can accomplish supernormal benefits by building up a particular association with their unions through these procedures. The point is to move far from a safe distance advertise connections, since contenders can undoubtedly copy this trade relationship since there is nothing one of a kind about the associations amongst purchaser and merchant. What takes after from the joint endeavors of the banding together firms in fashioning a relationship past a safe distance, is that rents are mutually

produced and possessed by collaborating firms. Social rents are then piece of the system or dyad. A social lease is characterized by Turkmen (2013) as: "A supernormal benefit together produced in a trade relationship that can't be produced by either firm in disconnection and must be made through the joint peculiar commitments of the particular collusion accomplices".

**6. Trust Based Rationalism:** Trust based rationalism (TBR) employs a behavioral assumption of trustworthiness, fair play, responsibility, and altruism instead of betrayal, self-interest, and opportunism. It focuses on collaboration and cooperation rather than politics and conflicts as the primary interaction modes. Trust, relationship, and social capital are the key concepts in TBR. Trust is viewed as a critical determinant in establishing a relational mode of governance structure (M. Cao and Q. Zhang, 2013). Continuing supply chain collaboration is based more on trust and equity than on monitoring and control capabilities (Kim *et al.* 2005).

Social capitals and relationships between partners arise from the foundation of trust. Trust reduces transaction costs and even eliminates the need for detailed contracts and governance mechanisms. While opportunism may create short-term benefits, it incurs costs in the long run because it lacks of reputation and trust. Trust helps supply chain partners create a win-win strategy for collaborative advantage (M. Cao and Q. Zhang, 2013).

**7. Learning and Knowledge Perspective:** Another rationale for explaining supply chain collaboration is that firms establish partnerships to exploit opportunities for knowledge creation and organizational learning. Through knowledge creation and organizational learning, firms strengthen their competitive positions. In the face of high environmental uncertainty, it is important to have access to a broad and deep knowledge base in order to respond quickly to changing circumstances. Since great diversity of knowledge is distributed across the supply chain, collaboration provides an ideal platform for learning and facilitates partner-enabled market knowledge creation.

Learning that takes place in supply chain collaboration can be divided into two kinds of activities: exploration and exploitation. Exploitation is to improve existing capabilities while exploration is to discover new opportunities (e.g., improve absorptive capacity). How much a firm can learn through supply chain collaboration is determined by the firm's absorptive

capacity, “the ability to recognize the value of new, external knowledge, assimilate it, and apply it to commercial ends.”. A firm’s ability to learn is based on the employee quality, knowledge base, organizational culture, and the quality of IT systems. Supply chain collaboration can also be an effective means of transferring knowledge and new technical skills across organizations. A firm may find it difficult to buy a particular skill in the marketplace because of its tacit nature. It may acquire new skills and competencies by collaborating with firms that excel in that area. However, the level of privileged information sharing needed for collaboration, in fear of risky information leakage, is not adequately addressed by the learning and knowledge theory (M. Cao and Q. Zhang, 2013).

#### 2.2.4 Export Performance

Export performance is often considered to be an exporting company’s achievements in terms of international sales; however, this achievement actually encompasses both financial and strategic factors. Cavusgil and Zou (1994) indicated that most measurement of export performance in previous studies has been in economic terms. Export performance has also been defined as “the extent to which a firm’s objectives, both strategic and financial, with respect to exporting a product to a market, are achieved via intention of a firm exporting market strategy” (Lages, Jap, & Griffith, 2008, p. 306).

#### 2.2.5 Perspectives of Export Performance

Two broad theoretical approaches, the resource-based paradigm and the contingency paradigm, provide the basis for classifying the determinants of export performance into internal and external factors. Specifically, internal determinants are justified by resource-based theory, while external determinants are supported by contingency theory.

**1. Resource-based theory:** highlights the generation of sustained competitive advantage by a unique bundle of resources (Conner and Prahalad, 1996) and the realization of superior export performance (Barney, 2001). According to the RBV, companies are collections of unique bundles of resources that can create a competitive advantage and promote export performance

(Barney, 1991). For exporting companies, the key to a sustained competitive advantage and enhanced export performance is the implementation of the three components of intellectual capital that are not easily duplicated (Barney, 1991; Bontis, 1998).

The resource-based view addresses the central issue of how superior performance can be attained relative to other firms in the same market and suggests that superior performance results from acquiring and exploiting the unique resources of the firm (Dhanaraj and Beamish 2003).

**2. Contingency based theory:** in this paradigm, exporting is considered as firm's strategic response to the interplay of internal as well as external factors. The contingency paradigm suggests that environmental factors influence the firm's strategies and export performance. According to Cavusgil and Zou (1994), this theory rests on two premises: (1) that organizations are dependent on their environments for resources and (2) that organizations can manage this dependence by developing and maintaining appropriate strategies.

*Internal Factors:* Factors related to the firm's export marketing strategy have been widely used as a determinant of export performance. The most frequently cited factors as firm-specific determinants in the export performance literature are marketing mix variables, management characteristics, firm specific variables, and export strategy factors.

*External Factors:* The external determinants are supported by the contingency theory, rooted in the structure-conduct-performance framework of industrial organization (Cavusgil and Zou, 1994), this theory argues that a firm must adapt to the external environment pressures in order to survive and prosper.

Foreign markets pose both threats and opportunities for firms which are argued to affect export performance significantly. Foreign market characteristics, such as cultural similarity, governmental regulations, market competitiveness, local business conventions, etc., influence export performance (Erramilli and Rao 1993; Styles and Ambler 1994). Therefore, export performance tends to be conditioned by foreign environmental characteristics. Legal and political factors and cultural similarity were the determinants that were most cited in this category.

The effects of the domestic market factors on the export performance should also be give due attention as domestic market characteristics are potential determinants of export performance identified two determinants: export assistance and domestic environmental hostility.

### 2.2.6 Operationalization of Export Performance

In spite of the large number of different export performance measures, only a few were frequently utilized, such as export intensity (export-to-total sales ratio), export sales growth, export profitability, export market share, satisfaction with overall export performance, and perceived export success.

The export performance indicators can be classified into objective and subjective measures. Indicators that are based mainly on absolute values such as export intensity, export sales volume, and export market share, among others, are called objective measures. Meanwhile, indicators that measure the perceptual or attitudinal performance such as perceived export success and satisfaction with export sales are considered to be subjective measures of performance.

Studies using subjective measures of export performance usually assessed the construct on a five or seven-point scale, although scales with higher number of intervals were also employed (e.g. in Styles (1998) study, perceived export success was assessed on a ten-point scale). The use of subjective measures has been suggested in cases where managers may be unwilling or unable to provide objective financial data or because of the difficulty in reconciling cross-national or cross-industrial differences in accounting practices, variations in exchange rates, and financial reporting between home and host countries (Woodcock, Beamish, and Makino 1994). As a result, the most common measure among all categories is export profitability with 18 studies using this indicator to assess export performance. Authors appear to believe that the use of this subjective indicator encourages more managers to respond given that managers need not provide confidential export profitability figures.

In this study, subjective assessments of export performance were obtained through a questionnaire that built as much as possible on internationally published scales followed by a



pre-test amongst a limited group of managers in order to assure concise questions with a minimum of ambiguous and unfamiliar terms.

Compared with their own expectations, employees of ASSC were asked to indicate how satisfied they were with the results obtained on their export markets with regard to economic and market aspects. This is in accordance with Cavusgil and Zou (1994), who defined performance in international markets by a scale based on managers' subjective perceptions.

This approach was further developed by Knight and Cavusgil (2004) and these indicators are adapted in the study related to the subjective satisfaction with the firm's market share, export sales and profitability, and overall satisfaction with the firm's export activities.

Table 2. 1 Export Performance Measures Used in Past Research

Export Sales	Profitability	Change
Export Intensity	Return on asset	Change in export intensity
Total Export Sales	Absolute export profit	Perception of dynamic success
Perception of Export success	Return on investment	Six years of export survival
Enter difficult market	Export gross profit margin	Change in market share
Number of export market	Export sales operating margin	Change in net profit
Export market share	Perception of success	Change in return on asset
Perceived sale relative to industry		Change in return on investment

Sources: *Cavusgil and Zou (1994); Chris (1998); Katsikeas, Leonidou, and Morgan (2000); Lages, Jap, and Griffith (2008); Shoham (1998).*

## 2.3. Empirical Literature Review

The empirical studies of supply chain integration and export performance were reviewed under the following sub-sections as the background of previous studies.

### 2.3.1. Supply Chain Integration

Various types of integration have been proposed in the extant literature, such as II, CI, SI, technology and planning, measurement, relationship integration (Stank et al., 2001a), and strategic integration (Johnson, 1999).

Consideration of the dimensionality of SCI is important to understand the way that the individual dimensions influence performance, as well as how they influence each other. While some studies propose SCI as a uni-dimensional construct (e.g. Rosenzweig *et al.*, 2003), others divide SCI into II and EI (e.g. Flynn *et al.*, 2010; Zhao *et al.*, 2011), some adopt more dimensions (e.g. Droge *et al.*, 2004; Narasimhan and Kim, 2002). While each of these dimensions represent an important aspect of SCI, there is a great deal of overlap between them. In line with the definition of SCM, from suppliers to manufacturers to customers, and the supply chain operations reference (SCOR) model with three linked major processes, from source to make to delivery, we argue that the diverse dimensions of SCI can be ultimately reduced to three major dimensions: II, SI, and CI. Both SI and CI can be further classified as EI. Information sharing, communication, demand coordination, relationship building, and so forth have been largely incorporated into the II and EI constructs. As a result, we focus specifically on II, CI, and SI in this study.

II refers to the degree to which a firm can structure its organizational strategies, practices, procedures and behaviors into collaborative, synchronized, and manageable processes to fulfill its customers' requirements (Kahn and Mentzer, 1996). In contrast, EI refers to the degree to which a firm can partner with its key SC members (customers and suppliers) to structure their interorganizational strategies, practices, procedures, and behaviors into collaborative, synchronized, and manageable processes to fulfil its customers' requirements (Stank *et al.*, 2001).

An efficient, integrated supply chain plays a major part in the success of the business strategies of its constituent companies. It is now recognized that, in many cases, competition is between supply chains rather than individual companies. Getting the product and service to the end consumer when they want it is critical. Consequently, the partner companies should work closely together to define and execute a supply chain strategy which will both satisfy customer needs and allow them to make an adequate return.

Supply chain integration (SCI) is taken into account to be a comprehensive conception applied to varied links among functions within a firm however additionally among organizations (Chen *et*

*al.*, 2009). There's a typical accord among researchers that because of the advanced international business setting, it's of a strategic importance for organizations to integrate activities each outwardly and internally (Danese *et al.*, 2013). In previous literature, Supply chain integration is associated to three main aspects like scope of integration, areas to integrate, and level of relationship (Näslund and Hulthen, 2012).

### 2.3.2 Scope of integration

Hulthen (2016) stated that the twofold scope of integration which of the foremost considered normal forms are external integration and internal integration.

Whereas each of these scopes signify a significant feature of Supply chain integration, there is an unlimited pact of overlay among them. In line with the meaning of Supply chain management, from suppliers to manufacturers to customers, and the supply chain operations reference (SCOR) model with three interconnected main processes, from source to make to delivery, it is arguing that the various scopes of Supply chain integration can be finally summarized to three main scopes: internal integration, suppliers' integration (SI), and customers' integration (CI). External integration (EI) holds together SI and CI in one. Information sharing, communication, demand coordination, relationship building, and so on have been generally combined into the II and EI ideas (Kumar *et al.*, 2017).

### 2.3.3 External Integration

Historically, relationships with suppliers were adversarial and the general approach was to accept the lowest price; so, little integration and collaboration were done (Jie *et al.* 2013). However, organizations are now increasingly focusing on their core capabilities and relying on suppliers to manage non-core activities – which means dependency on suppliers is increasing (Moshkdanian & Molahosseini 2013). A higher degree of customer integration influences organizational performance more positively than supplier integration, due to organizations being rewarded by customers, who conclude more sales transactions. However, in order to achieve the highest possible level of organizational performance, all integration dimensions must be developed (Huo 2012). Customer integration involves the coordination, implementation and controlling of goods

and services as well as the forward and backward flow of information from the point of origin to the point of consumption (Yu, Jacobs, Salisbury & Enns 2013). In terms of customer integration, the firm will penetrate deep into the customer organization to understand the product, culture, market and organization, so that it can respond rapidly to the customer's needs and requirements. The important concept of demand integration is based on the improvement of demand planning and visibility in supply chains. Without information, sharing from one end of the supply chain to the other, tremendous inefficiencies can occur in customer service (Kastro, 2006).

Supplier integration is the strategic relationship that exists between the purchasing firm and the supplier (Li & Tang 2010) in order to manage upstream organizational activities through collaborative planning, information sharing, and joint decision making (Petersen et al. 2003; He *et al.* 2014). According to Flynn *et al.* (2010), a strong strategic partnership with the suppliers will enable an understanding and anticipation of the needs of the firm and will help the suppliers meet their changing requirements. The exchange of information between the firm and its suppliers about processes, capabilities, products, and schedule will help the firm improve its delivery performance.

#### 2.3.4 Internal integration

Before external integration with partners beyond the organization, the first stage of supply chain integration should be beginning at the organizational level within the various functions as well as departments of the firm. Internal integration is defined as the strategically aligned and coordinated internal processes and functions for the purpose of achieving maximum performance of an organization; it advances the organization's performance through decreasing expenses and restricting departmental capacity which wouldn't maximize the overall goals within the organization (Kumar *et al.*, 2017).

In their study Huo B. *et al* (2014) found out that, companies that have strong internal integration within the business processes create sufficient requirements for the organization to improve their capability and financial performance. Flynn *et al* (2010) explained internal integration, as a systematic way of creating inter-functional interaction, collaboration, coordination,

communication and cooperation that takes functional areas together to create a cohesive organization.

The study by Saeed *et al.* (2005) shows that there is a positive relationship between internal integration and process efficiency and past studies have shown that internal integration has a positive effect on firm performance and operational outcomes such as process flexibility, quality, and delivery performance. Sanders and Premus (2005) also stated that, internal collaboration has a direct and positive impact on the competitiveness of a firm.

### 2.3.5 Layers of Integration

Layers of integration lined in previous supply chain integration literature refers to, for instance, what to integrate and with whom to integrate. There are four areas of integration in supply chain which may create a chain of partnerships for parties which are collaborated through supply chain management; these areas are: flows (physical, data, financial), processes and activities, technologies and systems, and integration of actors (structures and organizations) (Hulthen, 2016).

According to Barber (2008) elaborations, integration of each tangible and intangible parts must be integrated (i.e. processes, procedures, data, knowledge, innovations, and strategies).

The first task is to create a flow of information between chain partners so that physical flow takes place exactly as required. The second task is a series of physical movements: procuring parts, manufacture of the finished product and its delivery to the customer. The third task is the management of chains, and the fourth task is chain leadership. According to Hulthen (2016), it's very important to spot key processes to be joined with suppliers and customers. To integrate with all supply chain partners isn't possible and economically excusable. Thus, companies usually section their external relations and develop cooperative relationships with some supply chains partners whereas they keep arm's length with others (Lummus *et al.*, 2008).

### 2.3.6 Level of Integration

Constructing on the systematic ideas, reflect the connections among organizations in the supply chain. Such interactions between supply chain allies have a main impact on in what way the chain functions, by what means it flows goods or services to customers. The level of internal integration commences with a starting point of functional silos with freelance functions. within the next level the freelance silos are unit cross-functionally integrated through processes. As a result, the internal integration is affected to full integration involving seamless flow across structure functions. Then, the integration holds suppliers and customers, said as external integration. (Hulthen, 2016).

Concerning the external integration, not all business relationships with SC partners ought to be cooperative, and it's acceptable to be concerned in an arm's-length relationship if such behavior is suitable (Gimenez and Ventura, 2005). the extent of external integration could vary from arm's length ones to collaboration and strategic alliances. Spekman *et al.* (1998) differentiate between four levels of external integration: open market negotiations, cooperation, coordination and collaboration.

The open market negotiations, additionally referred to as Arm's length relationships, represent a pure exchange style of relationship between supply chain partners. There aren't any joint commitments or operations that mean that the link is terminated once the exchange ends (Shah *et al.*, 2002). in a very cooperation style of relationship, the stress is placed on data sharing or assets sharing between SC partners and distinctive areas of joint interest (Power, 2005). It's a primary stage concerning demand harmonization and cross-functional relations, taking part of relevant parties, strong kind of responsibilities (Ajmera and Cook, 2009).

### 2.3.7 Supply Chain Integration and Performance

As Darryl D. performance is defined as "the progressive achievement of tangible, specific, measurable and personally meaningful goals." Specific and measurable goals help organizations evaluate success.

Performance and productivity can be viewed as a company's ability to provide customer value. As Shirley Daniels 1997, a common problem with measurements of operations is not to measure what can be measured but to reduce the list of measurements to measure only desired attributes of operations [Schwarz L. B. 2004.,]. This is often a problem in case studies, where the practitioner has an overload of measurements to choose problem and for communicating the case effectively to others.

Discussing and measuring performance has two main aims - first to connect company goals and objectives to improvements and secondly to set targets for improvement activity. Together, these helps focus energy and activity and increase the impact of any improvement initiative. To sum up, performance is the valued productive output of a system in the form of goods and services. The actual fulfillment of the goods or services requirement is thought of in terms of units of performance.

These goods or services units of performance are usually measured in terms of quantity, time and quality feature measures. An improvement program - if it is to have real impact - must be tightly connected to performance goals and objectives. This helps to ensure clarity of the improvement program and to ensure that all participants are working in the same direction. In turn, if all levels of the company understand the program and its direction; all resources can more easily be directed to the same targets and goals. If improvement goals are connected with overall strategic goals, there can be a “multiplier effect” which fuels performance. A linkage between performance objectives and improvement objectives can raise the impact of improvement work, which in turn helps fulfill performance objectives.

Supply chain integration as a concept is concerned with the synergy that exists between the internal functions of a firm and its external activities across its supply chain that leads to organizational performance. (Kumar *et al.*, 2017).

Reflection of the scope of supply chain integration is vital to know the way that the different extents of integrations influence performance of the organizations, and also how each type of integration influence one another. Though some researches recommend supply chain integration

as a unidimensional concept, others split supply chain integration into Internal Integration and external Integration, some accept extra scopes. Despite the fact that each of these scopes signify an essential feature of supply chain integration, there is a countless overlap among them. Even if by considering the meaning of supply chain management that claim the various scopes of supply chain integration can be eventually condensed to three main scopes: Internal Integration, Suppliers Integration, and Customers Integration, (which is from suppliers to manufacturers to customers, and the supply chain operations reference (SCOR) model with three linked major processes, from source to make to delivery) (Huo, 2013).

This study tries to combine different views of dimensions of supply chain integration that many authors claimed on the classification in to Internal Integration, Suppliers Integration, Customers Integration.

Ascertaining the article, many investigations have elected organizational performance as one of the central concepts and have been demarcated differently. Organizational performance is problematic to measure and there is no commonly known meaning. But, Organizational performance deal with the way an organization thriving to attain both the export market oriented and financial oriented goals. This definition covers both financial performance and operational performance. Previously, organizational performance has been evaluated by many researches from financial and market criteria perspectives, such as 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. This study is thought to habit both financial and non-financial indicators to measure the organizational performance. A constructive relationship among SCI practices and the organizational performance have been confirmed by several studies. (Wijetunge, 2016).

A considerable positive linkage between SCI and firm performance is found by several empirical studies whereas some also reveal substantial adverse effects, and the magnitude of the linkage varies considerably. To well comprehend this relationship, performance effects collected in the meta-analysis is shortened and assessed across three types. Financial firm performance is measured using either revenue minus cost-based measures, such as profitability and return on



assets, or purely revenue-based measures, like sales and market share. Several studies found a significant relationship between SCI and firm performance. Thus, SCI is positively correlated with different measures of firm performance. (Leuschner, Rogers and Charvet, 2013).

## **2.4 Conceptual framework of the study**

In this study we focus on three main dimensions of supply chain integration that can be found in the literature. These three dimensions - supplier integration, customer integration, and internal integration - are generally operationalized as multi-item measures (Frohlich and Westbrook, 2001; Koufteros *et al.*, 2005; Swink *et al.*, 2007).

Based on previous studies of supply chain integration and depending on different models, the current study chooses to set the study model that shows the impact of supply chain integration with its all elements (supplier, customer and internal Integration) on export performance (mainly on export market and Profitability measures). Froehlich and Westbrook (2001) on the other hand suggested that companies with broader supply chain integrations with suppliers and customers showed the largest performance improvement in business achievements. Despite its intuitive appeal, the conceptualization of export performance as the share of markets has been subject to some fearsome criticism.

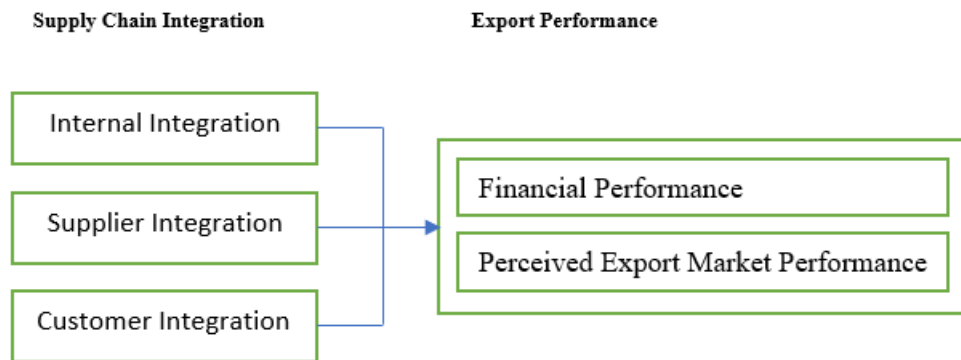
Previous studies suggest that effective SCM have a direct impact on the overall financial and marketing performance of an organization (Shin *et al.* 2000; Prasad and Tata 2000). Indeed, SCI efforts are expected to increase an organization's market share, return on investment and improve overall competitive 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. The firm's market orientation in export operations was a key determinant in previous reviews (e.g. Aaby and Slater 1989; Zou and Stan 1998) and in recent years, however, a considerable amount of research has focused on the relationship between market orientation and export performance.

Most studies select several items (e.g. export intensity, export sales, export profits, market share, etc.) to measure export performance and then assess the effect of the determinants on the export

performance construct. In an empirical investigation of the impact of a firm’s marketing strategy on its export performance, Cavusgil and Zou (1994) suggested the most widely used indices of export performance are the strategic, the economic (or financial), and the perception of management (management’s satisfaction with the results of export activity).

Therefore, this study has conceptualized as a three-dimensional construct, namely internal, external and customer integration, while limiting export performance to factors of financial and export market performance as its main measure. (shown in the schematic diagram below).

Figure 2.1 Conceptual framework of Supply Chain Integration



Source: study model developed by researcher based on: independent variables such as: (Zhao, L., Huo, B., Sun, L., and Zhao, X. (2013); Xu, D., Huo, B., and Sun, L. (2014); Zhang, M., and Huo, B. (2012). Dependent variable such as: (Zhao, L., Huo, B., Sun, L., and Zhao, X. (2013); Vaidya, M., and Hudnurkar, M. (2012); Gimenez, C., Vaart, T.V.D., and Donk, D.P.V. (2011).

Source: *self-depicted and semi modified from Davidson, 2006 and Malcolm E. Baird. 2010*

## 2.5 Identified Literature Gap

Most of the prior research on SCI are either focused on identifying challenges or done on measurement of organizational or firm overall performance or competitive capabilities. As far as the researcher knowledge goes this study will be first of its kind that to explore how the export performance can be improved by applying widely applied integration constructs.

# **CHAPTER THREE**

## **RESEARCH DESIGN AND METHODOLOGY**

### **Introduction**

*This section presents an overview of the methods that will be used in the study. Areas covered including the research approach and design, population and sample, data sources and types, ethical consideration, and data analysis.*

### **3.1 Description of the Study Area**

Anbessa is one of the oldest shoes manufacturing business in Ethiopia and is recognized to be a pioneer in terms of introducing modern shoe marking technology to the country. Its formation dates back to the late 1930s and it started production of shoes under the name of Darmar shoe factory. In 2011 that Darmar shoe factory was transferred to a private holding at a total cost of 4.3 million dollars.

Anbessa Shoes has finalized its expansion project that increase the current production capacity by threefold. Currently, it employs close to 1,578 people; among them 728 workers are permanent employees working at the head quarter in Akaki main factory. ASSC is recognized as a pioneer in modern shoe manufacturing in Ethiopia and is well-regarded brand. It is equipped with modern machinery and employs relatively skilled labour. Its capacity has allowed the company to be a substantial exporter and generating foreign exchange earnings. (ASSC Profile 2019).

ASSC's main export markets are Italy (90% of exports), Germany, Kenya, Uganda, Israel and the United States. Its upper stream channel consists of several supplier's raw material. Processed leather, which constitutes almost 50% of input costs, is sourced from different locally based Tanneries. Other inputs (TR material for sole, shoe components and accessories) are imported on a competitive international open tender basis.

In this study, a structured questionnaire was sent and information is gathered from the subjects in the sample frame to study the role of SCM Integration on the Export Performance of Anbessa Shoe Share Company (ASSC).

### 3.2 Research Approach

The study followed an inferential research approach, which is part of qualitative research approach in this study, to achieve its purpose. Therefore, this study focused on formulating research questions and objectives of the study that have been achieved throughout the processes of the study.

### 3.3 Research Design

The study was designed in descriptive explanatory research design. The descriptive study allowed the researcher to describe those data and helps to know the event that has been taken place whereas explanatory study examined the relationships and associations between variables (Independent and Dependent Variables).

### 3.4 Unit of Analysis

Employees of ASSC particularly whose jobs are related to sourcing and SCM activities such as inventory, logistics, procurement, production finance etc. are the basic observable entities being analyzed by the study for which data were collected in the form of variables.

### 3.5 Target Population, Sampling Technique and Sample Size

The populations of the study were permanent employees of Anbessa Shoe Share Company in the Head Quarter facility at Akaki. Such employees who are able to comprehend the subject matter and provide the needed answer for the research questions of the study are going to be selected as target population.

### 3.5.1 Sample Size

From total of 937 permanent employees that are working at the Head Quarter Facility, 80 employees are considered as sample size of the study applying the medium size determination based on Carvalho's Sample Size Determination of the below table. The researcher opted to use the medium size for the fact that the number of respondents can only correspondingly fall within the range of the populations size.

The table below shows how Carvalho's Sample Size Determination is applied.

Table 3.1 Carvalho's Sample Size Determination

Population Size	Small	Sample size Medium	Large
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1,200	32	80	125
1,201-3,200	50	125	200
3,201-10,000	80	200	315
10,001-35,000	125	315	500
35,001-150,000	200	500	800

Source: *Carvalho (1984)*

### 3.5.2 Sampling Techniques

Using a stratified sampling technique, the target population for the study was classified into seven strata based on the departments from which samples were selected randomly from each stratum according to their proportion ratio. This guarantees representation of each strata, regardless of strata size and measurements become more manageable when the population is grouped into strata.

The following table shows how sample size would be determined from each department (stratum) according to their proportion to the total target population.

Table 3.1 Sample Size Determination for the study

No.	Departments (strata)	Total pop. of each stratum	Sample size of each stratum
1	Management	19	2
2	Sales and Marketing	164	18
3	Production Department	401	44
4	Quality Control	37	4
5	Supplies Department	19	2
6	Finance Department	24	3
7	Technique Department	19	2
8	General Services	42	5
<b>TOTAL</b>	<b>728</b>	<b>80</b>	

Source: *Survey Data, 2019*

### 3.6 Variables of the Study and Measurement Instrument

Cross-sectional survey type, with a close-ending questionnaire instrument divided into three parts was used, the first part contains the demographic information of the respondents while the second part contains items to measure customer integration, supplier integration, and internal integration. The third part contains a set of items to measure export performance.

The questionnaire is adopted from the work of Li *et al.* (2006) ranges on a five-point Likert-type response scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The dependent variables are perceptual measures assessed on items in relation to firm's current performance. The independent variables are Customer integration, dealing with customers and understanding their needs and their considerations in the firm's business processes, supplier integration defined by how close cooperation with the firm's suppliers and the Internal integration defined by the degree to which a firm structures its own processes, practices, and organizational strategies to meet its customer's requirements.

### 3.7 Data Source and Method of Collection

The focus of the study was on observing of current practices so that the significance of primary data undoubtedly analyzed. The secondary data also collected to augment the studies. The researcher collected data by administering a questionnaire, and other instruments. The sources of the data were an employee of the organization for primary data; whereas different journal articles, books, pamphlet, and others will be sources of secondary data.

### 3.8 Method of data analysis and presentation

The data was obtained through the questionnaires and first checked for completeness. Whether the questionnaire found correctly filled and fitted for analysis, coded. All the data entered into statistical package for social sciences, and analyzed based on descriptive and inferential statistics. The descriptive statistics used included the frequencies, mean scores, standard deviation, percentages and ratios. Then was presented using tables for easier interpretation. Cronbach's alpha ( $\alpha$ ) for the measure of internal and scale consistency (reliability) is used to analyze and measure reliability.

A multiple linear regression model was done to establish the role of the three-independent supply chain integration variables on the export performance of the organization. To establish the relationship, a regression analysis was established. For each supply chain integration variables, an overall mean was computed and matched with the mean of performance of the organization. From this relationship, the model was generated to determine the relationship using the Multiple linear regression analysis assumptions, such as the relationship between the Y and each of Xi's is linear, those of nonexistence of multi-collinearity (the independent variables are not related among themselves), and other assumptions include those of homoscedasticity and normality distribution.

The regression equation assumed the following form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

Where:

Y is export performance;

$\beta_i$  (i = 0 – 6) is the regression coefficient;

X1 –Internal Integration

X2 – Supplier Integration

X3 – Customer Integration

$\epsilon$  – Error Term or Unexplained variables not explained by the model

The F- test was conducted to determine the significance of the regression while the coefficient of determination, R<sup>2</sup>, used to determine how much variation in Y is explained by X. This was done at 95% confidence level, and correlation analysis carried out to find the degree and direction of the relationship between dependent variables and the independent variables.

### 3.9 Ethical Consideration

Confidentiality of the information of the respondents ensured for by not recording any identifying things like the that of the respondent's name and etc. While conducting the study, respondents were informed that the research and collected information using instruments would have been used for the academic purpose only. Additionally, respondents were confirmed that the data collection process carried out whenever they are a willing to cooperate from their side.

### 3.10 Data Reliability and Validity

Selecting scales to include in the study is important to find scales that are reliable. There are a number of different aspects to reliability. One of the main issues concerns the scale's internal consistency. This refers to the degree to which the items that make up the scale 'hang together'. One of the most commonly used indicators of internal consistency is Cronbach's alpha coefficient.

Cronbach's alpha values are higher than the generally agreed lower limit of 0.70 (Flynn *et al.*, 1990; Nunnally, 1978) (Table 3.3), therefore, the items are reliable.

Table 3.3 Reliability Statistics



Construct	Number of questions	Cronbach's alpha
Internal integration	6	.810
Customer integration	6	.870
Supplier integration	6	.776
Export Performance	4	.724
Total Reliability	22	.807

Source: *Survey Data, 2019*

The overall reliability test result (.807) proved that there were internal consistencies in those data constructed in questionnaire. There are four other columns of output. The two first after the item names show the change to the overall mean and variance if that particular item is omitted from the scale. However, the last two columns provide useful information and should now be inspected. The Corrected Item-Total Correlation column shows the degree to which each item correlates with the total score for the scale. Low correlations suggest the item is measuring something different to the scale as a whole. All the correlations are high and positive in this study. The right-hand column (Alpha if Item Deleted) shows the alpha value of the scale with that item omitted. What is looking for are the items, which if removed, would increase alpha (increase the internal consistency of the scale). The reliability of the scale used in the study (0.807), is the highest score and no need for deleting any question to bring the reliability higher.

The study tested construct validity which deals with the consistency of the questions with the responses intended. Validity is assured by structuring the questionnaire according to the specific objectives. The critical requirement to achieve validity is to measure the constructed data to ensure free from measurement error (Mat Roni, 2014). Therefore, the constructed data in the questionnaire were valid that proved by the above reliability test result with insignificant (less than .3) measurement error.

## CHAPTER 4

# ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

### 4.1 Introduction

*The objective of this study is to establish the relationship between supply chain integration and export performance of Anbessa Shoe Share Company. The aim of this chapter is to present and interpret the result, and also made discussions on the findings of the study.*

### 4.2 Demographic Information of the Respondents

#### 4.2.1 Response Rate

Out of a total of 80 questionnaires that were distributed, 70 are returned. The returned questionnaires signify a response rate of 87.5% and this response rate would be adequate and enough to draw analysis.

#### 4.2.2 Gender

The Gender disaggregation of out of the 70 respondents of the study, 61 percent of the participants of the survey result is male while female respondents are account for 39 percent of the study.

Table 4.1 Demographic Information

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	43	61.4
Female	27	38.6
<b>Total</b>	<b>70</b>	<b>100.0</b>
<b>Position</b>	<b>Frequency</b>	<b>Percent</b>
Managerial	7	10.0
Section Head	5	7.1

Officer	58	82.9
<b>Total</b>	<b>70</b>	<b>100.0</b>
<b>Educational Level</b>	<b>Frequency</b>	<b>Percent</b>
Certificate	6	8.6
College Diploma	11	15.7
First Degree	46	65.7
Masters and Above	7	10.0
<b>Total</b>	<b>70</b>	<b>100.0</b>
<b>Work Experience</b>	<b>Frequency</b>	<b>Percent</b>
Less than 2 Years	9	12.9
2-5 Years	29	41.4
6-10 Years	26	37.1
Over 10 Years	6	8.6
<b>Total</b>	<b>70</b>	<b>100.0</b>

Source: *Survey Data, 2019*

#### 4.2.3 Educational Background

The respondents that are participated in this study have diverse educational background as it can be seen in the above Table 4.1. Most of them, 75%, were a graduate of first degree and second degree. Those who have first degree are accounted for 65% of the total. This confirms that the respondents of this study were knowledgeable professionals who are well familiar with supply chain integration and export performance issues. Diploma are only account about 16% of the respondents under study whereas certificate is the remained 8.6 percent of the responses.

#### 4.2.4 Position in the Organization

The respondents were asked to indicate the positions they held, and there are also different compositions of the titles. They were provided with options to choose from; the findings in the table above indicated that managerial and section head account for a total 17% of the respondents and the rest work at the capacity of officer.

## 4.2.5 Experience

The research also sought to establish the duration that the respondents have had by the time of the study. The results illustrated in the table 4.1 confirm that 46% of them have been in operation for more than 6 years where 37% is from 6-10 years and 41 percent of the workers had a stay between 2-5 years. This is an indication that most of the employees have been an experienced worker to measure the relationship that exists between supply chain integration and export performance in their firm.

## 4.3. Descriptive Analysis of Extent of Supply Chain Integration

**The first objective of this study** is to examine the extent of supply chain integration in the company. The participants were asked to respond of their perception to extent of supply chain integration in their organization, and rated their degree of agreement on a five-point Likert- type scale from, strongly agree to strongly disagree. To further investigate this integration, the information exchange, handling, and storage activities have been examined with encountered challenges.

The details of supply chain integration practices inside the firm for the case study are discussed in Table 4.2. In the process of examining of the data, standard deviation was used. Small standard deviations (relative to the value of the mean itself) indicate that data are close to the mean whereas a large standard deviation (relative to the mean) indicates that the data points are distant from the mean. The mean is a poor fit of the data. Standard deviation is a measure of how well the mean represents the data (Field, 2009).

Table 4.2 Supply chain integration extent, and export performance

<b>Independent Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Internal Integration	70	4.000	.43220
Supplier Integration	70	3.4619	.56692
Customer Integration	70	3.7762	.53152
Export Performance	70	3.7083	.42272

Source: *Survey Data, 2019*

According to the survey result, the mean of all the independent variables are 4.00, 3.4619 and 3.7762 for internal, supplier integration and customer integration. Internal integration has the lowest deviation, .43220. Hence, this finding implies that there are high integrations of supply chain in the organization with respect to Internal Integration which has relatively low when compared to the remaining independent variables.

The findings of this survey result of extent of supply chain integration in the organization is substantially consistent with the results of the Uwamahoro, 2018 that all the independent variables are with high mean values. This implied us that as there are indirect proportionality between mean values and significance level, since independent variables with high mean are produce insignificant level.

#### **4.4. Supply Chain Integration and Export Performance**

**The second objective of the study** is to determine the relationship between supply chain integration and export performance.

Correlation analysis is used to describe the strength and direction of the linear relationship between two variables. The correlation is used for the purpose of a relationship allows predictions to be made of one behavior from another; to demonstrate a test scale validity by showing a significant relationship between it and another accepted scale for a related construct; to show reliability consistency of measurement on two occasions, to show internal consistency of scale items, and for theory verification use to support hypotheses that predict the relationships between variables. Pearson's Product-Moment Correlation is the best-known correlation and the most used for interval data (Beech, 2006).

The findings of the correlation matrix analysis between each indicators of supply chain integration (i.e., Internal Integration, Customer Integration, and Supplier Integration) and Export performance are shown in the table 4.3 below.

Table 4.3 Correlation Matrix

		Correlations				
Internal Integration	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	70				
Supplier Integration	Pearson Correlation	.038	1			
	Sig. (2-tailed)	.756				
	N	70	70			
Customer Integration	Pearson Correlation	.440**	-.108	1		
	Sig. (2-tailed)	.000	.376			
	N	70	70	70		
Export Performance	Pearson Correlation	.361**	.327**	.068	1	
	Sig. (2-tailed)	.002	.006	.575		
	N	70	70	70	70	70

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

Source: *Survey Data, 2019*

As it can be seen from the findings of study, the Pearson correlation test indicates that there is positive medium correlation between export performance the constructs of internal and supplier integration with correlation coefficient of .361, .327 and a significance value less than .002, .006 respectively. Whereas, there is a small correlation of .068 with insignificance of .575 happened between customer integration and export performance. The researcher has tried to see the insignificance relationship and has comprehended during the research that at this stage of competitiveness on the global market, it's the buyers who have the upper hand in dictating the relationship and the market and brand competitiveness has to first be enhanced.

It can be concluded that the Supply chain integration has a positive relation based on Pearson correlation which will be detailed in the following chapter.

## 4.4. Regression Analysis

### 4.4.1 Multiple Linear Regression Assumptions

**1. Linearity:** Linearity assumption states that the residuals should be linear relationship with the predicted dependent variables scores. Linear relationship between independent variables and

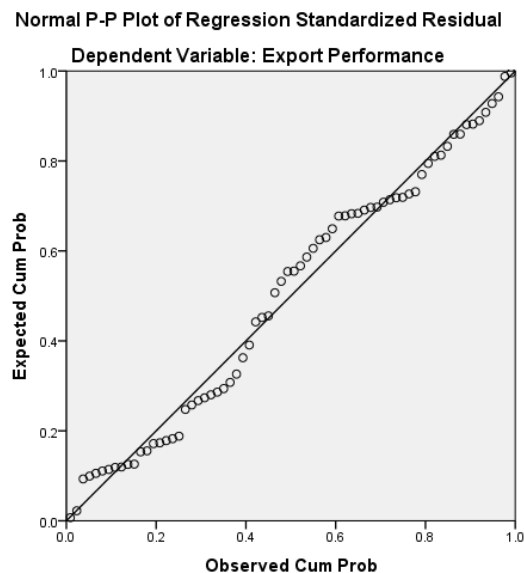
dependent variables. According to Chatterjee and Hadi (2006), the true relationship between independent and dependent variables can be approximated by the regression model.

This set of assumption can be examined to a fairly satisfactory extent simply by plotting scatterplots of the relationship between each explanatory variable and the outcome variable. It is important to check that each scatterplot is exhibiting a linear relationship between variables (perhaps adding a regression line to help you with this). Alternatively, you can just check the scatterplot of the actual outcome variable against the predicted outcome. The term residual considered is the difference between outliers and influential cases a bit further (J, 2010).

The simple outlier influences the line to a far lesser degree but will have a very large residual (distance to the regression line). The influential case outlier dramatically alters the regression line but might be harder to spot as the residual is small - smaller than most of the other more representative points in fact. To examine the scatterplot, you can also use influence statistics (such as the Cook's distance statistic) to identify points that may unduly influence the model (Wang, Rosner and Goodman, 2016).

If it is looked at the scatterplots below, the plot of the below graph indicates that the residuals are normally distributed. Non-normal if points substantially deviate from the diagonal line.

Figure 4.1 Linear Multiple Regression Assumption



**2. Multicollinearity:** According to Robert (2006) Multicollinearity assumption states that independent variables should not be related to each other, if they are highly correlated, then multicollinearity exists. High predictor-predictor correlation ( $r > .85$ ) results in unstable regression model (J, 2010). The table 4.3 shows that the relationships between explanatory variables, Internal Integration, Supplier Integration, Customer Integration, are below the correlation boundary line (i.e., .85) for all of the independent variables.

A more precise approach to check whether or not a given explanatory variable has a strong relationship with the other explanatory variables (an issue of multicollinearity exists in the model), Tolerance and VIF (variance inflation factor) is the good indicators. For example, Tolerance less than .1 (10%) hint at multicollinearity, and VIF (variance inflation factor)  $> 10$  also implies multicollinearity. So that VIF must be between 1-10, otherwise  $VIF < 1$  or  $> 10$  indicates multicollinearity existence (Ge, 2013). The table 4.4 correlation coefficient below describes that both the tolerance and variance inflation factor (VIF) are greater than 10%, and below 10 respectively.

Table 4.4 Multicollinearity Test of Independent Variables  
Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)	1.636	.535		3.058	.003					
1 Internal Integration	.370	.118	.379	3.139	.003	.361	.360	.339	.799	1.251
Supplier Integration	.228	.081	.305	2.802	.007	.327	.326	.302	.979	1.021
Customer Integration	-.052	.096	-.066	-.541	.590	.068	-.067	-.058	.791	1.264

a. Dependent Variable: Export Performance

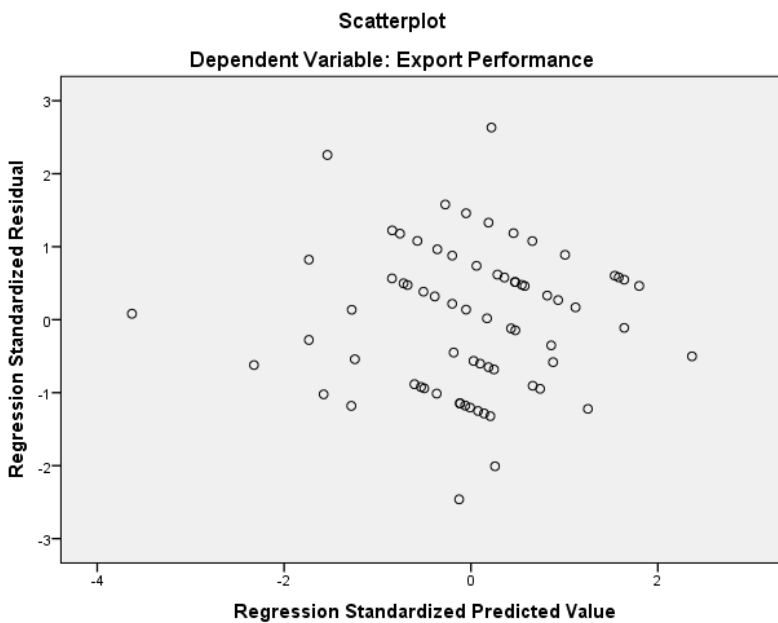
**3. Homoscedasticity:** Homoscedasticity assumption elaborates that the variance of the residuals about the predicted dependent variables scores should be the same for all predicted scores. Error



variance is assumed to be the same across all values of other variable. As it can be seen from graph, the dots which are scattered evenly is the indication of a homogeneity assumption (Mat Roni, 2014).

It could be checked that residuals do not vary systematically with the predicted values by plotting the residuals against the values predicted by the regression model. And looking for any evidence that residuals vary in a clear pattern. Look at the following figure, the data points appeared fairly randomly distributed with a fairly even spread of residuals at all predicted values.

Figure 4.2 Homoscedasticity Multiple Regression Assumption



This scatterplot is a result of what a scatterplot might look like if the assumption of homoscedasticity is met. The data points seem to funnel towards both the negative of the x-axis, and also toward the positive of x-axis indicating that there is equal variability in the residuals at higher predicted values and at lower predicted values. This suggests that our model is equal accurate in estimating both lower values and higher values.

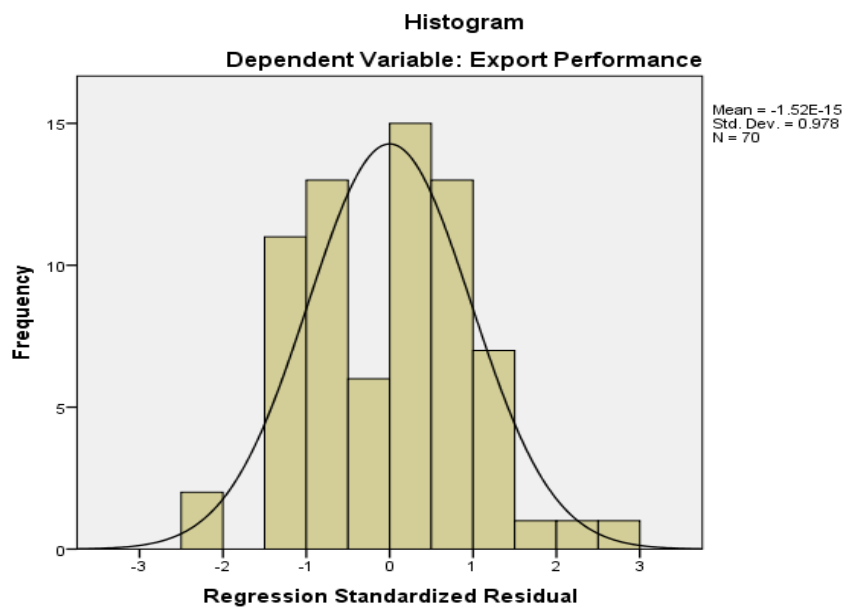
#### 4. Normally distributed residuals

A histogram of the residuals (errors) in a model can be used to check that the residuals are normally distributed about the predicted dependent variables scores. However, it is often good to

tell if the distribution is normal from just a histogram, and additionally, a P-P plot should be used as shown below figure.

As it could have been seen from the below figure, the expected and observed cumulative probabilities are matched perfectly. This suggests that the residuals are seamlessly normally distributed. So, in this survey result, the assumption of normality is not violated.

Figure 4.3 Normality Distribution Histogram



Source: *Survey Data, 2019*

#### 4.7.2 The Role of Supply Chain Integration for the Export Performance

**The third objective of this study** is to examine the role effect of supply chain integration on the export performance of the company, since correlation cannot determine existence of cause and effect due to there may be a number of other unmeasured variables which could be interrelated and responsible for the relationship found.

A multiple regression analysis was conducted to predict the relationship between the supply chain integration (internal integration, supplier integration, customer integration,) and export performance using regression analysis. The Model Summary table shows how much variance is explained by each model. Whether the independent variables are a significant predictor of

dependent variable will be indicated by the value in the Sig. F Change for this model. Note that the value for the next model reflects all independent variables entered.

R is the population correlation coefficient, and it takes on values between -1 and +1; 0 indicates no linear association; 1 indicates a perfect positive linear relationship; -1 indicates a perfect negative linear relationship (Ge, 2013).

Table 4.5 Model Summary

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.482 <sup>a</sup>	.232	.197	.37874	.232	6.652	3	66	.001

a. Predictors: (Constant), Customer Integration, Supplier Integration, Internal Integration

b. Dependent Variable: Export Performance

Source: *Survey Data, 2019*

A. Predictors: (Constant), Internal Integration, Suppliers Integration, Customers Integration. B. Dependent Variable: Export Performance

R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable.

The finding of the analysis implies that there are an association of 48.2% between observed and predicted export performance. Therefore; from this result, it can be interpreted as there is a close correlation between observed and predicted performance of the company.

R<sup>2</sup> is called the coefficient of determination, it is the proportion of the variance in the dependent variable (organizational performance) explained by variations in the independent variables, it shows the level of variance explained by the model; which indicates how the export performance varies with variation in supply chain integration efforts, Internal Integration, Customers Integration, Suppliers Integration.

The finding shows that, the independent variables (Customers Integration, Suppliers Integration, Internal Integration,) that were studied, explain only 23.2% the performance of the company, in case of ASSC as represented by the R<sup>2</sup>. Therefore, this means that another supply chain integration factor not studied in this research contribute 76.8% of the export performance. Therefore, further research should be conducted to investigate the others supply chain integration dimensions that have a role for the performance of the organization.

Table 4.6 ANOVA<sup>a</sup>

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.862	3	.954	6.652	.001 <sup>b</sup>
	Residual	9.467	66	.143		
	Total	12.330	69			

a. Dependent Variable: Export Performance

b. Predictors: (Constant), Customer Integration, Supplier Integration, Internal Integration

Source: *Survey Data, 2019*

The findings of the above table 4.6 indicated that the significance value of the model is  $p < .0005$ ; which is less than the significance level of 0.05 at a confidence level of 95%, thus the model is statistically significant in predicting how Customers Integration, Suppliers Integration, Internal Integration affect the export performance of the company. The F critical at 5% level of significance was 2.2. Since this value of F calculated is greater than the F critical (value = 6.65), this shows that the overall model is significant.

The regression coefficient is the independent variable associated with it is contributing significance to the variance accounted for in the dependent variable. From the findings in the above table 4.4, the regression equation is: -

$$Y = 1.636 + 0.370x_1 + 0.228x_2 + \epsilon$$

Where Y is Organizational Performance

X<sub>1</sub>= Internal Integration,

X<sub>2</sub>= Supplier Integration,

X<sub>3</sub>= Customer Integration,

€= Error term

From the above regression model, the significance value of three independent variables (internal integration, and supplier integration) is less than 0.05 which show that the model is statistically

significance to predict the analysis of supply chain integration role on export performance, whereas the significance value of customer integration is slightly greater than 0.05 which show that it can't significantly predict the analysis on export performance.

Internal integration positively affects ( $p < 0.001$ ) the export performance and this supports other studies conducted. Internal integration allows cooperation among the internal departments of the firms and decreases functional barriers (Flynn *et al.* 2010), thereby affecting process efficiency (Saeed *et al.* 2005) and building up capabilities and competencies that in turn improve export performance. The results show that upstream (supplier) the best predictors of export performance were found to be (in order of decreasing importance): internal integration, supplier integration and customer integration.

Prasad *et al.* (2001), reported that possession of competencies such as relationship skills enables a firm to enjoy superior export performance. Management characteristics also significantly influence a firm's export success, Axinn (1988) stressed the link between managers' attitudes towards exporting and firm export performance. Among the managerial factors identified in the study, export commitment/support has had the most frequently respondent to influence export performance. Based on these results, management commitment in exporting appears to be a necessary organizational ingredient to determine export success.

This is consistent with the view that commitment at the top management level is crucial for the export success of the firm (Cavusgil 1984; Cunningham and Spiegel 1971). The rationale for this view is that, when managers are committed, they carefully plan the entry and allocate sufficient managerial and financial resources, and as a result, uncertainty is reduced and marketing strategy can be implemented effectively, leading to better performance (Aaby and Slater 1989).

The distribution channel relationship analysed by Styles and Ambler (2000) and Ling-yee and Ogunmokun (2001) provide evidence that relational variables such as the distribution channel relationship have a positive impact on the export performance of the firm. These studies appear to corroborate the view of Zhang *et al.* (2003) that the development of mutually beneficial, trust-based relationships with foreign partners can be viewed as a source of enduring advantage,

particularly in the contemporary global business environment, where classical marketing tools such as price and product quality are susceptible to imitation by rivals.

This implies that internal integration and supplier integration have the greater influence on the export performance of the firm. On the other hand, customer integration has less impact for the performance. According to the finding, the multiple linear regression equation established that all independent variables taking to be zero (Customers Integration, Suppliers Integration, Internal Integration are held at Zero), it was found that organizational performance would be increase by 1.636 constant. Increase in internal integration, would lead to an increase in export performance by a factor of 0.37 while effective supplier integration increased performance of the firm by a factor of 0.288; a unit increase in customer integration will decrease performance of an organization to a 0.052. This clearly indicates that there existed a positive relationship between supply chain integration practices and export performance.

These findings support other literature that argues the supply chain management integration have a role on organizational performance as a whole. When the results of this study compared with those of previous research on supply chain integration, the supplier integration, customer integration and internal integration findings that indicate as there are no significant impact in improving a firm's performance is consistent with the findings of Uwamahoro, 2018, Devaraj, S., L. Krajewski and J.C. Wei (2007), and Chirchir and Richu, 2013 respectively.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Summary of Major Findings

From the findings of the study's objectives of this investigation, the results found were summarized by the researcher in the following paragraphs.

The first objective sought to assess the extent of supply chain integration in the company, ASSC. The second objective of the study is to determine the relationship between supply chain integration and export performance.

The third objective of this study is to examine the role effect of supply chain integration on the export performance.

Regarding the extent of SCI on export performance, only two variables, that is, internal integration and supplier integration significantly influenced export performance. Although the model was not statistically significant to predict export performance, together these factors accounted for 23.2% of the variance in export performance of the survey.

The majority responses have mean scores greater than 3.5, which imply the respondents agreed to the fact that the company actually put efforts on supply chain integration constructs where internal integration has the highest score as ranked by the respondents. The result of the analysis implies the high extent of supply chain integration practices by the organization since all of the dimensions have been fall in the great rate as per the survey scale instrument.

The result of the second objective of the study to examine the correlation between supply chain integration and export performance has experienced that the relationships of the dependent variable (export performance) correlation between export performance the constructs of internal and supplier integration with correlation coefficient of .361, .327, and small degree relationships with customer integration (.068).

## 5.2. Conclusions

This study provides insights into the relationships between integration of supply chain activities and several performance dimensions. In this study, export performance was measured using widely used performance indices from the literature, our results show that internal as well as external integration play critical roles for organizations.

The test results further show that internal integration and linkages with a firm's suppliers have the most effect on a firm's export performance. The finding of this study that internal integration significantly affects export performance and competitiveness suggests that firms should structure its internal organizational processes and strategies to meet their customer requirements and should promote collaboration and cooperation across their various internal processes in order to achieve better business performance and competitiveness. Internal integration can be attained through functional coordination, integration of internal functions, internal communication, and generating effective operational and production plans.

Internal integration shows the highest significance as a predictor for export performance. Also, the positive regression and significance of correlation indicates that it is positively tied to export performance. To that extent we can conclude that supply chain performance can be used as a proxy for export performance. The low score, but still positive relationship between customer linkages and export performance indicates there are more works to be done to leverage the opportunity on the downstream relationships in terms of customer satisfaction and working on surpassing their international customers' expectations.

This study implies that all kinds of integration are important but managers should pay particular attention to internal integration because the effectiveness of both customer and supplier integration works through the internal integration of the firm.

The overall assessment results of the structural model revealed that the model had satisfactory statistical power in predicting the research model. Generally, the study showed that the superior organizational performance can be attained through supply chain integration impact.



### 5.3. Recommendations

Since the study showed positive effects of supply chain integration on export performance, and specifically the linkages with the suppliers, ASSC should invest in long-term relationships with their suppliers and invest in business processes that involve their customers.

Although the focus of the research is ASSC, primary industries like leather tanneries are not considered in this research. The research population is limited to ASSC and hence the results of the research may not necessarily be applicable to other firms.

While great weight in this paper has been given to export performance, it would also be interesting if the study is modified for the home market to see if there exists a correlation between performance in the home market and export market, thus shedding more light on the differences between local and global supply chains especially with respect to downstream linkages. The present study used generic export performance indices.

Here under listed recommendations are projected as a way forward from findings of the study.

- Continuous improvement of supply chain integration practices should be undertaken in the organization, so that optimal performance would be achieved with all partners in the chain.
- The degree of variance amongst supply chain integration dimensions and organizational performance should be increased through systems automation, framework agreement, relationship management and performance assessment.
- Another factor of supply chain integration that have not seen in this study, but might have explained organizational performance should be considered and retreated in order to minimize the effects of unpracticed supply chain integration.
- All the dimensions of supply chain integration should be created as well as practiced by the organization to attain superior performance

## **5.4 Suggestion for Further Study**

The present study's geographical scope was limited to permanent employees in the Head Office, Addis Ababa; so that the future studies should have to consider expanding this scope to cover the branches and outlets. Moreover, the study was also limited to the Anbessa Shoe Share Company only, future studies could incorporate other exporting companies in the footwear sector and supply chain partners to learn the interaction between intra-organizations relationship.

From the regression finding, other factors not in the model that affects the organizational performance of Anbessa Shoe Share Company constitute 83.20%. These unexplained variables in the supply chain need to be established, and from this end, there is a need for a research that will introduce more independent variables especially other supply chain integration variables to establish how the level of association with the export performance would be look like. I would therefore, like to suggest that the future studies have to focus on the customer integration that was insignificant by this study and include other parameters that would describe the supply integration construct.

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## Appendices: Appendix I

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Customer Integration, Supplier Integration, Internal Integration <sup>b</sup>		Enter

a. Dependent Variable: Export Performance

b. All requested variables entered.

### Scale: ALL VARIABLES

#### Case Processing Summary

	N	%
Valid	68	97.1
Cases Excluded <sup>a</sup>	2	2.9
Total	70	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.807	.825	22

### Item Statistics

	Mean	Std. Deviation	N
<b>Internal Integration</b>			
Functional coordination works well in our company.	4.09	.566	68
Managers communicate effectively with managers in other departments.	4.03	.572	68
Real time searching of the level of inventory	4.07	.630	68
Decisions in terms of stock level and sales forecast are jointly made with purchasing department.	4.07	.555	68
Production progress and stock levels are shared with sales department.	3.47	.657	68
All employees are committed to the goals of this business unit	4.24	.626	68
<b>Supplier Integration</b>			
We maintain cooperative relationship with our suppliers	3.72	.844	68
We have close communications with suppliers about quality issues.	3.76	.794	68
A database of suppliers is easily maintained as a result of SC Integration.	3.40	.964	68
We do not share information on production plans with key suppliers.	2.82	.863	68
With an integrated suppliers supply chain, logistics services are improved	3.93	.759	68
Our key suppliers are included in our planning and goal-setting activities	3.24	.576	68
<b>Customer Integration</b>			
Customers are actively involved in our product design process.	3.76	.601	68
Customers involve us in their quality improvement efforts.	3.84	.660	68
We work as a partner with foreign customers.	3.47	.657	68
We have a quick ordering system with foreign customer.	4.03	.690	68
We do not share our production plan with major foreign customer.	3.37	.667	68
We share our available inventory with major foreign customer.	4.10	.794	68
Export Market Share	3.76	.461	68
Export Market share growth	3.76	.492	68
Through exporting, the firm has generated a high volume of sales	3.18	.791	68
The firm's exports have achieved rapid growth	4.13	.516	68

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
82.25	44.459	6.668	22

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Functional coordination works well in our company.	78.16	40.287	.536	.792
Managers communicate effectively with managers in other departments.	78.22	40.354	.520	.792
Real time searching of the level of inventory	78.18	40.297	.470	.794
Decisions in terms of stock level and sales forecast are jointly made with purchasing department.	78.18	41.759	.333	.801
Production progress and stock levels are shared with sales department.	78.78	41.458	.304	.802
All employees are committed to the goals of this business unit	78.01	39.925	.524	.791
We maintain cooperative relationship with our suppliers	78.53	40.910	.263	.806
We have close communications with suppliers about quality issues.	78.49	41.268	.251	.806
A database of suppliers is easily maintained as a result of SC Integration.	78.85	39.769	.309	.804
We do not share information on production plans with key suppliers.	79.43	40.756	.269	.806
With an integrated suppliers supply chain, logistics services are improved	78.32	41.625	.230	.806
Our key suppliers are included in our planning and goal-setting activities	79.01	42.582	.206	.806
Customers are actively involved in our product design process.	78.49	41.358	.354	.799
Customers involve us in their quality improvement efforts.	78.41	40.186	.458	.794
We work as a partner with foreign customers.	78.78	40.772	.388	.798
We have a quick ordering system with foreign customer.	78.22	40.085	.446	.795
We do not share our production plan with major foreign customer.	78.88	40.941	.360	.799
We share our available inventory with major foreign customer.	78.15	39.680	.415	.796
Export Market Share	78.49	41.418	.477	.796
Export Market share growth	78.49	40.880	.530	.793
Through exporting, the firm has generated a high volume of sales	79.07	41.532	.226	.807
The firm's exports have achieved rapid growth	78.12	41.568	.395	.798



## Appendix II: Research Questionnaire

*This questionnaire is designed for the purpose of gathering information on the study under title “Employees Perspective on the Effect of Supply Chain Integration on Export Performance: for the case of Anbessa Shoe Share Company”. Kindly spare some time to respond to the following questions. The information provided will be used for Academic purpose only and shall be treated with utmost confidentiality.*

► Please make tick mark (√) in the appropriate box for answer options that are provided.

### PART I: RESPONDENT PROFILE

1. Sex: Male  Female

2. Educational Level:

Grade 12 completed  Certificate  College diploma  First Degree  2<sup>nd</sup> Degree and above

3. Current Position/ Title in the company:

Managerial position  Section Head  Non-managerial position

4. Work experience in this company:

Under 2 years  2–5 years  6–10 years  over 10 years

5. Department/work unit \_\_\_\_\_

### PART II: EXTENT OF SUPPLY CHAIN INTEGRATION

Please indicate the extent to which the following statements concerning the level of SC Integration within your organization occur. Use the scale of:

1=Strongly Disagree. 2=Disagree. 3=Neutral. 4= Agree. 5=Strongly Agree.

No	6. Internal Integration	1	2	3	4	5
1	Functional coordination works well in our company.					
2	Managers communicate effectively with managers in other departments.					
3	Real time searching of the level of inventory					
4	Decisions in terms of stock level and sales forecast are jointly made with purchasing department.					
5	Production progress and stock levels are shared with sales department.					

6	All employees are committed to the goals of this business unit					
No	<b>7. Supplier Integration</b>	1	2	3	4	5
1	We maintain cooperative relationship with our suppliers					
2	We have close communications with suppliers about quality issues.					
3	A database of suppliers is easily maintained as a result of SC Integration.					
4	We do not share information on production plans with key suppliers.					
5	With an integrated suppliers supply chain, logistics services are improved					
6	Our key suppliers are included in our planning and goal-setting activities					

No	<b>8. Customer Integration</b>	1	2	3	4	5
1	Customers are actively involved in our product design process.					
2	Customers involve us in their quality improvement efforts.					
3	We work as a partner with foreign customers.					
4	We have a quick ordering system with foreign customer.					
5	We do not share our production plan with major foreign customer.					
6	We share our available inventory with major foreign customer.					

### **PART III: EXPORT PERFORMANCE**

Please indicate the extent to which the following statements concerning the relationship that exists between your SCI and the export performance of your organization occurs with regard achieving its market and financial goals in the past five years. Use the scale of:

1= Significantly low. 2=Low. 3 =Average. 4=Higher. 5=Significantly High. 6=Not Applicable.

<b>9. Perceived Export Market and Financial Performance</b>	1	2	3	4	5
Export Market Share					
Export Market share growth					
Through exporting, the firm has generated a high volume of sales					
The firm's exports have achieved rapid growth					

For any comment:

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