ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

DEPARTMENT OF MARKETING MANAGEMENT

POSTGRADUATE PROGRAM

A STUDY ON

MAJOR MICRO FACTORS THAT AFFECT CHANNEL INTEGRATION IN THE ETHIOPIAN GARMENT AND TEXTILE SECTOR I N THE CASE OF ADDIS ABABA

SUBMITTED TO: - ADDIS ABABA UNIVERSITY GRADUATE SCHOOL OF COMMERCE IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE MASTERS DEGREE IN MARKETING MANAGEMENT

BY

DANIEL THOMAS

ADVISOR: MEHRET BERHANU (Ass. Prof.)

May. 2014

ADDIS ABABA

ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

DEPARTMENT OF MARKETING MANAGEMENT

POSTGRADUATE PROGRAM

ASSESSMENT OF MAJOR FACTORS THAT AFFECT CHANNEL INTEGRATION IN THE ETHIOPIAN GARMENT AND TEXTILE SECTOR I N THE CASE OF ADDIS ABABA

BY DANIEL THOMAS

Approved by Board of Examiner

Research Advisor	Signature	date
Internal Examiner	Signature	date
External Examiner	Signature	date

DECLARATION

I declare that "**The Assessments of major factors along the supply chain that affect channel integration on Ethiopian garment/textile firms"** is my original work, that all the sources I have used or quoted have been indicated and acknowledged as complete references, and that it has not been submitted for degree purposes previously."

Daniel Thomas Shamena **July, 2014**

……..
Signature

This is to certify that the above declaration made by the candidate is correct to the best of my knowledge**.**

Mihret Berhanu (Ass.Prof.) **Date_____**

ACKNOWLEDGEMENTS

Above all, I would like to thank the almighty God for his unlimited blessings of my work throughout my life.

I also express my heartfelt gratitude to my study leader, Mihret (Ass. Prof.) for her meticulous reflections, valuable support and guidance in the course of conducting my study. She was always available to offer me guidance through email and telephone call.

I really appreciate and thank my respondents because they willingly shared me their precious time to fill the questionnaire.

My deepest gratitude is extended to Engedasew Temere, who initiated and filled me with courage to attend this program.

My especial thanks go to my friends, especially Abrham Tilahun, Besufekad Zena, Yohannes Tessema, Robel Siyum and Girma Belachew for their unconditional support and patience during my study.

Last, but definitely not least, my deepest thanks goes to my Family members, who encouraged and supported me for the last two years. Their love, support, encouragement, dedication, and many priceless sacrifices contributed to the successful completion of my MA studies. Without their assistance, this research would not have been possible.

ACRONYMS

AGOA African growth Opportunity Act

CSA Central Statistics Agency

CMT Cut Make and Trim

DBE Development Bank of Ethiopia

EBA Everything but Arms

ETGMA Ethiopian Textile and Garment Manufacturers Association

EU European Union

FOB Free On Board

SCM Supply Chain Management

SPSS Statistical Software Package for Social Science

TIDI Textile Industry Development Institute

MOIT Ministry of Industry and Trade

LIST OF FIGURES

LIST OF TABLES

APPENDIXES

ABSTRACT

The main purpose of this research is to identify the major problems that challenge companies to integrate with the channel partners this research is designed in order to assess the major factors which are road blocks for the successful collaboration of channel members. This was done by taking nine variables from different literatures on supply chain management practices. These were grouped in to nine parent variables and under each category there are 4-7 sub- factors that can explain the parent factors. The researcher used a simple random probability (lottery system) to select its final sample size (35) out of 59 garment and textile companies which are located in Addis Ababa. In order to analyze the collected data SPSS version 21 was employed. The result shows that companies which are engaged in producing fabric items are more affected by order handling, suppliers, sales persons and corporate image. On the other hand, garments are affected by order handling; price and product quality. These factors became major challenges while companies are trying to integrate. In order to be competent in the local and the international market as well, companies are expected to improve their internal performance. For instance quality of their products, images of their company, reducing their lead time, revising their pricing strategy, reducing turnover rate and managing orders properly are among the recommendations forwarded by the researcher.

Key words: *supply chain integration, garment, textile, order handling, product quality, sales people, price, corporate image*

TABLE OF CONTENTS

CHAPTER ONE
INTRODUCTION

Under this chapter the researcher would like to show the back ground of the study, statement of the problem, research questions, objectives of the study, significance of the study, and scope/delimitation of the study. These are the basic elements of the research which outlines the direction to the whole subsequent chapters.

1.1 Back ground of the study

As most of the countries in the world did, Ethiopia has also gone through the cottage and modern stages of producing different cloths. The history of modern textile in Ethiopia dates back to 1939 when Dire Dawa's Textile mills started its operation (Chauvin, 2010). Even though the cloth making in Ethiopia has been performed for more than a century, its development and modernization is still at low stage (Loop, 2003).

Although there is 3 million hectares of land which is suitable for cotton production, the country uses only 6-7% of it. (Ethiopia's Grand Renaissance, 2012); together with this, the country is known to be "The water tower of Africa" (Investment Guide to Ethiopia, 2004) since she has a very large water bodies at each corner. If they are used wisely, the above resources together with the ideal climatic condition can create considerable opportunity to have competitive edge in the market. Even if the country is rich in such endowments of nature, there is still a long journey to go to stay profitable both in global and local markets.

In one hand, the local market is flooded with different cloths that are imported from China. These products are better in variety and price as well. On the other hand, our global presence is not satisfactory. Based on International trade center, in 2008, out of 129 textile exporting countries, Ethiopia was ranked 112^{th} in market share. The value of exports in USD was only 14,612,319 and shares from national exports and world market were 1% and 0.00% respectively (Admaw, 2010).

Our current performance in the international market witnesses that having resources by itself doesn`t make sense unless these resources (information, raw materials, capital…) effectively used throughout the value chain. Different studies show that supply chain integration and customer integration have strong impact on competitive advantage of a company (Salem, 2012). Different researchers made various studies on the textile and garment sector. But the focus of their study was mostly inward-looking. Especially those researches that are under taken locally, gave due attention to the company's internal (operational) performance in relation to their competitiveness in the global market place. For example Performance measurement and improvement of Ethiopian garment industry by (Rahel, 2010) and Determinants of the performance of the garment industry in Ethiopia (Berihun, 2008), both tried to recommend suggestion to problems that are related to the company's internal performance.

There are also others whose primary interest was identification of factors that are related to supply chain integration; nonetheless, the factors were seen in association to producing quality products (Salem, 2012) or international competitiveness. Approaches to supply chain logistics integration in the textile and clothing sector by (Marcella et.al, 2007) and the impact of supply chain practices on the competitive position of Ethiopian textile firms by (Admaw, 2010) raises the issue of supply chain management practices; however, the former is too narrow (i.e. logistics) and the latter ignores the impact on the local customers.

The purpose of this research is to examine the major problems along the supply chain that hinder company's effort to be well integrated with the channel members. In such a way that companies can insure their customers' satisfaction. The paper also recommends some solutions that have practical implications on the company's performance.

1.2 Problem Statement

In the country like Ethiopia where a great deal of unemployment is common, we don`t have better option than engaging in to garment and textile sector. The sector is remarkably characterized by its labor intensive nature. In addition to this, the sector is reliable bridge which takes the agrarian economy to industrialization where the country is dreaming to reach. In one way or the other, the garment and textile sector, if the bottlenecks specially that are associated to

supply chain integration are handled properly, it could be the back bone of the economy as there is a promising market where the country can collect potential hard currency(Chauvin, 2010).

So far different researchers have come up with different researchable issues and attempted to find out ways that will improve the performance of the garment/textile sector. All have done their best to contribute their part for the success of the entire sub-sector. In addition to the researchers, the government has also taken the initiative to promote manufacturing specially those who are engaged in tannery and textile business. It gives preferential advantage like offering land for low lease rate, longer grace period while investors get loan from Development Bank of Ethiopia (DBE), raw material (fabric) and even accessories are also allowed to be imported duty free. Although these attempts are being done, our success falls far behind major exporters of garment items in the world. (China, Hong cong, Bangladesh…)(Loop, 2003)

Because this is an industrial development, it requires continuous research and strong governmental commitment in supporting investors. So, the researcher here also tries to answer the following question. What micro-factors are there in the supply chain integration which are prohibiting the success of the companies in the sector?

1.3 Research Questions

1. What are the major micro factors along the supply chain that affect the smooth flow of inputs?

2. Among those factors which of them more explain international and local business?

3. Which micro factors are more important to garment companies and textile companies?

4. Are there strong relationships among these micro factors along the supply chain?

5. What should be done on the supply chain system to improve the flow of inputs?

1.4 Objectives of the study

1.4.1 General objectives

The main objectives of this study is to clearly identify the major factors across the supply chain integration that affect the company's performance in the sector and showing their relative impact in Ethiopian garment/textile sector.

1.4.2 Specific objectives:

After the completion of this study, it will be able to:-

- Identify the major factors that affect channel integration in the garment and textile sub-sector
- Show the relative impact of each factor in the garment and textile companies.
- Examine certain relationships between the main factors
- Suggest solutions to problems associated to supply chain value.

1.4 Significance of the study

- As we hear from different government officials in public mass media, the government is promoting the sector since it has crucial role in leveraging the country`s economy. So, the paper will be used in providing valuable information about the sector.
- Not only the above bodies, but ultimate customers can also get garment items in terms of quality, quantity, time…as per their expectation.
- More over the study is significant to researchers and academicians since it serves as a reference in their further studies.
- It is also important for new entrants to this industry to make sound investment decisions.
- Even company managers can sharpen their knowledge of major problems that are associated with supply chain. So that they can shape (re-design) their business philosophies (policies).

1.5 Scope /delimitation/ of the study

The research raises three basic issues; Identification of major problems in the supply chain , comparison of their relative impact and suggestion of possible solutions. Its coverage is limited to the garment and textile sector of Ethiopia located specifically in Addis Ababa only. Since there is time, finance and other constraints, this research will be done by considering the data which will be gathered from the garment and textile companies only. Garment companies are the middle players between the upstream and downstream channels so that more reliable data can be obtained.

CHAPTER TWO

REVIEW OF RLATED LITERATURE

In this part of the research, various literatures are discussed concerning the Ethiopian textile and garment companies, their establishment and progress, structure as well as the nature of the garment and textile market. In addition to this, definitions of supply chain management, scope, kinds of channel integrations, customer satisfaction, and industry performance factors are presented.

2.1. Overview of the textile and garment sector

2.1.1 Establishments and progress of the garment and textile sector in Ethiopia

As most of the countries in the world did, Ethiopia has also gone through the cottage and modern stages of producing different cloths. The history of modern textile in Ethiopia dates back to 1939 when Dire Dawa's Textile mills started its operation (Chavan, 2010). The first industrialized garment industry was also introduced in 1960s with the establishment of Addis garments. Akaki garment was founded in 1963 followed by the Adey Ababa yarn co, Gulele garment and Nazreth garment factory. These garment factories have dominated Ethiopia's garment sub-sector for the last ten years. A number of private garment industries have been established and currently there are around 64 garment companies (Enterprise map of Ethiopia, 2011). The garment products made mostly constitute uniforms, work wears, and knit wear products like sportswear, under wears, polo shirts etc. More information is presented in the annex section "D".

2.1.2 Structure of the Ethiopian textile sector

The introduction of new economic systems that advocate privatization and adjustment of incentives, increases inflow of foreign and domestic investors into the textile sub-sector (MoIT, 2009). Accordingly, private investment in the textile sector has shown improvements. During this period, the numbers of both public and private owned medium and large scale operational textile enterprises has increased from 31 establishments in 1991/92 to 64 in 2007/8 (CSA, 2009). In addition, private enterprises play a significant role in enhancing various macroeconomic variables such as employment generation, total value of output, value of fixed asset, sales

revenue and per capital output. These elements have improved over the last 10 years. For instance, the study conducted by China Textile Planning Institute of Construction in 2004, estimated the share of public enterprises in terms of the number of employees; total value outputs and total sales revenue were 68.99%, 73.63 % and 75.52 %, respectively. In recent years, the public textile enterprises part in the textile industry is gradually declining due to privatization. The role of the private textiles outpaced the public enterprises in terms of employment generation and production value added at factor cost (Admaw , 2010). In Ethiopia the sector is playing a major role in the strategy of agricultural led economy , as it is closely linked in backward integration with the agricultural sector in terms of raw material supply (abundant raw material such as cotton and vertically integrated textile industries) and taps into the huge global textiles and garment market (forward integration).

2.1.3 The nature of the garment market

Due to globalization, its effects in business environment and due to the specific market nature of the garment industry including short product life cycle, high volatility, low predictability, and a high level of impulse purchase, quick response of market industries are facing the greatest challenges. Hence Ethiopian garment industries find themselves in difficult position to be competitive. Due to the availability of imported Chinese readymade garments that have good quality, varieties of design and low price, made the competition very stiff.

Moreover due to labor wage increment in developed countries, the apparel manufacturing has been migrating from the high wage developed world to developing countries. Following these, different treading menses such as CMT, FOB and out sourcing of the production activity, have been formed by developed countries. Hence, low wage labor is one of the competitiveness advantages of the industry (Mohammed Ziaul Haider, 2007). Furthermore due to the US and EU customers requirement, the Chinese apparel manufacturers are under limited restriction of exporting to these countries which provides more opportunity for other garment manufacturers. One of the developing countries' leading exporters of apparel Bangladesh success is proper utilization of the phase out of the export quota system and the low wage labor existing (Mohammed Ziaul Haider, 2007). In addition, different preferential market accesses have been available to the industry, by US and EU such as EBA and AGOA (AGOA is a market

opportunity provided by the US government to Sub-Saharan African countries to export their products free from tariff and quota. AGOA came to effect on October 1, 2000 G.C after President Clinton signed the historic law called "AGOA 2000" on May 18, 2000) respectively to developing countries including Ethiopia which allow free of quota export to these countries (Rahel Abebe, 2007).

2.1.4 Ethiopian textile firm's export market

According to the Ministry of Industry and Trade (2009), during the period 2006/7, the value of Ethiopian textile exports was 11.1 million USD and later in the two consecutive years increased to USD 12.6 and 14.6 million respectively. The major Ethiopian textile products include yarn, woven products and garment. Textile products and garment take higher share. The average share for the period 2006/07 to 2008/9 for the textile products and garment was 34.65 % and 62.97%, respectively. The other fact observed in the period was the shift in the type of product from textile to garment. Accordingly, the share of textile products has reduced from 37.66 % in 2006/07 to 31.24% in 2008/09; while in the same period, the share of garment product has increased from 59.80 % to 66.20%.

The Ethiopian textile firms export their products mainly to European and Asian markets. Other major textile export destinations are the USA and Africa. The destination for most of the products is Europe with average share of 62.96 % of the total export value of Ethiopian textile products for the period of 2006/07 to 2008/9. During the same period, the USA and Asia were also among the major importers of the Ethiopian textile products with respective average share of 20.22 % and 12. 78 % (MOTI, 2009)

2.2. Supply chain management

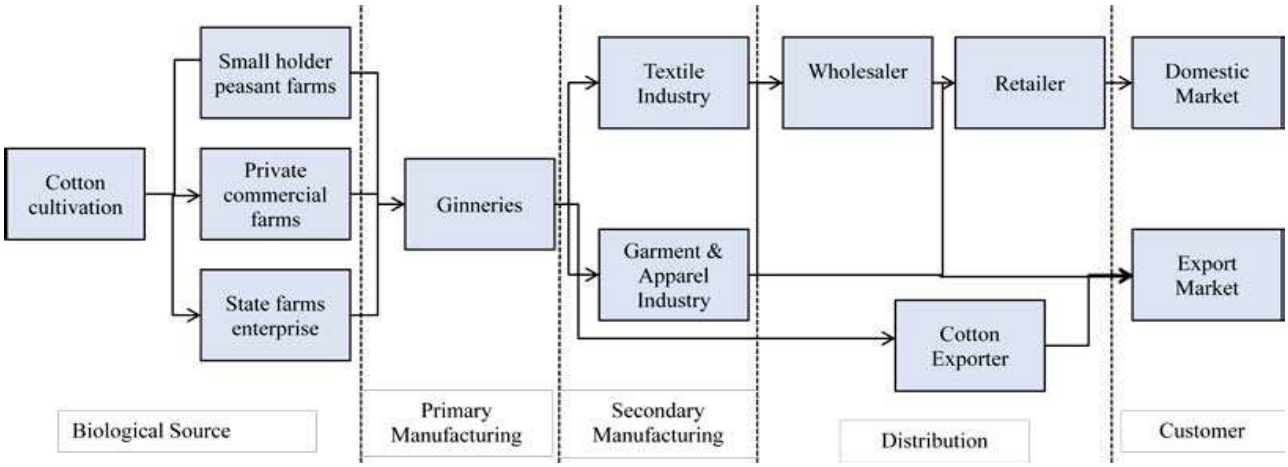
2.2.1. Definition of supply chain management

SCM mainly aims at virtual integration of organizations' product, information and financial flows. Regarding its scope, SCM may encompass the simplest interaction among departments up to the largest global supply chain (Sunil & Meindl, 2006).

Supply Chain Management (SCM) aims at the efficient use and operations of supply chain assets, products, information and cash flows (Sunil & Meindl, 2006). According to (Lummus and Vokurka, 1999), the Supply Chain Council defines supply chain management as a system that "encompasses every effort involved in producing and delivering a final product, from the supplier's supplier to the customer's customer". In general, supply chain management includes managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customers. It incorporates varieties of costs and participants such as customers, distributors, manufacturer, supplier, material costs, transportation costs, manufacturing costs, inventory costs etc.

The objectives of SCM include customer satisfaction, value addition, long-term profitability and the achievement of a competitive advantage of the supply chain as a whole. The building blocks of this management approach focus on managing information flows, financial resource flows, and product flows between the various organizations to the benefit of the supply chain (Cronin 2001, cited in Admaw, 2010). Thus, the government has expressed commitment and has facilitated the establishment of Textile Industry Development Institute (TIDI) to assist the development of the whole supply chains (MoIT, 2009 cited in Admaw, 2010). The supply chain for Ethiopian textile of the Garment/textile sector in Ethiopia is shown below.

Fig. 1. Model of supply chain in Ethiopian textile of the Garment/textile sector



(Source: John Sutton and Nebil Kellow, 2011)

2.2.2 Scope of Supply Chain Management

Supply chain management (SCM) is the term used to describe the management of the flow of materials, information, and money across the entire supply chain, from suppliers to component producers to final assemblers to distribution (warehouses and retailers), and ultimately to the consumer. SCM also extends to purchasing, distribution, logistics, material management for both supply and demand sides.

The concept of SCM is diverse. According to Croom et.al (2000) SCM is a field at the confluence of many other disciplines such as marketing (customer relationship management, buying strategies), industrial economics (make-or-buy, international purchasing procurement, supplier evaluation), operations management (just-in-time, Inventory management, production and distribution planning, transportation management), international business and organizational management (teams and internal coordination, strategic issues, organization and procedure, partnering and strategic alliance), and information technology.

2.2.3. Channel integration and Customer satisfaction

2.2.3.1 Supply Chain Integration

The theoretical foundation for supply chain integration can be traced to the value chain model of Porter, and specifically, its notion of linkages. According to Baharanchi (2009), an integrated supply chain is linked organizationally and coordinated with information flow, from raw materials to the on-time delivery of finished products to customers. The entire supply chain is linked by information about anticipated and actual demand. There are two interrelated forms of integration that manufacturers regularly employ. The first type of integration involves integrating the forward physical flow of delivery between suppliers, manufacturers and customers. The second type of integration involves the backward integration of information technologies and the flow of data from customers to suppliers.

Chopra et.al (1998) discusses an integrated supply chain needs its dynamics to be considered at three levels:

- **Strategic level**- develops objective and policies for the supply chain, determine its physical components having a statement of customer service; an organization structure which would be capable of bridging the gap between various functions.

- **Tactical perspective** -focus on the means by which the strategic objective may be realized.

- **Operational perspectives**- to focus on the efficient operation of the supply chain.

2.2.3.1.1 Upstream and Downstream Integration

Upstream and downstream integration extends the scope of integration outside the company to embrace suppliers and customers. More specifically, this stage of integration represents more than a change of focus from product-oriented to customer-oriented in relation to mutual support and cooperation.

A review of external supply chain integration literature reveals two major areas of emphasis. They are: (i) Customer integration and (ii) Supply integration. For supply integration, integration back down to the suppliers represents a change in attitude away from conflict to cooperation, starting from product development, the supply of high quality products, process and specification change information, technology exchange and design support (Baharanchi, 2009). Some researchers have investigated supply-side integration in different dimensions. Power (2005), defines supply integration as obtaining frequent deliveries in small lots, using single or dual sources of supply, evaluating alternative sources on the basis of quality and delivery instead of price, and establishing long-term contracts with suppliers. In terms of logistics communication, this concept could view supply integration as effective alignment, information sharing and supplier participation between suppliers and manufacturers.

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).

2.2.3.1.2 Internal Integration

According to Sweeny et.al (2011), most businesses certainly manufacturing based business can be described in terms of the five functions: buy, make, store, move and sell. This is what is referred to as the internal (or micro or intra-firm) supply chain. Traditionally these functions have often been measured, and therefore managed, in isolation, often working at cross purposes. This traditional approach is analogous to a relay race with responsibility being passed from one function to another. SCM means thinking beyond the established boundaries, strengthening the linkages between the functions, and finding ways for them to pull together. A recognition that "The whole is greater than the sum of the parts" calls for more effective integration between purchasing and procurement (buy), production planning and control (make), warehouse management (store), transport management (move) and customer relationship management. The phrase "internal supply chain" is to describe work aimed at breaking down the barriers between functions within organizations. Asif (2010) also discusses to support customer requirements at the lowest total system cost, internal integration represents the integration of all internal functions, from material management to production, sale and distribution. At this stage, the firm focuses on the internal flow of goods into the organization and on the way out to the customer. Moreover, internal integration is characterized by full system visibility from distribution to purchasing, and required integration across functions under the control of the firm to achieve customer satisfaction. In practice, it means that special attention must be given to the interface between functional areas such as procurement, production, logistics, marketing, sales and distribution.

Integrating supply chain business process involves collaborative work between buyers and suppliers, joint product development, common systems and shared information. According to Moberg et al (2002), operating an integrated supply chain requires a continuous information flow. However, in many companies, management has reached the conclusion that optimizing the product flows cannot be accomplished without implementing a process approach to the business. The key supply chain processes stated by Lambert et al (2005) are:

- Customer relationship management,

- Procurement,
- Product development and commercialization,
- Manufacturing flow management/support,
- Physical distribution,
- Outsourcing/partnerships,
- Performance measurement, and
- Collaboration with supply chain partners

2.2.3.2 Customer satisfaction

Today customers are from every corners of the world; the supply chain strategy should have focus towards satisfying the customers. Without satisfied customer, the whole exercise of applying the supply chain strategy could be costly and futile (A. Gunasekaran, C. Patel, and E. Tirtiroglu, 2001).SCM contributes to reduction of inventory and purchasing cost, shortening the business process, lead-time and sales promotion planning time, and enhancing delivery time, increasing sales revenue and decreasing defective rates.

Customer satisfaction is the customer's reaction to the value received from the purchase or utilization of the offering. Customer satisfaction represents the customer's reaction to his or her perception of the value received as a result of using a particular product or service. Thus customer satisfaction will be influenced by the desired value (ideal standard) as well as by the perceived value of competitive offerings (industry norms, expectations based on use of competitor products). Thus customer satisfaction is influenced by the perception of the value delivered as well as by the perception of the value offered by competition. Today customers are very diverse; the supply chain strategy should have focus towards satisfying the customers. Without satisfied customer, the whole exercise of applying the supply chain strategy could be costly and futile (Thomas Gruenberg, 2004).

Given its potential to reduce lead times and total costs of operations, increase delivery speed, responsiveness and flexibility, and ultimately customer satisfaction, supply chain integration can help to improve the competitiveness of the textile and clothing (T/C) firms.

Since the concept of customer satisfaction was introduced by (Cardozo, 1965 cited in Bei and Chiao, 2001) into marketing field, there has been divergent definition concerning customer satisfaction (Bei and Chiao, 2001). For instance, Oliver (1981) proposed that customer satisfaction is "a total psychological state when there is an existed discrepancy between the emerging emotion and expectation, and such an expectation is a consumer's feeling anticipated and accumulated from his or her previous purchases". Kotler and Armstrong (1996) defined customer satisfaction as "a feeling which results from a process of evaluating what has been received against what was expected, including the purchase decision itself and the needs and wants associated with the purchase".

2.3 Industry Performance Improvement Factors

In order to improve performance effectively, organizations must identify factors of performance that should be particularly monitored, which are either key to success or identify under-performance. Depending on the type of the industry there are different key performance factors, where it is impractical to review all possible measures of performance in this chapter since it is a broad topic. Thus important key performance factors that are associated to garment industry are considered; these are cost, time, productivity, flexibility and quality.

2.3.1 Time

In today's business marketplace customers are placing greater value on delivery time. In competitive industries, short lead time will differentiate a company from its competitors, leading to increase sales. Lead-time begins with the first receipt of a customer order and ends with customer receipt of the product or service. Total lead-time includes four main components; order lead times (i.e., the time it takes to process an order), supply lead times (i.e., the time it takes to purchase item), manufacturing lead time (i.e. this refers to the time span from material availability at the first processing operation to completion at the last operation) and delivery lead time (i.e. this refers to the time taken to final receipt to the customer).

2.3.2 Product Quality

Product quality is the collection of features and characteristics of a product that contribute to its ability to meet given requirements. There are three views for describing the overall quality of a

product. First is the view of the manufacturer, who is primarily concerned with the design, engineering, and manufacturing processes involved in fabricating the product. Quality is measured by the degree of conformance to predetermined specifications and standards, and deviations from these standards can lead to poor quality and low reliability. Efforts for quality improvement are aimed at eliminating defects (components and subsystems that are out of conformance), the need for scrap and rework, and hence overall reductions in production costs. Second is the view of the consumer or user. To consumers, a high-quality product is one that well satisfies their preferences and expectations. This consideration can include a number of characteristics, some of which contribute little or nothing to the functionality of the product but are significant in providing customer satisfaction. A third view relating to quality is to consider the product itself as a system and to incorporate those characteristics that pertain directly to the operation and functionality of the product (Kastro, 2006 cited in,Salem 2010).

In order to improve competitiveness of a garment industry and build better reputation amongst consumers and competitors it is important to maintain level of quality of the garments. Quality affects all aspects of the organization and has dramatic cost implications. The most obvious consequence occurs when poor quality creates dissatisfied customers and eventually leads to loss of business. Effective quality improvements should result in a future stream of benefits, such as: reduced failure costs, lower appraisal costs, increased market share, increased customer base and more productive workforce. Improved quality increases productivity, hence, many world class industries use quality as a powerful competitive tool.

There are many aspects of quality in garment operations including; quality of garment design, quality of production, quality of inspections, and quality of sales as well as quality of marketing of the final product which, is as important as the quality of the garment itself (Rahel, 2010).

CHAPTER THREE
RESEARCH METHODOLOGY

This chapter describes the methodological procedures used to answer the research questions proposed in Chapter 1. It includes six sections: (3.1) Research Design, (3.2) Target population Sampling, (3.3) Sample and sampling technique, (3.4) Participants (3.5) Data source and instrument (3.6) Variables and measures (3.7) Techniques of data Analysis (3.8) Ethical procedure.

3.1. Research design

This is a descriptive research that tries to examine the relationship between problems along the supply chain and customers' satisfaction. Descriptive analysis refers to statistically describing, aggregating, and presenting the constructs of interest or associations between these construct (Anol Bhattacherjee, 2012). So, quantitative research design was employed for this study. Quantitative research involves attaching numbers to relationships between variables (Hopkins, 2000). Quantitative research uses objective measurements and statistical analysis of data that is collected from a well-controlled setting. `

3.2. Target population

A population can be defined as all people or items (unit of analysis) with the characteristics that one wishes to study. The unit of analysis may be a person, group, organization, country, object, or any other entity that you wish to draw scientific inferences about (Bhattacherjee, 2012). The population of this research comprises all 59 garment factories which are currently working in Ethiopia.

3.3. Sample and sampling technique

Simple random sampling technique was applied for selecting sample garment industries. The sampling technique that was used to draw a sample from the target population is lottery system. Lottery system is a type of simple random sampling technique in which a total list of the population is prepared, enfold each member's number or name in separate and identical papers,

and choose randomly until it reaches the targeted sample size 35. This sampling technique was appropriate since the target population in this study is limited in number. According to Yalew (2006), if the research is correlation and have many members in the total population, then the sample size must not be less than 30. On the basis of this research, 35 companies was selected using random sampling system (lottery system).

In order to strengthen the reliability of data gathered from questionnaires interview was conducted based on purposively selected five top managers and their companies. To make the data more reliable three higher officials from Ethiopian Textile and Garment Manufacturers Associations (ETGMA) and three other professionals from Textile Industry Development Institute (TIDI) were asked.

3.4 Participants

The respondents were merchandisers and senior managers who have academic achievements of diploma and above. These people were selected since their position gives them the opportunity to interact with the external environment more than any official in the company. One participant is taken from each sampled company.

3.5 Data source and Instrument

The main data gathering tool was a well structured questionnaire. However interviews were also used in order to check the reliability of the information collected. To ensure the validity of the items in the questionnaires, sample questionnaires were distributed to three colleagues (M.A holders in business field) to check if there are problems (like spelling, numbering, order…) that threaten the quality of their response. Moreover, four professionals in the sector took the questionnaire to check if the items are appropriate to measure what is intended by the researcher. Regarding data source company brochures, previous researches and different publications were used. So, both primary and secondary data sources were used.

3.6 Variables and measures

In this research there are nine independent variables (Factors that affect channel integration) and six dependent variables (companies which sell to the domestic market, exporters and companies

which serve both markets. These are grouped in one category and fabric producers, garment companies and integrated companies in the other category). According to Homburg and Rudolph (2001), channel integration will be evaluated by the following factors; suppliers, Products, sales people, product price, relationship, order handling, corporate image, complaint behavior, customer loyalty were taken as independent variables.

3.7 Data analysis

The data that were collected form employees through questionnaire were analyzed by the help of SPSS software version 21. Demographic variables, reliability, descriptive statistics, correlation analysis and ANOVA test were conducted to analyze the collected quantitative data. First, demographic information about the participants was reported. It included the frequency distribution of demographic variable such as gender, age, service year, education, etc. Second, Cronbach's alpha was calculated for testing the reliability of the scales used in this study. Third, descriptive statistics were calculated to get information about the means and standard deviations for each of the variables of interest. Fourth, to answer the research questions, correlation analysis was conducted. The Correlation analysis was interpreted through checking the direction and magnitude of each two related variables in terms of the '*r*' value. ANOVA was conducted to check if there is difference between dependent variables due to the factors.

3.8 Ethical procedures

In conducting this research, respondents were informed in advance that the data collection process was carried out whenever they were willing to cooperate. In addition to this, any information collected via the instruments would never be used for any other purpose other than its academic intent i.e. the data would be kept confidential. They were also made to know that before it is publicized, the copy of the research findings could be offered.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

The main purpose of the study is to identify the major factors that affect channel integration and searching for solutions that can bring about strong bondage between members in the line. In order to meet the purpose of the study this chapter presents the data analysis part of the study. The analysis presentation part is depicted in seven sections. These are (4.1) data sample information, (4.2) demographic information (4.3) Mean values of variables (4.4) correlation analysis, (4.5) ANOVA (4.6) results. These will be presented as follows.

4.1. Respondents' profile

A total of 30 questionnaires were distributed to employees of medium sized companies. According to UNIDO (2002) survey medium sized companies have 200-400 employees and have also small to medium range of products. Twenty nine questionnaires were returned, out of which two were discarded because of missing data. Therefore, the numbers of usable questionnaires were four and as a result the response rate was 86.6%

4.2 Demographic Information of the Respondents

Table:1 Frequency table of respondents' age and sex

Values		Frequency	Percent
	18-19	14	53.8
Age	30-39	8	30.8
	40-60	4	15.4
	Total	26	100.0
Male	Sex	14	46.2
	Female	12	53.8
	Total	26	100.0

As you can see in the above table, the questionnaires were distributed to 26 individuals. Out of these, 14(53.8%) were in the age between 18-29 and 8(30%) of the respondents' age falls

between 30 and 39. The rest 4 (15.4%) answered that their age is between 40 and 60. Among these respondents the majority (53.8%) were females and the remaining 12(46.2%) were male.

Table: 2 Academic status and position of respondents

Demographic variables		Frequency	Percent
Academic status	Diploma	8	30.8
	First degree	12	46.2
	Second degree	4	15.4
	Above second degree	2	7.7
	Total	26	100.0
Position	Investor	8	30.8
	General manager	8	30.8
	Marketing manager	4	15.4
	Commercial Manager	6	23.1
	Sales	26	100.0
	Total		

Regarding the academic achievements of the respondents, most of the professionals have first degree. This accounts about 14(53%) of the total respondents. There are also second degree holders that constitutes 4(15.4%).Other than these, there are 8(30%) who are diploma graduates.

When we look at the respondents' current status in their organization, there are 2(7.7%) investors, 8(30%) general managers, 6(23.1%) marketing managers and 8 (30%) sales persons. This profile of the respondents helps the researcher to have the diversified view of the subject matter of the study.

Concerning the respondents year of service, 14 (53.3%) of the participants served the sector for less than 3 years. And 10(38.5%) of the employees have the experience that lies between 5-10 years. There are only two participants who stayed in the sector for more than 10 years. This realizes that there is high employee instability.

Table: 3 Respondents' Service year

Variables		Frequency	Percent
Service years	Below three years	16	61.5
	5-10Years	8	30.8
	11-20 years	2	7.7
	Total	26	100.0

Among the 26 respondents only 2 produces fabric. The majority (61.5%) of the responding companies deliver sewing service only. which means that these are garment companies. Around 8(30.8%) of the companies are engaged in producing both fabric and garment items. With regard to the type of market they serve, 8 of the companies offer their product to the local market. Only 2 companies send their product to the foreign market; however, there are16 companies that do business in both markets.

Table: 4 Product type and market served

Variables		Frequency	Percent
Product type	Fabric	2	7.7
	Garment	14	53.8
	Both	10	38.5
	Total	26	100
Customers			
	Local buyers	6	23.1
	Foreign customers	8	30.8
	Both	12	46.2
	Total	26	100.0

4.3 Reliability test

Cronbach's alphas were calculated to examine the reliability of all the items (51) each variable of the study. The nine variables in the study were Suppliers, sales persons, product quality, pricing, relationship, order handling, complain, loyalty, corporate image. Under each variable there are five up to seven items were presented and their Cronbach's alpha became 0.798.

Usually, reliability coefficients should be at least '.70' and the higher the better (Fankel and Wallen 1996, p 163). Furthermore, as suggested by Churchill (1979), if scale item were to exhibit an item-to- total correlation of 0.25 or less the item should not be included in further analysis. All items used in this study have greater than 0.25 an item total correlation (Appendix A, B and C). Reliability coefficient for items in each variable (Cronbach's alpha) is also greater than 0.7 which showed higher reliability of the items used in measurement of the variables.

Table: 5 Reliability statistics result

Cronbach's Alpha	N of Item
.798	51

4.4 Mean values of variables

The means of the factors; suppliers, Sales, Product quality, pricing, relationship, order handling, corporate image, loyalty and complaint were calculated and presented in Table 6. From this table, it can be noted that, the means scores of all variables are above the midpoint (3) of the scale. The highest mean score recorded was for order related factors (M=3.90) while the lowest score was recorded for supplier related factors (M=3.08).

Table 6: Mean values of parent factors

Descriptive Statistics

	N	Mean	Std. Deviation
Mean of supplier related factors	26	3.08	.552
Mean of sales related factors	26	3.13	1.116
Mean of product quality factors	26	3.47	.625
Mean of pricing related	26	3.74	.551
Mean of relationship related factors	26	3.31	.443
Mean of order related factors	26	3.90	.829
Mean of corporate image related factors	26	3.47	.899
Mean of loyalty related factors	26	3.50	.707
Mean of complain related factors	26	2.82	.787
Valid N (list wise)	26		

Source: SPSS Survey out put

4.5 Correlation Analysis

Correlation analysis is a useful way of exploiting relation (association) among variables. The value of the coefficient (*r*) ranges from -1 up to +1 .The value of coefficient of correlation(*r*) indicates both the strength and direction of the relationship. If *r* = -1 there is perfectly negative correlation between the variables. If *r* = 0 there is no relationship between the variable and if *r* = +1 there is perfectly positive relationship between the variables. For values of *r* between +1 and 0 or between 0 and -1, different scholars have proposed different interpretations with slight

difference. For this study diction rule given by Bartz (1999) was used. Bartz (1999) described the strength of association among the variables as follows.

Table 7: Interpretation of r *Source*: Bartz (1999)

Value of *r*	Description
0.80 or higher	Very high
0.6 to 0.8	Strong
0.4 to 0.60	Moderate
0.2 or 0.4	Low
0.20 or lower	Very low

4.6. Measuring the strength of relationship between the major factors.

In this study the researcher tried to see the relationship among the five identified major factors and .Here only the three factors are discussed the rest correlation result is attached in the annex part.

4.6.1. Correlation result for order and product quality

As the table below clearly depicts, for the relationship between order handling and product quality, the correlation coefficient was found to be r=-0.497. Since p value was .000 which is less than 0.01, it is possible to say that there is moderate and positive relationship between these factors.

Table.8 Correlation result for order and product quality.

		Sum of order related factors	Sum of product quality factors
Sum of order related factors	Pearson correlation	1	.497**
	Sig. (2-tailed)		.000
	N	26	26
Sum of product related factors	Pearson correlation	.497**	1
Pearson correlation			
	Sig. (2-tailed)	.010	
	N	26	26

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

4.6.2. Correlation result for Customer loyalty and corporate image

The relationship between corporate image and customer loyalty is strong. This is because *p* value is less than 0.05 and coefficient correlation was calculated to corporate image and customer loyalty and became *r*=0.409. Hence companies corporate image increases, customer loyalty will also be enhanced proportionally .The value for correlation coefficient and calculated p values are given in the table below.

Table: 9 Correlation result for Customer loyalty and corporate image

Correlations

		Sum of corporate image related factors	Sum of loyalty related factors
Sum of corporate image related factors	Pearson Correlation	1	.409*
	Sig. (2-tailed)		.038
	N	26	26
Sum of loyalty related factors	Pearson Correlation	.409*	1
	Sig. (2-tailed)	.038	
	N	26	26

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

4.6.3. Correlation result for corporate image and price

We can see on the table below that the coefficient correlation for the corporate image and price was *r*=0.763. More over the *p* value was found 0.000.From this we can deduce that there is a strong positive relationship between order handling and pricing because the calculated p value is less than the tabulated p value. This implies the company's price goes in line with the image of the company.

Table 1 Correlation result for pricing and corporate image

Correlations

		Sum of pricing related	Sum of corporate image related factors
Sum of pricing related	Pearson Correlation	1	.763**
	Sig. (2-tailed)		.000
	N	26	26
Sum of corporate image related factors	Pearson Correlation	.763**	1
	Sig. (2-tailed)	.000	
	N	26	26

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

4.7. ANOVA test

In order to see whether the effect of factors on the textile companies, the garment companies, exporters and local business vary among the factors or not, the mean of the factors were compared. Analysis of variance is a method suitable for this purpose and the results of one way ANOVA was made and presented below.

The ANOVA was done at 95% confidence interval. As it is reported in the ANOVA analysis table, p value was found to be greater than 0.05. Therefore we can say that there is no significant difference due to the five variables among garment, textile and companies who produce both garment items and fabric. However, there is significant difference on companies which are participating in local market, foreign or both markets simultaneously. The p value reported for price, product quality and corporate images are 0.013, 0.037 and 0.009 respectively. The result of the ANOVA test is presented in annex section (B and C) of the paper.

4.8. Results

Figure 2 mean values of major factors in the supply chain

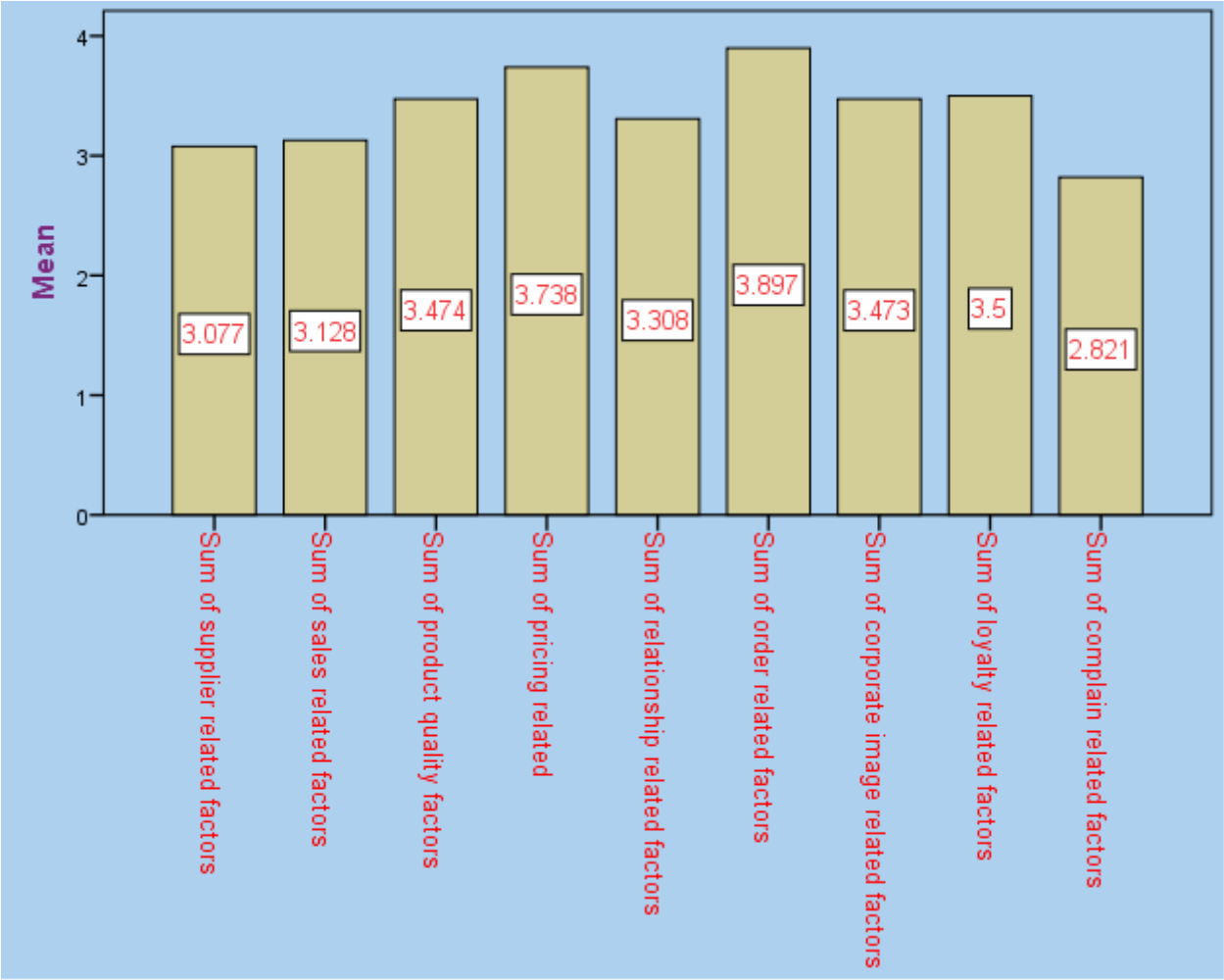


Figure 3 mean values of major factors in the supply chain

As we can see in the above graph, the most important challenge that affect channel integration is order related .This is explained by the mean score value (3.897).This implies that most of the respondents agreed that channel integration is highly affected due to order handling problems. According to one of my respondent during my interview, the major problem in the sector was power shortage. “If power interruption is common, not only the garment companies but also other members in the line cannot process the order well.” Unlike the interviewees’ comment, the result shows high employee turnover and lead time (the time a company takes to settle an order) have more impact on the company’s ability to integrate with channel members. The sector is

sensitive to high employee turnover because many of the workers in the industry are girls. These girls are not stable since they leave their mother land to Middle East countries searching for better payment. More over a slight change in their income can take them away their job. Together with this power interruption and its consequence inability to meet dead line will challenge them to be competent in the supply chain. This is because the failure in power can result in a failure to supplying the required quality of item on the promised time. Here we can look at which sub-factor has the highest share of the respondents in the following chart.

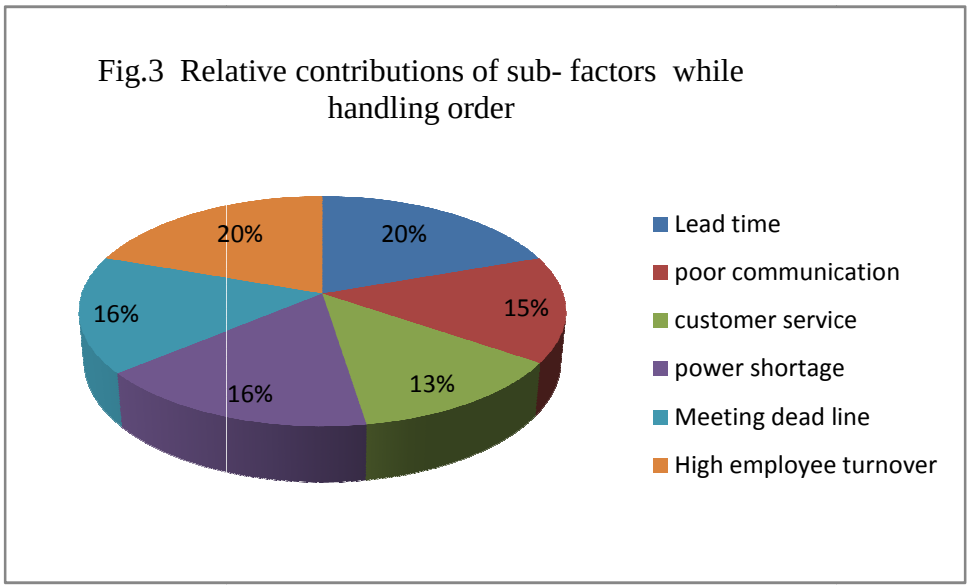


Figure 4Relative contributions of sub- factors while handling order

The second highest mean value indicates that pricing related factors are threatening the sector. The textile engineer in TIDI in his part suggested that most of the textile companies manufacture fabrics. However they would prefer to send it to the foreign market or to use it for their own consumption.

Almost all of the textile companies produce finished garment items by themselves to get the benefit of cost as a result of synergy. This by implication shows how much the power of the suppliers will be. This remark of the respondents strongly supports the survey result of pricing problem. Garment manufacturers set price on the bases of 80 % of fabric cost. The cost indicated earlier is very high; therefore, their garments price will be in problem accordingly or they will be forced to use poor quality fabric made of carded (low quality) cotton. In this case the issue of

quality(which became one of the dominant factor) fall behind. This in return will lead customers to be dissatisfied.

Thus, as it is indicated in the table customer loyalty is one of the major problems most of the respondents answered. Of course customers are not loyal for the reason mentioned above. Be it in the upper stream or in the lower stream in the channel, customers cannot be loyal so far as their quality expectations are not met.

The issue of corporate image is also highly related to customers' reaction towards the company's product or service. In the table corporate image also became one of the challenge contributing to poor channel integration.

Figure 5 Sub-factors contributing to high price on the chain

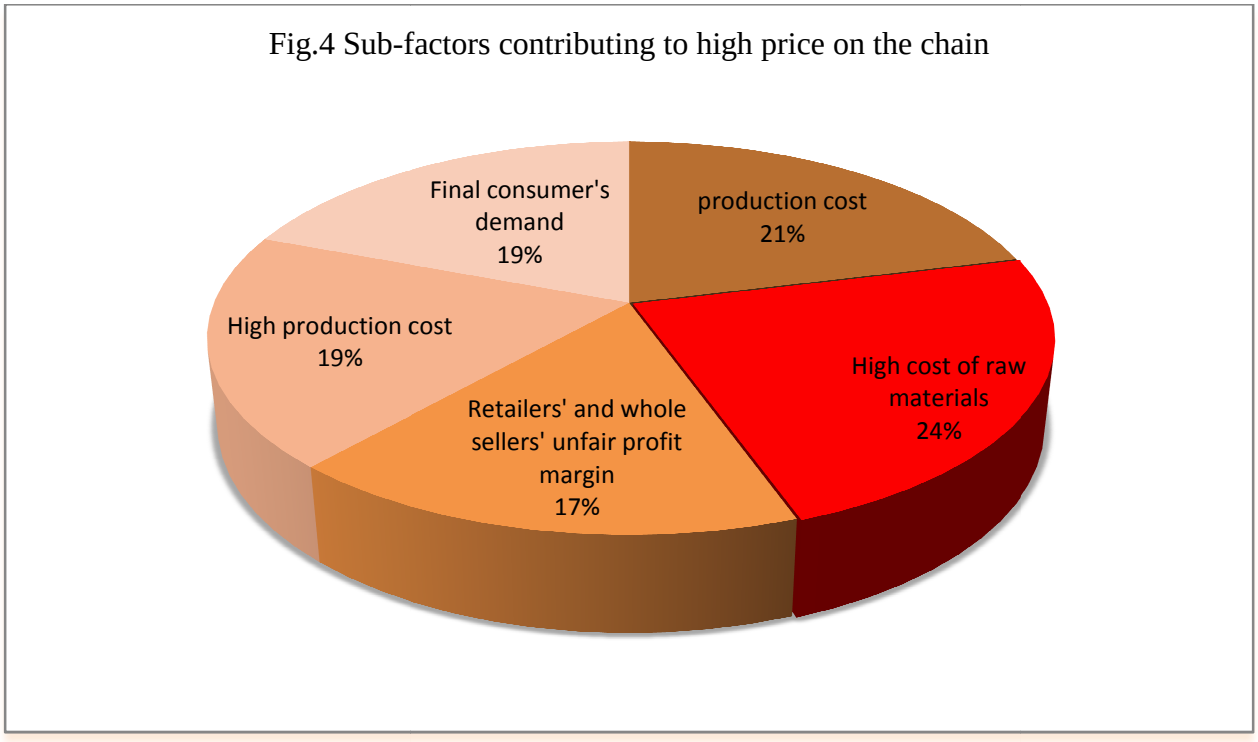


Figure 6 Sub-factors contributing to high price on the chain

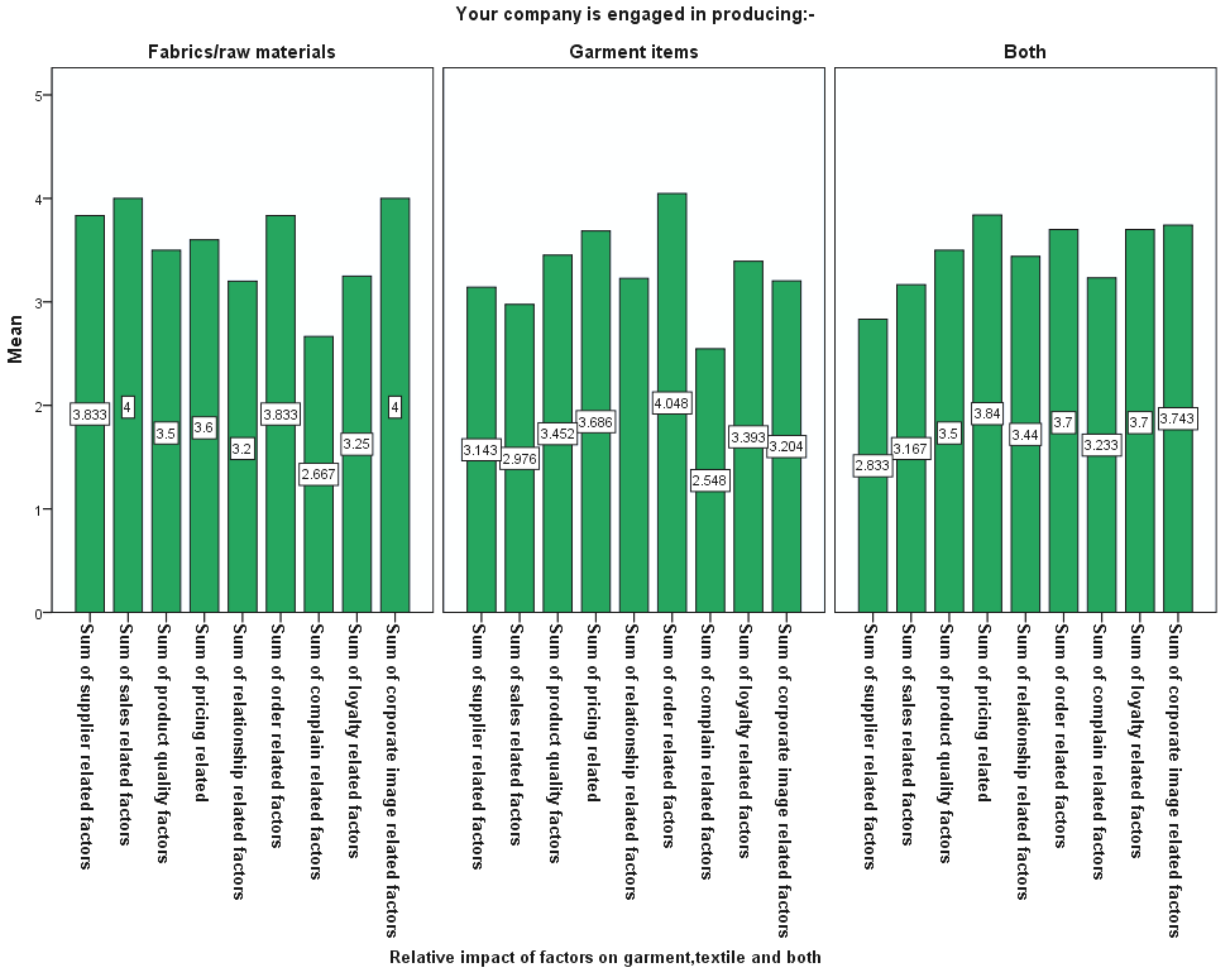


Fig. Relative impact of factors on garment, textile and integrated (both) companies

Here, we can see the relative impact of each of the factors on the channel integration. According to the response obtained from the majority of the participants, factors that are related to sales persons and corporate image with the same mean value of (4) affect textile companies (companies that produce fabric only).It is also important to note that there are suppliers (with mean value 3.83) and order handling (3.25) factors which are contributing a lot to poor integration.

Unlike textile companies, order handling with mean value of 4, plays a greater role in case of garment manufacturers. The other major factor is related to pricing. As we know most of the time in garment sector the challenge to meet customers' requirements is to get fabric with fair

price. This has also a root reason which is born from the shortage of raw cotton supply to the textile companies. One of my interviewee said that “we are challenged with the increasing price of imported cotton. This has a rubber stamp effect on the garment companies, the whole sellers and the retailers. This problem consequently goes to the final consumers as well.” She further explained that “The cotton production is incapable of satisfying the local market since the farmers use retained seeds that produce short fiber cotton. In addition to this, lack of finance for start-up and expansion of cotton firms together with undeveloped irrigation systems, made the textile companies to look for suppliers from the foreign market with additional cost.”

Again companies who are engaged in producing both garment and fabrics are similarly affected by prices of raw materials. More over corporate image and customer loyalty issues are also supported by the respondents to be among the major factors.

R.2. Among those parent- factors which are sensitive to international, local, and both business?

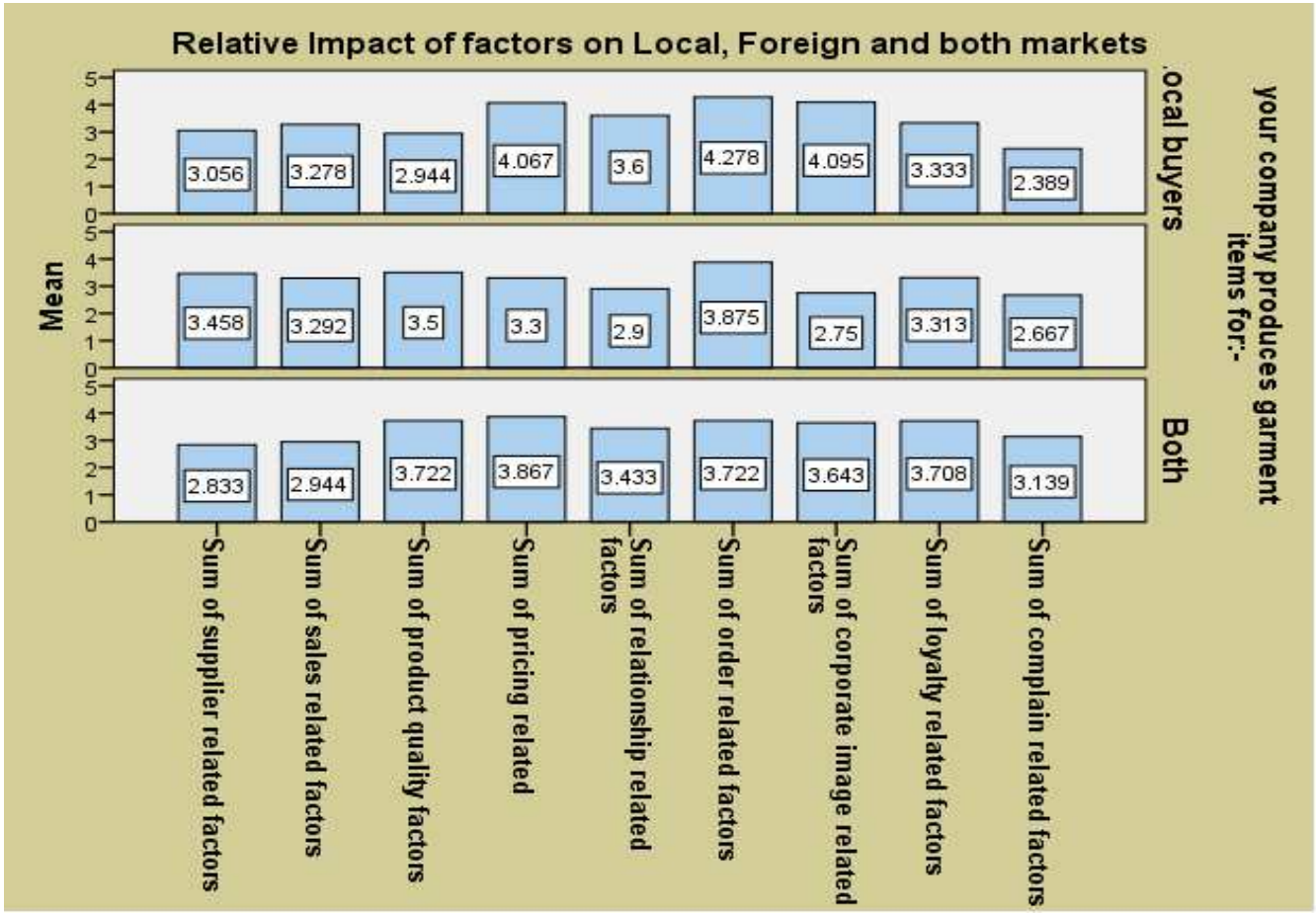


Fig.6 Relative impact of parent- factors on local, foreign and both markets.

Companies who offer their garment items to the local market are highly affected by the factors that are related to order handling (mean value 4.278) and many of the respondents also agreed that corporate image (4.095) and pricing (4.067) factors can affect their integration with other channel members. This means the companies that built good company image has more chance to enjoy benefits of channel partnerships. This idea goes in line with what my respondents from TIDI. “In our country there is no strong and enough suppliers of raw materials (accessories, chemicals, fabrics…) so that the garment companies will face problems to comply with the interest of their international buyer. That is why many of our companies engage in sub-contracting business agreement.”

Like companies who serve the local market, most of the exporting companies are affected by the problems that are associated with order handling (3.875). Suppliers related factors are also another challenge that has an important role in the development of successful interaction among the channel members.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

Under this section of the research paper summary of the findings, conclusions and recommendations are forwarded. Moreover limitations of the study and directions for the future researchers are indicated.

5.1. Summary

To summarize this research, the researcher has identified five major factors among the nine parent factors which were presented for analysis. Accordingly these factors are:-

- √ Order handling
- √ Price of products
- √ Customer loyalty
- √ Product quality and
- √ Corporate image

When we look at the relative impact of the above factors on channel members, textile (fabric producing companies) were more explained by order handling problems and corporate image.

Garments have got problem that is related to order handling like that of textile companies. However, their pricing became the major factor in their trial to cooperate with the downstream channel partners.

The other investigation made under this study was the effect of the five major factors on the exporting and local companies. The research identified that exporting companies are more affected by order handling and product quality.

Those companies who serve the local market primarily, they are not encouraged by the government. But the research further showed that order handling and corporate image became critical problems of the companies.

The five factors have strong and positive relationship among themselves. This means any action taken in one factor has an implication on the other.

The ANOVA result showed that there is significant difference among local companies, foreign companies and companies who serve both market due to price, ,product quality and corporate image.

5.2 Conclusion

For the consumption of this of study, among the various factors, the researcher took only nine factors for his analysis. These are suppliers, salespeople, relationship, corporate image, customer loyalty; complain handling, order, handling, pricing and product quality.

Among these factors, order handling, that textile companies have got a problem that is related to sales people, corporate image and order handling respectively; whereas the garment companies suffer from order handling problems. This problem was seen as a major issue since it is related to power interruption, high employee turnover rate and lead time. This was supported by almost 95% of the respondents. The other main factor shown in the analysis part was pricing. The garment companies pricing is affected by the in availability of enough suppliers. All the interviewees' answer also goes in line with this idea. This paper also attempted to identify factors which are more related to companies which serve the local market and the exporting companies.

Accordingly, companies who sell their garments to the foreign market are highly affected by order handling, product quality and supplier related factors respectively. The foreign market requires timely supply of quality garments more than those companies who serve the local market.

Similar to the exporters, companies who serve the local market also suffer from order handling and price of raw materials problems. However, the corporate images of the companies have also become a major factor for local marketers. This is because most of the exporters are using raw materials from the sub contracting companies.

From the correlation the researcher found that channel integration is affected by a number of factors but these factors are interrelated. When a company manages one factor it has to be sure that it is bringing some change on the other factor. So there is strong bondage between different variables.

5.3 Recommendations

In this study five major factors, that can potentially pull back the company's effort towards success, were identified. These are order handling, pricing, product quality, customer loyalty and corporate image. The research also showed the possible relationship that can exist among these variables through correlation analysis

From this the researcher would like to recommend that companies need to have very sharpened strategic objectives that took the development of the sector into consideration. A respondent from ETGMA mentioned that companies in this sector should not work for themselves rather they have to act like a team in the industry. This will enable the sector to attract the clothing giants like H&M and TESCO. These buyers are known for their bulk order. This cannot be handled with one or two companies. Thus every channel member should strengthen their collaboration by actively participating in the association. This is a forum where companies can get information about the overall sectoral development.

When we look at the problem of order handling, the major problems are found to be power interruption and high employee turnover. These problems need the government's commitment; however, the problem can be minimized by rescheduling their production plan and reprioritizing orders as per the urgency and strategical importance.

It is also important to use additional working hours. Motivating employees to work in a part time base, can help to compensate the time wasted due to power.

Giving incentives and training employees to cope up with the organizational objectives and visions. By making this, it could be possible to use the labor in a flexible time schedule.

From the government side, Electric and Power Corporation should work in collaboration with these companies at least by providing ample information about the seriousness of the problem.

Companies should train their employees to be multi-skilled. This will help to rotate workers to do tasks that don't require electric power like packing and other finishing tasks.

Order handling is strongly affected by high employee turnover. This is due to, the company's capacity to pay. To get relief of this bottle neck, companies should improve their production

performance. This can be done through minimizing wastage rate and lead time. This in turn, will increase the company's revenue. In such away companies can upgrade their salary scale so that company's can retain their customers.

Concerning the price issue, companies should revise their pricing strategies .Searching for competitive suppliers, can also help to lower their cost of raw materials.

Government should encourage both local and foreign investors to get in to the sector especially in the production of quality cotton, Fabric, chemicals and accessories for the entire sector.

Product quality can be assured by managing both the internal and external environment. Searching for quality raw material suppliers, organizing the company with skilled staff can be taken as a means to produce quality items.

The rest corporate image and customer loyalty can be achieved when the above suggestions are fulfilled. Most of the respondents in my interview commented similarly.

Pertaining to garment companies, they are expected to promote themselves in different trade fairs and big gatherings. They should bring their products with the company image like that of ambassador garment did consequently channels members will develop trust from both the lower stream and the upper stream. In addition to this they are expected to update the technology they are using such as production, machineries.

Product quality is one of the major problems of the exporting companies there are many reasons for this. On one hand this is related to suppliers on the other hand the company's internal performance for instance companies can take actions such as changing or fixing machineries, developing succession plan to replace the vacant position. Finally they need to have a well organized management.

5.4 Limitations of the study and directions for future researchers

This study is conducted based on the data collected from limited companies (i.e. Medium scale garment producers and textile companies which reside in Addis Ababa). As it is always disclosed by peoples in the sector, fabric cost takes 80% of the final garment item (clothes).The garment companies are the major players in the sector that serve as a bridge between the upper and lower stream participants. The researcher also used survey and interviews to collect data for his input. Finally the research tries to assess the channel integration based on only nine factors.

Therefore; other researchers can enrich this study by using other data gathering tools; like panel discussion. By including more channel members like cotton producers, accessory suppliers, financial institutions so on, it is possible to pin point challenges from each corner. Moreover, further studies can also be conducted by adding more factors which might be crucial in the sector. So that companies can be competent to support the sector in particular the nation in general.

Appendix A

Correlation result of major factors investigated in the study

		Sum of supplier related factors	Sum of sales related factors	Sum of pricing related	Sum of order related factors	Sum of corporate image related factors	Sum of loyalty related factors
Sum of supplier related factors	Pearson Correlation	1	.449*	-.308	-.390*	-.460*	-.478*
	Sig. (2-tailed)		.022	.125	.049	.018	.014
	N	26	26	26	26	26	26
Sum of sales related factors	Pearson Correlation	.449*	1	.061	-.250	-.125	.131
	Sig. (2-tailed)	.022		.767	.219	.541	.524
	N	26	26	26	26	26	26
Sum of pricing related	Pearson Correlation	-.308	.061	1	.623**	.763**	.503**
	Sig. (2-tailed)	.125	.767		.001	.000	.009
	N	26	26	26	26	26	26
Sum of order related factors	Pearson Correlation	-.390*	-.250	.623**	1	.640**	.586**
	Sig. (2-tailed)	.049	.219	.001		.000	.002
	N	26	26	26	26	26	26
Sum of corporate image related factors	Pearson Correlation	-.460*	-.125	.763**	.640**	1	.409*
	Sig. (2-tailed)	.018	.541	.000	.000		.038
	N	26	26	26	26	26	26
Sum of loyalty related factors	Pearson Correlation	-.478*	.131	.503**	.586**	.409*	1
	Sig. (2-tailed)	.014	.524	.009	.002	.038	
	N	26	26	26	26	26	26

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

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

Appendix B

ANOVA Result that shows the impact of major factors on textile, garment and both companies

		Sum of Squares	df	Mean Square	F	Sig.
Sum of product quality factors	Between Groups	.015	2	.007	.017	.983
	Within Groups	9.746	23	.424		
	Total	9.761	25			
Sum of pricing related	Between Groups	.180	2	.090	.280	.758
	Within Groups	7.401	23	.322		
	Total	7.582	25			
Sum of order related factors	Between Groups	.714	2	.357	.499	.614
	Within Groups	16.457	23	.716		
	Total	17.171	25			
Sum of corporate image related factors	Between Groups	2.296	2	1.148	1.475	.250
	Within Groups	17.899	23	.778		
	Total	20.195	25			
Sum of loyalty related factors	Between Groups	.686	2	.343	.667	.523
	Within Groups	11.814	23	.514		
	Total	12.500	25			

Appendix C

ANOVA result for companies that serve the foreign market , the local markrt and both local and foreign markets

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Sum of product quality factors	Between Groups	2.427	2	1.214	3.807	.037
	Within Groups	7.333	23	.319		
	Total	9.761	25			
Sum of pricing related	Between Groups	2.382	2	1.191	5.267	.013
	Within Groups	5.200	23	.226		
	Total	7.582	25			
Sum of order related factors	Between Groups	1.240	2	.620	.895	.422
	Within Groups	15.931	23	.693		
	Total	17.171	25			
Sum of corporate image related factors	Between Groups	6.851	2	3.426	5.905	.009
	Within Groups	13.344	23	.580		
	Total	20.195	25			
Sum of loyalty related factors	Between Groups	.969	2	.484	.966	.395
	Within Groups	11.531	23	.501		
	Total	12.500	25			

Appendix D

The garment and textile sector general information

Cotton farming area (large)	ca. 30,000 ha (40% SOEs)
Cotton farming area (smallholders	ca. 40,000 ha
Annual cotton production	44,000 tones of lint cotton
Commercial cotton yield	2,140 kg/ha
Smallholder cotton yield	800 kg/ha
Ginning capacity	200,000–210,000 tones (40% utilization)
Textile production capacity	44 million SME1 (25% utilization)
No. of spinning plants	8 operational (3 in project phase)
Daily output (of the above)	75,000 kg/day
No. of weaving and	7 (with a total of 534 shuttle looms
processing plants and	904 looms without shuttles)
Daily output (of the above)	265,000 linear meters of cotton and cotton blends/day
No. of knitting machines	84
Daily output (of the above)	60,000 kg/day (single jersey and rib)
No. of garment factories	50
No. of vertically integrated factories	7 operational (2 in project phase)
Major products of Current:	T-shirts, sportswear shirts, bed sheets garment industry
Planned	casual wear and underwear
Types of business	CM, CMT, FOB
Export turnover	$14.6 million USD, in 2007/08
AGOA fill rate	0.1% of eligible level
Employment (formal sector)	ca. 35,000

Source: (Enterprise map of Ethiopia, 2011)

APPENDIX E

INTERVIEW GUIDELINE

1. What are the common challenges that discourage channel integration?
2. Are suppliers welcoming to accept comments?
3. Is there a system developed by the channel members so as to promote smooth communication flow?
4. What should be done to satisfy the local market demand?
5. Can your Consumers get garments in ample variety?
6. Are there enough suppliers of raw materials that offer inputs for each subsequent channel members' requirement?
7. Do you think corporate image is affected as a result of poor integration in the supply chain?
8. Is your company image well communicated to your final consumers?
9. What do companies do to control the smooth flow of price along the subsequent channel members?
10. Do you offer varied price option for one product type?
11. Do companies along the supply chain have strong relationship with suppliers?
12. Do members along the supply chain have common goals to meet customers' expectation?
13. What technical services are offered among the supply chain members?
14. What should be done to improve the integration of channel members?
15. What are the sources of information which enables channel members to make quick decision?
16. Which factors are critical to satisfy foreign Buyers?

Appendix F

Questionnaire

Addis Ababa University School of Commerce
Department of Marketing Management
Postgraduate Program

Dear Participants,

My name is **Daniel Thomas**. I am conducting a research entitled "**The assessment major factors along the supply chain that affect integration in Ethiopian garment sector**" for the partial fulfillment of the requirements of my Masters Degree in Marketing Management.

Since you are the main actor in this business, I kindly request you to share me your valuable time in filling the questionnaire. Finally, all your answers will be treated with confidentiality and be used for academic purpose only.

Please write your e-mail through which you would like to be communicated so that, you can get the copy of the final output from the researcher.

For further information don't hesitate to contact me through the following addresses.

Mob.0911 78 30 27/0913034627

E-mail dan_thom20@yahoo.com

Thank you in advance for your keen cooperation!

Please show your answer by putting a tick mark (√) in the box provided before each alternative. Please don't write your name in any of these pages

General information

1. Age 18-29 ☐ 30-39 ☐ 40-60 ☐ above 60 years ☐
2. Sex Female ☐ Male ☐
3. Lastly achieved academic status:-

   a. Diploma ☐ First degree ☐ Second degree ☐ Above second degree ☐
4. Your current position :- Investor ☐ General Manager ☐ Marketing manager

   Commercial manager ☐ Sales person ☐ Other ☐
5. Your company is engaged in producing :-

   Fabrics (raw materials) ☐ Garment items ☐ Both ☐
6. Your service year in the garment and textile sector

   Below 3years ☐ 5-10years ☐ 11-20years ☐ Above 20 years ☐
7. Your company produces garment items for:-

   Local buyers ☐ Foreign customer ☐ Both ☐

Please show your level of agreement by putting a thick mark in the boxes below based on the following information.

No	Possible factors that affect integration of channel members	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
8	**Suppliers related**					
	Suppliers offer inputs with the required quantity					
	Our company gets raw materials on time					
	Suppliers have minimum order quantity/MOQ/					
	Suppliers ' staffs are well coordinated at each level in the chain					
	Your company fulfills the minimum order quantity of our suppliers					
	suppliers location is closer to the garment Company					
9	**Sales people related**					
	Sales people take an organized record of customers					
	Sales people have enough knowledge about their products					
	Sales people have excellent interpersonal skills					
	Sales people have good knowledge of the market					
	Sales people have good managerial skills					
	Sales people are well motivated to work with suppliers					
10	**Which are the factors that affect product quality?**					
	low quality awareness of employees					
	Old machineries					
	Lack of top management commitment					
	Inadequate training of workers					
	Lack of employee's commitment					
11	**Factors that affect your pricing**					
	Production performance					
	High cost of raw materials					
	Retailers' and whole sellers' unfair profit					
	High production cost					
	Final consumers' demand					
12	**Relationship in the value chain is affected by:-**					
	delayed delivery					
	Organizational objectives					
	Poor quality raw materials					
	Poor communication systems					
	Limited order quantity					
13	**Order handling is affected by**					

	lead time					
	Poor communication					
	customer service					
	Power shortage					
	meeting deadline					
14	**Corporate image is affected by:-**					
	Delayed supply					
	defective raw materials					
	cost of the raw materials					
	Shortage of raw materials					
	Supplier's image					
	Consistency of supply					
	Poor performance of employees					
15	**Factors that affect customer loyalty**					
	Reliable information					
	Quality of sales people					
	product quality					
	Pricing					
16	**Which *complain* comes to your company frequently?**					
	Color variation					
	Stitching					
	Delayed delivery|					
	Design					
	Delayed communication					
	Poor product information					
If you have comment ……..……..…… ……..						

Note: Raw material in this questionnaire includes fabrics, threads, trims, accessories, chemicals and any other things that helps you to makes your final product complete.

Thank you again!