

# **Effective Supply Chain in Ready Made Garments in Bangladesh: A Study on Alfa Fashion**

Dissertation submitted in partial fulfillment of the  
requirements for the Degree of  
Masters in Procurement and Supply Management

Submitted by  
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**BRAC Institute of Governance and Development,  
BRAC University**

**Effective Supply Chain in Ready Made Garments in  
Bangladesh: A Study on Alfa Fashion**

# Letter of Transmittal

Date: 28 February, 2017

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## **Subject: Submission of Dissertation**

Dear Sir,

With great gratification I am submitting my dissertation on “**Effective Supply Chain in Ready Made Garments in Bangladesh: A Study on Alfa Fashion**” that you have assigned me as an essential requirement of thesis program. It is really an enormous prospect for me to congregate vast information and grasp the subject matter in an appropriate way. I have found the study is quite interesting, beneficial & insightful and tried my level best to prepare an effective & creditable thesis.

I honestly, not only anticipate that my analysis will assist to provide a clear idea about the overall condition of “**Effective Supply Chain in Ready Made Garments in Bangladesh: A Study on Alfa Fashion**”, but also optimistic enough to believe that you will find this thesis worth for all the labor I have put in it. I welcome your entire query & take pride to answer them.

Yours Sincerely

---

**Muhammad Taslim Rahman**

ID # 15182007

## **CERTIFICATION**

The dissertation affiliation entitled “**Effective Supply Chain in Ready Made Garments in Bangladesh: A Study on Alfa Fashion**” has been submitted to the Office of Placement & Alumni, in partial fulfillment of the requirements for the degree of Master in Procurement and Supply Management on **28 February, 2016** by **Name: Muhammad Taslim Rahman, Id: 15182007**. The thesis has been accepted and may be presented to the thesis Committee for evaluation.

(Any opinions, suggestions made in this report are entirely that of the author of the report. The University does not condone nor reject any of these opinions or suggestions).

---

**Md. Hasan Maskud Chowdhury**  
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**Dissertation Supervisor**

## **Student Statement**

I have read the University' Plagiarism Policy and I understand the consequences of a breach of this policy.

I verify that other person's work contained herein is fully referenced and properly attributed.

Students Signature..... Date.....

## **Acknowledgement**

At the very beginning, I would like to express my deepest gratitude to the almighty Allah for giving me the strength and the ability to finish the task within the scheduled time.

I am deeply indebted to my Dissertation Supervisor Md.Hasan Maksud Chowdhury, assistant Professor, BRAC University for his whole-hearted supervision during the assigned period. His valuable suggestions and guidance helped me a lot to prepare the report in a well-organized manner.

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.

Thanks to them for helping me with the relevant information about Effective Supply Chain in Alfa Fashion that I needed to prepare this report. Moreover, I would like to thanks all the workers of Alpha Fashion for providing me necessary support whenever required. Without their contribution, it would not have been possible for me to conduct this project work.

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# Acronyms and Abbreviations

RMG	Ready Made Garments
SCM	Supply Chain Management
EDI	Electronic Data Interchange
WWW	World Wide Web
L/C	Letter of Credit
CSR	Corporate Social Responsibility
SCOR	Supply Chain Operations Reference
GSCF	Global Supply Chain Forum

## **Executive Summary**

A key indicator of economic development in third world developing countries like Bangladesh is garments industry. Garments play a major role for the developing countries, by improving the GDP. The Alfa Fashion is one of the major garments manufacturing organization in Bangladesh. A supply chain is a network of facilities that procure raw materials, transform them into intermediate goods and then final products and deliver the products to customers through a distribution system. This report tried to give a snap-shot of theoretical framework of supply chain, company overview, SWOT analysis of Alfa Fashion and tried to cover supply chain effectiveness of Alfa Fashion. This study selected 40 respondents for the research as sample size and used Likert's scaling technique to collect response from the respondents and personal interviewing method was used to get response from respondents. After collecting data some statistical methods were used in order to analyze the data. After analyzing the data, some findings are generated and enlisted some recommendations on the basis of these findings. If the authority of Alfa Fashion takes proper steps to improve these findings then they are able to build splendid relationship with their customers.

# **CHAPTER 01: INTRODUCTION**

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## 1.1 Introduction

RMG (Ready Made Garments) is very important and helpful for our Bangladesh. Bangladesh has emerged as a key player in RMG sector since 1978. Textiles and clothing account for about 85% of total export earnings of Bangladesh. Out of which, 75% comes from the apparel sector which covers the major products of knit and woven shirts, blouses, trousers, skirts, shorts, jackets, sweaters, sports wears and many more casual and fashion items. The sector currently employs approximately 1.5+ million workers, mostly females from underprivileged social classes.(Bangladeshi RMG sector,Wikipedia)

In today's world of globalization many apparel manufacturers are building strong supply chains to gain advantage over their competitors by offering the best value to their customers. The objectives of the supply chain and the performance measurements need to be understood in order to build the most effective supply chain. Performance measurement provides an approach to identify the success and potential of supply chain management strategies. One major aspect of the supply chain management is to select the right sources of supply in the global business environment that can support corporate strategy. Contrary to the conventional adversarial relationships, effective supply chain management in the new competition suggests seeking close relationships in the long term with less number of partners.

Alfa Fashion is incorporated with Garments, Textile business in Bangladesh. It is performing well since its birth. The report mainly focuses on supply chain effectiveness of the Alfa Fashion in different supply chain area such as merchandising, production, commercial and distribution and quality control department. Here extensive analysis of the supply chain performances in different area is highlighted in details. A snap shot of all functional areas are shown simply to give an idea about the Alfa Fashion. It also covers the SWOT analysis of Alfa Fashion. Moreover, all the functional areas are intensely related with the supply chain department because all creates value for the satisfied customers.

Finally, the analysis, findings and recommendations will be helpful for the organization to effectively utilize the benefit of supply chain management and increase the efficiency and

effectiveness of their current operations. By using these tools enable the garment industries as well as Alfa Fashion to greatly increase its profitability because it is able to match supply and demand in a much more coordinated fashion.

## **1.2 Objectives of the report**

The main objective of the study is to reveal effective supply chain in garments industry.

There are some specific objectives of the study such as:

- To know detail about RMG sector.
- Getting idea about supply chain procedure.
- To find the current scenario of backward supply chain status of Alfa Fashion.
- To define the nature of supply chain management and give real examples of its application in manufacturing and service industries.
- Achieving a realistic idea that how the system working in Alfa Fashion.
- To find the ways of improving the backward linkage of the supply chain for Alfa Fashion.
- To identify the factors related to supply chain effectiveness.
- To know about the different supply chain areas of Alfa Fashion.



### **1.3 Problem Statement**

Under this report, the researcher has worked on the “Effective Supply Chain in Ready Made Garments in Bangladesh: A Study on Alfa Fashion”. The researcher tries to measure the supply chain effectiveness of the Alfa Fashion in different supply chain areas and also finds out how much those are effective or ineffective. Hence, researcher conducts a research on 40 samples and collect data through personal interview and questionnaire. After collecting data, researcher analyzed those data and generates some findings. At last, some effective recommendations are provided for the improvement of those ineffective findings.

### **1.4 Literature Review**

Supply chain management (SCM) is an approach that has evolved out of the integration of various considerations. SCM is defined as the integration of key business processes from end user through original suppliers that provide products, services, and information and hence add value for customers and other stakeholders (Lambert et al., 1998). The concepts of supply chain design and management have become a popular business paradigm in these days. This has intensified with the development of information and communication technologies that include electronic data interchange (EDI), the Internet and World Wide Web (WWW) to overcome the ever-increasing complexity of the systems driving buyer-supplier relationships. The complexity of SCM has also forced companies to improve online network communication systems.

Supply chain management emphasizes the overall and long-term benefit of all parties on the chain through co-operation and information sharing. This signifies the importance of communication and the application of IT in SCM. Information sharing between members of a supply chain using EDI technology should be increased to reduce uncertainty and enhance shipment performance of suppliers and greatly improve the performance of the supply chain system (Srinivasan et al., 2001).

A supply chain is a network of facilities that procure raw materials, transform them into intermediate goods and then final products, and deliver the products to customers through a

distribution system' (Lee & Billington, 1995). The basic objective of supply chain is to “optimize performance of the chain to add as much value as possible for the least cost possible”. In other words, it aims to link all the supply chain agents to jointly cooperate within the firm as a way to maximize productivity in the supply chain and deliver the most benefits to all related parties (Finch 2006).

Supply chain effectiveness is defined as an external standard “of how well an organization is meeting the demands of the various groups and organizations that are concerned with its activities through its supply chain” (Pfeffer and Salancik 1978) which approximately is a construct “for doing the right things” or having validity of outcome (Hines et al. 2000). A conceptualization of effectiveness as use value is interesting to highlight that how well as well as demands in the above definition is vague.

Håkansson and Prenkert (2004) seem to refer use value to evaluation of the network’s utilization of resources. In resource dependence perspective is effectiveness seen as an independent measure for evaluating organizations. Meeting demands of various evaluators means that conflicting as well as compatible demands are prevalent. Pfeffer and Salancik (2003) foresee conflict when one stakeholder’s demand constraints other stakeholder’s demand, which is the case for the supply chain actors. Conflict but also co-operation gives “lessons learnt” in one exchange process that is leveraged in other exchange processes. Suppliers are effective if they deliver what is asked for, no matter if they are bound to fill their warehouses to manage, i.e. if they manage the task inefficiently. In supply chain management effectiveness is equalized with supply chains’ flexibility and agility to customer demand. Ineffective supply chains are loosely integrated with poor management of existing interdependencies. Even though different researchers give different categories of the processes involved in a supply chain, these processes are somewhat functionally independent and quite similar in that sense.

Strader et al. (1999) referred to the underlying business processes as mechanisms and included these processes in a complete supply chain which directly and indirectly impact on effectiveness of supply chain:

- Forecasting demand based on information such as market research,
- Placing and receiving customer orders,
- Managing inventory,
- Planning production,
- Communicating between supply chain partners and
- Managing distribution (shipping).

### **1.5 Limitation of the Study**

To complete the study faced some problems, which can be termed as the limitation/constraints of the study. This study was conducted only one garments of Bangladesh. So result may vary if survey conducted in long range. One of the limitations is getting relevant papers and documents were strictly prohibited. Getting and acquaint information was very restricted. Information gathering sources were few. To meet with top management was too difficult. The company could not offer adequate information to have an intensive idea about their business. The institute doesn't provide proper financial and other facilities to continue study. Most of the officials are too busy to provide sufficient time. They were very much reluctant to show all the documents. There was time limitation for this research project. That made difficult to get all information. There are so many analysis of various sectors of SCM( Supply Chain Management) have been performed and enlisted as effective or ineffective but ultimate solutions of the current problems of the Alfa fashion has not been enlisted precisely because of those limitations. This is the main gap between the literature review and the ongoing study. Though there were so many limitations the report was delivered properly.

## **CHAPTER 02: METHODOLOGY**

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## **2.1 Research Type**

Qualitative research method has been used in this study.

## **2.2 Sources of Data**

**Primary Data:** Data originally collected for an investigation are known as primary data. Such data are original in character and are generated in large number of surveys by some individual institutions. **Secondary Data:** The data, which are collected for some earlier research work and are applicable or useable in the study. The secondary data can be divided into two types. Such as-

(I) Internal Secondary Data

(II) External Secondary Data

Secondary data are obtained by visiting competition offices and is the report of the company. Both primary and secondary sources of data were explored for the study.

Most of the information are collected either from the internal sources of the firm or from external sources.

During the project period, researcher has taken help mainly from primary data which has been collected through questionnaire and conducting different survey like interview method, observation method, and questionnaire method.

### **Primary Sources:**

- Relevant document studies as provided by the officers concerned.
- Observation of various departments.
- Interview of Alfa Fashion authority.

## **Secondary Sources:**

- Annual report of Alfa Fashion.
- Brief of Alfa Fashion chief officers and staff.
- Various published documents in newspaper, journal, electronic media etc.

### **2.3 Scaling Technique**

Among different scaling techniques in this study chose Likert scale to collect data from the respondents. Typically, each scale item has five response categories, ranging from “strongly disagree” to “strongly agree.”

Strongly Agree =5

Agree =4

Neutral =3

Disagree =2

Strongly Disagree =1

### **2.4 Questionnaire Development and Pretesting**

For an easy understanding and reading, the questionnaire was designed based on two types of information, one is customer information, another covers the information about different supply chain areas of Alfa Fashion. Then, Likert scaling technique is used to rate the response of respondents: 1. Strongly Disagree, 2. Disagree, 3. Neutral, 4. Agree and 5. Strongly Agree. After the questionnaire development, test the questionnaire on a small sample of respondents within the Alfa Fashion in order to identify and eliminate potential problem.

### **2.5 Sampling Information**

Samples are collected from the institutional clients of the company. Most of the sample size age between 25 to 55. Here, the samples had been picked up on a judgmental basis. For the organization part, much information had been collected from different published articles, journals, brochures and web sites. All the information incorporated in this report has been collected both from the primary sources and as well as from the secondary sources. The basic

information is collected from the customer of the garments product by this the information are get very strong because the data is raw and it will be collected from those people those are continuously taking the garments products on the regular basis.

## **2.6 Sampling Plan**

### **2.6.1 Target Group**

In this study target group includes senior merchandisers, assistant merchandisers, trainee merchandisers, production executives, commercial executives, quality controllers and suppliers of Alfa Fashion.

### **2.6.2 Sampling and Sampling Unit**

There have 40 persons been chosen randomly for interview. Sampling unit consists of 2 senior merchandisers, 10 Assistant merchandisers, 13 trainee merchandisers, 3 production executives, 2 commercial executives, 6 quality controllers and 4 suppliers.

### **2.6.3 Sampling Technique**

This descriptive study covers the sample of 40 respondents. The pool of respondents consists of senior merchandisers, assistant merchandisers, trainee merchandisers, quality controllers, commercial officers and suppliers of Alfa Fashion. Non-probability convenience sampling technique is used to select the sample.

## **2.7 Data Analysis Techniques**

The raw collected data were stored in the computer for quick retrieval. The data were analyzed by using the MS Excel and sometimes graphically represent by using MS Word.

## **CHAPTER 03: COMPANY PROFILE**

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### **3.1 Profile of the Organization**

#### **Alfa Fashion**

Registered Office: House 25, Road 02,  
Sector 11, Uttara-1230, Dhaka Bangladesh.  
Factory: Gazipur.

In the business world today no major player in apparel industry can ignore capability of Bangladesh in offering qualitative and valuable products. Alfa Fashion has the capability of providing a bridge between overseas customers/buyers and local manufacturers in Bangladesh to ensure quality, services, timely deliveries and adherence to buyer's quality standards. In today's world the key to success of any buyer is to identify the country to source the right product at right price. This is where the company is step in to cater the buyer needs regarding communication, quality and most of all timely delivery. ([www.alfafashionbd.com](http://www.alfafashionbd.com))

### **3.2 Historical Background**

Alfa Fashion is a large garments industry in and it has a very good reputation. Alfa Fashion started its journey in garment industry in 2002 with the apparel business. Alfa Fashion is a 100% export oriented readymade garments industry. The company is constantly providing customers across the world with garment sourcing solution, with manufacturing facilities. Bangladesh entered in readymade garments business in early 1980s. At that time there were very few local entrepreneurs who knew the business. Mainly the foreign entrepreneurs directly operated their business for the cheap labor. But during late 1980s and early 1990s the scenario of garment sector of Bangladesh started changing. Local expert and entrepreneurs started experiencing the knowledge of the business. Alfa Fashion tried to cope up with this situation and tried to play a major role in garments and textile industries.

Alfa Fashion does its business mostly with Canada, Spain, UK, France and Poland. Its basic products are divided by three category followed by the year basis like summer, autumn and winter. Under this category three part which is knit, woven and sweater. For these instance each part divided by three another part which is men, women and kids. Alfa Fashion does its banking activities with Standard Chartered Bank. All kind of Master L/C (letter of credit) and

back to back L/C are opened with Standard Chartered Bank. Alfa Fashion gives importance to product quality to achieve more market report. Also it gives importance to achieve more quantity to maximize its profit. Now this company has become very renown in the field of garment factory because of its positive approach from the very beginning along with the garment activities. The company has a dynamic management team to control the overall operation and under their leadership its strong workforce (designers, merchandisers, quality controllers, technicians, compliance and supports service team members) focus on each customer to professionally manage the entire supply chain to product design and development, through raw material and factory sourcing, production planning and management, quality assurance and export documentation and distribution to customers' warehouses worldwide.(other reports of Alfa Fashion)

### **3.3 Vision, Mission, Values and Objectives**

#### **3.3.1 Vision**

Earning foreign currency through exporting and serving the clients successfully with expertise and experiences of production capacity, and participating in the economic growth of the country.

#### **3.3.2 Mission**

Alfa Fashion is committed to maintain discipline, punctuality and quality products at reasonable price and ensure quality service. Their focus is on the customer needs and satisfaction. They always maintain delivery schedule according to buyer's requirement.

They are committed,

- **To our customers:** Total satisfaction through providing on-time delivery of quality products and services.
- **To our employees:** Good work environment & compliance with national and international rules.
- **To our society:** Creation of a better tomorrow.

#### **3.3.3 Values**

- Customer satisfaction
- Commitment
- Integrity
- Fairness
- Innovation
- Environment

### **3.3.4 Objectives**

To strive hard to optimize profit through conduction of transparent business operations within the legal & social framework with malice to none and justice for all in respective of gender disparity, caste, creed or religion or region.

- To Increase productivity.
- To create more jobs with minimum investments.
- To be competitive in the internal as well as external markets.
- To maximize export earning with minimum imported in-puts.
- To reduce the income gap between top & bottom categories of employees.
- To promote corporate social responsibilities (CSR) amongst all.

### **3.4 Corporate Focus**

Our vision is the polestar to our mission that fulfils our objectives with emphasis on the quality of product, process and services blended with good governance that help build the image of the most venerable corporate citizenship at home and abroad.

### **3.5 Company Culture**

The focus at Alfa fashion is pretty simple: customers, creativity, doing what's right, and delivering results. Together, we call it "wearing your passion." And it's the perfect match for the kind of people we attract — as both employees and customers.

#### **Think: Customer First**

We make decisions with our customers in mind. We connect with our stores and create the quality our customers' value and expect.(Annual report of Alfa Fashion)

#### **Inspire: Creativity**

We think big, take risks and solve problems. We challenge the status quo and always look for new ideas and ways of working.

### **Do: What's Right?**

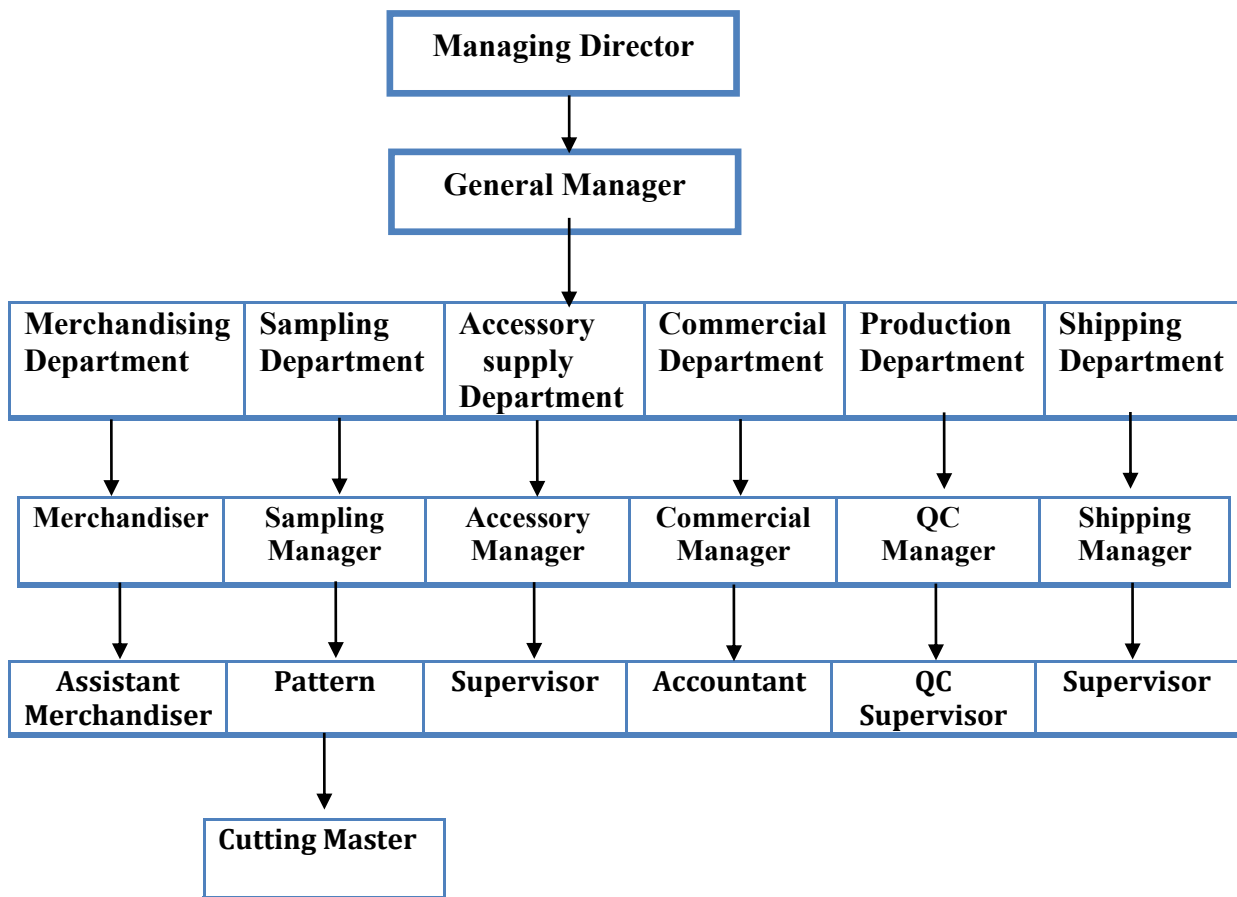
We believe that how we do business is as important as what we do. We act with integrity, and we give back to the communities in which we do business.

### **Deliver: Result**

We deliver the best result possible – we're committed to taking responsibility, setting priorities and meeting our goals.

(Annual report of Alfa Fashion)

### **3.6 Organization Chart**



### 3.7 Number of Employees Total 1440 Persons

No.	Details	Persons	
1	Professional administrative officer	40	
2	Clinical sales and related officer	30	
3	Factory employee, cutting section	40	
4	Sewing section	1200	
5	Checking section	80	
6	Finishing section	50	
	Total	1440	

### 3.8 Employee Safety, Health & Hygiene System

Strictly maintaining safety, health and hygiene provisions as per ILO's and Bangladesh labor law's rules and regulation, the following facilities are available for employee safety, health and hygiene.

- Free medical services
- Proper first aid box
- Enough fire extinguisher
- Trained fire fighting team
- Training program for fire fighting

### 3.9 Office Equipment and Machine

#### 3.9.1 Cutting Section

No.	Name	Details
01	Cutting Table	22 Nos. (L 201.90 ft. x W 27 ft)
02	Cutting Machine	40 Nos.
03	Band Knife Machine	15 Nos.
04	Pattern & Marker done by computerized Garber Technology	10 nos.

#### 3.9.2 Sample Section

No.	Name	Details
01	Plain Machine (Brother & Juki)	15 Nos.
02	Over Lock Machine (Pegasus)	15 Nos.
03	Flat Lock Machine (Pegasus)	12 Nos.
04	Embroidery Machine	10 nos.

### 3.9.3 Sewing Section (Woven & Knit)

No.	Name	Details
01	Plain Machine (Brother & Juki )	321 Nos.
02	Double Needle ( Brother & Juki )	34 Nos.
03	Flat Lock ( Brother & Juki )	21 Nos.
04	Kansai Special P.M.D ( Brother & Juki )	03 Nos.
5	Kansai Flat Lock Machine	07 Nos.
6	Over Lock (Brother & Juki)	80 Nos.
7	Iron Table	18 Nos.
8	Inspection Table	25 Nos.
9	Marking Table	24 Nos.
10	Piping Machine	02 Nos.
11	Jig Jug Machine	05 Nos.
12	Eye Let Button Hole Machine	01 Nos.

### 3.9.4 Finishing Section

No.	Name	Details
01	Button Stitch Machine	08 Nos.
02	Snap Button Machine	08 Nos.
03	YKK Button Attach Machine	06 Nos.
04	Bar Tack Machine	07 Nos.
	Bar Tack Machine	07 Nos.
5	Thinner Spray Gun Machine	10 Nos.
6	Button Hole Machine	10 Nos.

### 3.9.5 Others Equipment

No.	Name	Details
01	Personal Computer	23 Nos.
02	Printer	08 Nos.
03	Server	01 Nos (Dedicated )
04	Photocopier Machine	02 Nos
5	PABX System	32 Ext
6	Air Conditioner	08 Nos.



### 3.10 Products and Services

#### 3.10.1 Ready Made Garments

- Sleepwear
- Kids' Wear
- Casual Knitwear
- Fashion Wear
- Formal and Casual Shirts

#### 3.10.2 Apparels

<b>MEN'S</b>	<b>WOMEN'S</b>	<b>KID'S</b>
T- Shirt	T-Shirt	Polo
Polo Shirt	Tank Top	T-Shirt
Hoody	Vest	Sweat Shirt
Jacket	Jacket	Pants
Granddads Tee	Dresses	Rugby Shirt
Vest	Leggings	Oceation ware
Shorts	Ladies Dress	Shirt with vest
Joggers	Ladies Blouse	
Henley	Ladies Shirt	
Men's Shirt	Sleeping Dress	
Dress Shirt	Pajama	
Formal Shirt	Skirt	
	Fashion Shirt	

### 3.10.3 Fabrics

Single Jersey Fabric	Terry Fleece Fabric	Birds Eye Fabric
Lycra Single Jersey Fabric	Lycra Terry Fleece Fabric	Jersey Mesh Fabric
Single Lacoste Fabric	Fleece Fabric	Jersey Fleece Fabric
Lycra Single Lacoste Fabric	Lycra Fleece Fabric	1x1 Rib Fabric
Double Lacoste Fabric	Heavy Jersey Fabric	Lycra 1x1 Rib Fabric
Lycra Double Lacoste Fabric	Double Knit Fabric	2x2 Rib Fabric
Pique Fabric	Herringbone Fabric	Lycra 2x2 Rib Fabric
Lycra Pique Fabric	Jumbo Pique Fabric	5x2 Rib Fabric
Flat Back Rib Fabric	Lycra Interlock Fabric	Engineering Stripe (Single Jersey, Rib, Interlock Fabric)
Waffle Fabric	Drop Needle Interlock	
Jack Rib Fabric	Punto De Roma Fabric	Engineering Stripe (Lycra Single Jersey, Lycra Rib, Lycra Interlock Fabric)
Interlock Fabric	Mesh Fabric	

### 3.11 Running Customer

No.	Name	Details
01	JIB-TEX	Netherlands
02	HALF MOON	Germany
03	HTH	Netherlands
04	KIDS HEAD QUARTER'S	U.S.A
05	CAD	France
06	Angina Tex, Primark	U.K
07	Annex	Belgium
08	Blackout	Switzerland
09	LPP-Group	Poland

## **CHAPTER 04: CONCEPTUAL FRAMEWORK**

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## 4.1 Supply Chain

A supply chain is a system of organizations, people, technology, activities, information and resources involved in moving a product or service from supplier to customer. Supply chain activities transform natural resources, raw materials and components into a finished product that is delivered to the end customer. In sophisticated supply chain systems, used products may re-enter the supply chain at any point where residual value is recyclable. (Designing and managing the supply chain by David Simechi-Levi)

The concept of supply chain management is based on two core ideas.

- The first is that practically every product that reaches an end user represents the combined effort of multiple organizations. These organizations are referred to collectively as the supply chain.
- The second idea is few businesses understood, much less managed, the entire chain of activities that ultimately delivered products to the final customer. The result was disjointed and often ineffective supply chains. (Logistics and supply chain management by Martin Christopher)

Supply chain management, then, is the active management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage. It represents a conscious effort by the supply chain firms to develop and run supply chains in the most effective and efficient ways possible. Supply chain activities cover everything from product development, sourcing, production, and logistics, as well as the information systems needed to coordinate these activities. (Operation management – strategy and analysis by Ritzman, 6<sup>th</sup> edition)

The organizations that make up the supply chain are “linked” together through physical flows and information flows. Physical flows involve the transformation, movement, and storage of goods and materials. Information flows allow the various supply chain partners to coordinate their long-term plans, and to control the day-to-day flow of goods and material up and down the supply chain. A typical supply chain may involve a variety of stages. These supply chain stages includes:

- Customers
- Retailers
- Wholesalers & Distributors
- Manufacturers
- Component & Raw material suppliers

#### **4.2 Activities of Supply Chain Management**

Supply chain management is a cross-functional approach to manage the movement of raw materials into an organization, certain aspects of the internal processing of materials into finished goods, and then the movement of finished goods out of the organization toward the end-consumer. As organizations strive to focus on core competencies and becoming more flexible, they have reduced their ownership of raw materials sources and distribution channels. These functions are increasingly being outsourced to other entities that can perform the activities better or more cost effectively. The effect has been to increase the number of organizations involved in satisfying customer demand, while reducing management control of daily logistics operations. Less control and more supply chain partners led to the creation of supply chain management concepts. The purpose of supply chain management is to improve trust and collaboration among supply chain partners, thus improving inventory visibility and improving inventory velocity. Several models have been proposed for understanding the activities required to manage material movements across organizational and functional boundaries. SCOR (Supply Chain Operations Reference Model) is a supply chain management (SCM) model promoted by the Supply Chain Management Council. Another model is the SCM Model proposed by the Global Supply Chain Forum (GSCF). Supply chain activities can be grouped into strategic, tactical, and operational levels of activities.

### **Strategic**

- Strategic network optimization, including the number, location, and size of warehouses, distribution centers and facilities.
- Strategic partnership with suppliers, distributors, and customers, creating communication channels for critical information and operational improvements such as cross docking, direct shipping, and third-party logistics.
- Product designs coordination, so that new and existing products can be optimally integrated into the supply chain, load management.
- Information technology infrastructure, to support supply chain operations.

### **Tactical**

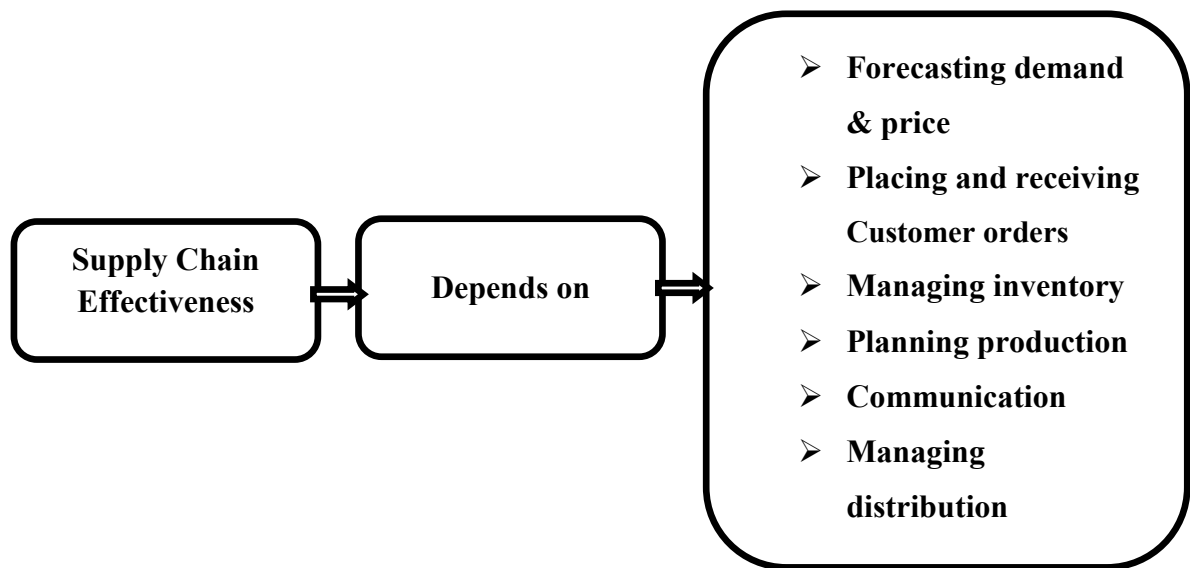
- Sourcing contracts and other purchasing decisions.
- Production decisions, including contracting, locations, scheduling, and planning process definition.
- Inventory decisions, including quantity, location, and quality of inventory.
- Transportation strategy, including frequency, routes, and contracting.
- Benchmarking of all operations against competitors and implementation of best practices throughout the enterprise.

### **Operational**

- Production and distribution planning, including all nodes in the supply chain.
- Production scheduling for each manufacturing facility in the supply chain (minute by minute).
- Demand planning and forecasting, coordinating the demand forecast of all customers and sharing the forecast with all suppliers.
- Sourcing planning, including current inventory and forecast demand, in collaboration with all suppliers.

- Inbound operations, including transportation from suppliers and receiving inventory.
- Production operations, including the consumption of materials and flow of finished goods.
- Outbound operations, including all fulfillment activities and transportation to customers.
- Order promising, accounting for all constraints in the supply chain, including all suppliers, manufacturing facilities, distribution centers, and other customers.

### 4.3 Factors affecting supply chain



**Figure No.1: Factors affecting supply chain**

### 4.4 Functional Divisions of Alfa Fashion

There are seven major departments under Alfa Fashion. That are-

- Merchandising Department.
- Sampling Department.
- Commercial Department.
- Accessory Supply Department.
- Production Department.
- Distribution Department.
- Accounts Department.



#### 4.5 Value Chain analysis of Alfa Fashion

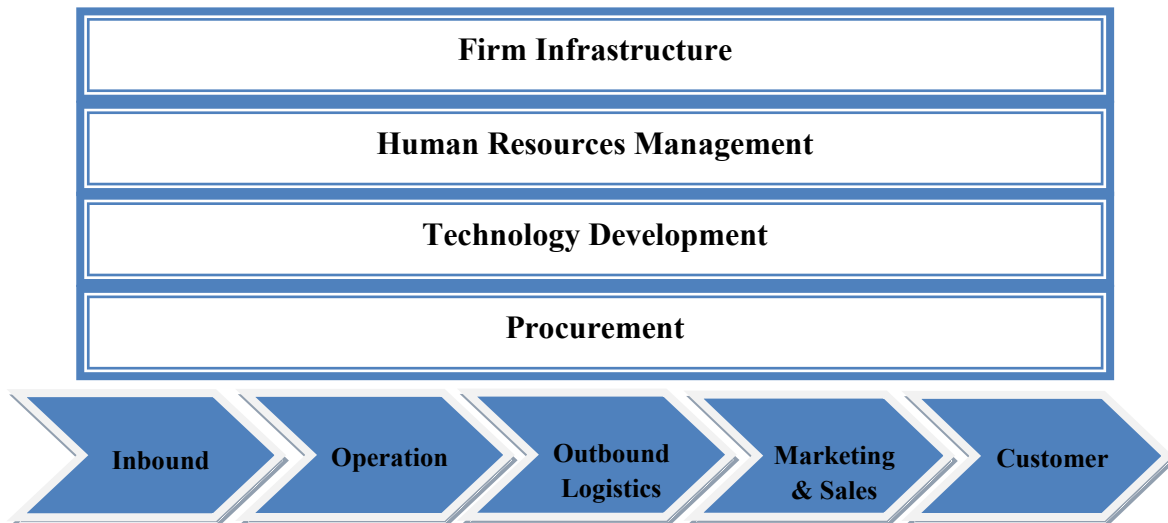
A garments success depends on the value they are avail to provide. Value chain analysis is a useful framework for systematically identifying strength and weakness of any organization. Value chain analysis assumes that a firm is a collection of activities necessary to design, produces market and supports its product and each of these activities could add value to product or service. Each of them can be a competitive advantage of that firm.

This value chain activity is divided in to two major categories-

- Primary activity and
- Supportive activity.

Primary activities contribute to the physical creation of the product, its sale and transfer to the buyer and after sales service. Support activities assist the primary activities and each other.

The following are the primary and supportive activities that create the value chain of the firm:



**Figure No.2: Value chain of the firm.**

## **Inbound Logistics**

- Firm's effectiveness.

## **Operation**

- Productivity of personnel compared to that of key competitors of Alfa Fashion.
- Efficiency of services Alfa Fashion.
- Effectiveness of service control systems of Alfa Fashion to improve quality and reduce cost.
- Its efficiency to plan layout and workflow design.

## **Outbound Logistics**

- Timelines and efficiency of delivery of finished goods and services of Alfa Fashion.
- Efficiency in shipping activities of finished goods.

## **Marketing and sales**

- Its effectiveness of market research to identify customer segments and needs.
- Innovation of sales promotion and advertisement.
- Motivational competence of HR capital.
- Development of image and favorable reputation of the firm.
- Its extend to brand loyalty among its customers.
- Extend of market dominants within the market segment or overall market.

## **Customers**

- It means to solicit customer inputs for service improvement.
- Its promptness of attention to customer complaints service.

## **Procurement**

- Development of alternate sources by Alfa Fashion for input to minimize dependence to a single supplier.
- Procurement of raw materials by the firm on timely basis, at a lowest possible cost and at an acceptable level of quality.
- Its procedure of procurement plant, machinery and building.
- Its long term relationship with reliable supplier.

## **Firm Infrastructure**

- Its capability to identify new product market.
- Opportunity and potential environmental threat.
- Its quality of strategic planning system to achieve corporate objective.
- Its coordination and integration of all activities associate with the value chain among organizational sub unit.
- Its ability to obtain relatively low cost funds for capital expenditure and working capital.
- Its level of information systems support in making strategic and routine decision.

### **4.6 Current Backward Supply Chain in Alfa Fashion**

Backward supply chain management is one of the most important components of an RMG factory. If a factory is dependent on outside suppliers, various problems occur and the production process, hence the delivery of the product, always faces a high level of uncertainty.

Alfa Fashion has a vertically composite setup for its knit garments unit. As a result, Alfa Fashion does not face a lot of common problems faced by other small factories. However, in reality, the full system of downward supply chain of Alfa Fashion cannot fulfill all the demands of the garment unit as there are many types of raw materials which Alfa Fashion cannot produce.

#### 4.6.1 Backward Supply Chain

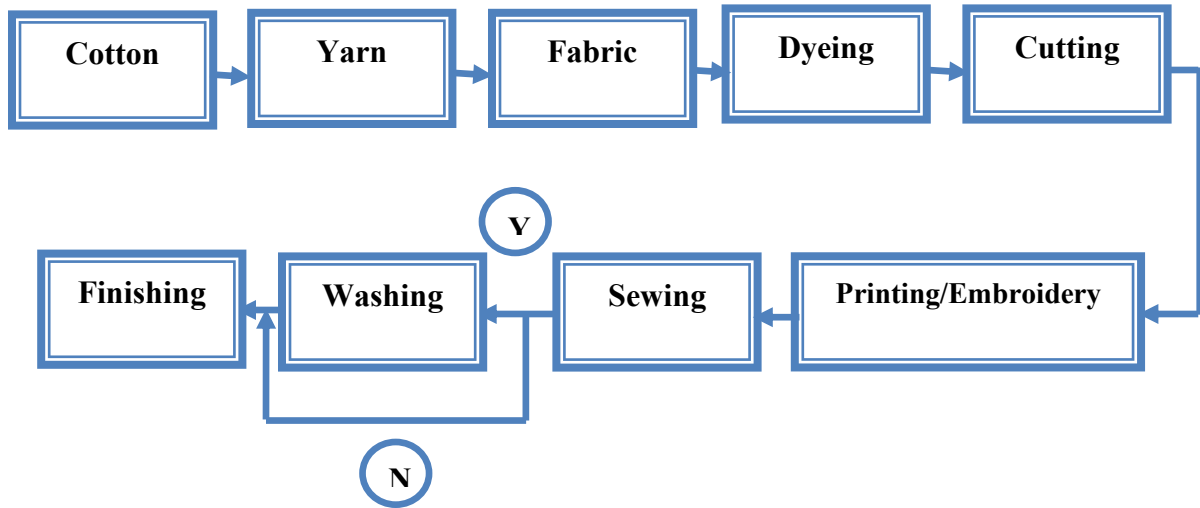


Figure No.3: Backward Supply Chain of the firm.

#### Cotton

Cotton from:

- USA (Fair Trade certified cotton, Organic cotton)
- CIS countries (Uzbekistan, Kazakhstan)
- African(CMIA cotton, Aid by Trade Foundation certified countries)
- Pakistan

Issues concerned

- Certificate from Aid by Trade Foundation
- Certificate of OEKO standard
- Certificate of Reach Standard

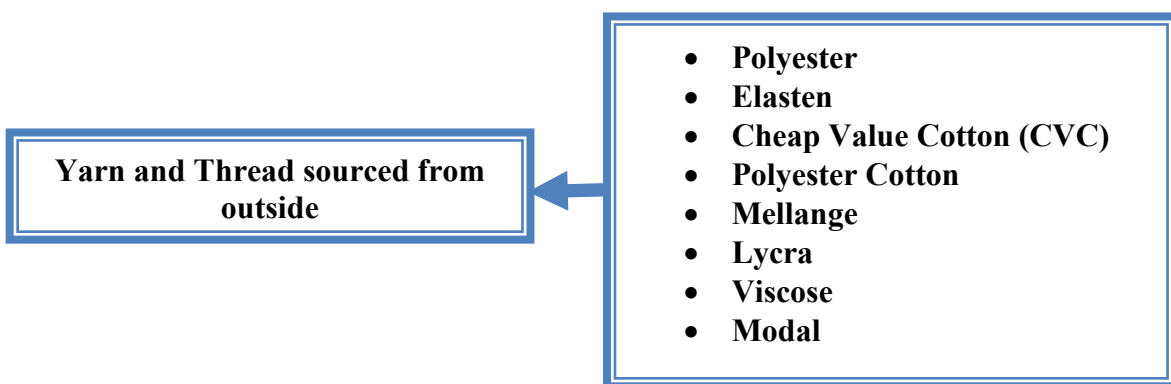
- Textile Organic Exchange
- Textile Global Organic standard
- Child labor
- Cotton plucking procedure

The spinning unit of Alfa Fashion sells mainly to its knitting sister concern. But sometimes when the knitting unit's demand is low, yarn is sold to outside export oriented factories. Typically knitting consumes 93% of the spinning unit's production.

### **Yarn and Thread**

Alfa Fashion produces only pure cotton yarn for knit fabric production. Other types of yarns needed in knit fabric production are bought from outside sources. 75% of these yarns are collected from local factories and the remaining 25% is imported from foreign producers who are mostly Chinese.

All types of threads needed for sewing are collected from local and foreign producers. Sometimes timely arrival of the threads is of a huge concern for the material management department as it is imperative for the sewing process and the suppliers to deliver it on time, especially at peak season.



**Figure No. 4: Types of yarn and thread that is outsourced**

### **Knitting**

Knitting unit uses yarn to make knit fabric and it has a capacity of 550 tons of grey knit fabric per month in Alfa Fashion. The current machine capacity is also used for fabric production for other companies just as in Alfa Fashion knit fabric is also produced in other factories. This mutual cooperation exists because the diameters and characteristics of the machines are varied and the internal machines cannot produce all types of knit fabrics required for in Alfa Fashion garments. A very small amount of woven fabric is needed for garments.

Fabric needs prior booking with a lead time of 30-90 days depending on the type of fabric and the availability of the machines. Sometimes availability of yarn also influences the lead time.

### **Dyeing**

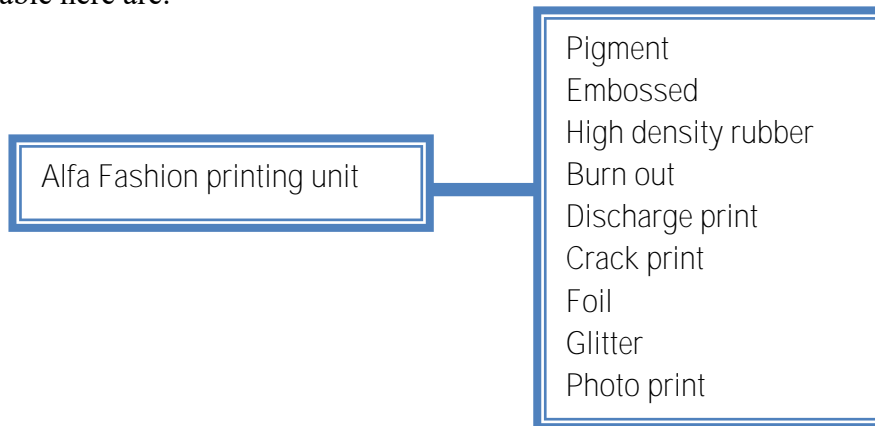
The dyeing unit of in Alfa Fashion has more than 800 tons of dyed fabric per month. The daily production capacity is around 30 tons. This unit can only dye the knit fabric. Currently the dyeing unit of in Alfa Fashion is performing quite satisfactorily as it meets all the demands of the garments unit on time in most cases.

### **Washing**

Washing is necessary before and after the garments is made. Before some fabrics reach the garments, they are washed for operational conveniences and some garments are washed after they are made. The washing unit of Alfa Fashion has a capacity of 18,000 pieces/day in 2 shifts each having eight hours. This capacity depends on dryer, fabric, type of wash, quantity in a lot etc. If necessary, the washing unit works overtime. The lead time of washing unit is 6 hours for washing and 1.5 hours for drying process.

### **Printing**

The printing unit has a color capacity of up to 18 colors and 0.5-0.6 million pieces (critical) and 1-1.2 million pieces (normal) of fabric printing per month. The types of printing available here are:



**Figure No. 5: Different types of printing done at Alfa printing unit**

The main problem with this printing unit is the quality and timeliness of the delivery.

### **Embroidery**

The embroidery unit has a color capacity of up to 12 colors of thread and the capacity in quantity produced always depends on design. Normally the capacity is 1.9 billion stitched embellishments per month. This capacity is lower than necessary and the remaining are done outside.

#### **4.6.2 Critical Path and Activities Involved in Alfa Fashion**

Movement of materials can be controlled by simple visual systems like the Critical Path Method (CPM). There are certain activities to be done to follow-up garment orders. A brief summary of the activities are presented here. It covers each step that a merchandiser performs while carrying out the order for a basic t-shirt without significant value added activities. We also assume for this overview that all relevant materials come from convenient sources.

### **Step 1: Receipt of Style Sheet**

It is the primary stage of placing an order. A designer creates some styles for the garments and then the illustrations of these styles with measurements are sent to the manufacturer in the form of a technical specification package or a Tec pack. So, any new order generally starts with converting the drawing of the concept of the designer into the garment itself. In a typical situation it takes 3 days to a week varying from buyer to buyer for this process to be completed.

### **Step 2: Development of samples**

Once the style sheets reach the sampler's desk, the sampler and product developer work together to create an actual sample for the product. This requires deciding which materials and methods to use, it takes almost a week to develop an appropriate sample.

### **Step 3: Price Quotation**

After developing the sample, cost of the garment is calculated. This is one of the most important steps. If the quotation is low, then the manufacturer is going to incur loss in bulk production and on the other hand, the price must be competitive to beat other manufacturers. To quote the best price, it is essential to calculate the consumption of different raw materials (fabric, accessories etc.) to produce the garment. Then, the cost of these raw materials and other relevant process costs are added to calculate the price of the garment.

### **Step 4: Sample sent and received**

Once the sample is ready, it is checked for measurements and styling and then sent to the designer/buyer for their comments. The sample is usually sent through courier to the buyer's head office and it takes about 3 days to reach the destination.

### **Step 5: Price Agreed**

When both the sample and the price of the garment reach the buyers, they analyze the price in terms of materials and demand in the market. If the price is fair, they agree to it. But, in most cases, price bargaining occurs and then it is settled.



### **Step: 6.Order Confirmation**

After fixing up the price of the product, the order is confirmed via e-mail. This order confirmation letter usually contains-

- Details of the garment to be ordered.
- Details of main raw materials.
- Size-wise break down quantity.
- Mode of shipment (Must also be included in L/C).
- Time to ship the goods etc. (Must also be included in L/C).

### **Step 7: Contract Raise**

Once the order confirmation mail arrives, the merchandisers working book the space with the production team and then ask buyer to raise the contract for the order. This contract is the official purchase order for the garments. It clearly specifies the information mentioned in the order confirmation mail. This contract becomes the main source of all information on the order details.

### **Step 8: Garment Sketch and Technical Specification**

Once the price is agreed, the order is placed. The technical team of buyer sends the full sketch and specification of the garment to be followed in bulk production. This works as a guideline for all measurements in the production.

### **Step 9: Labeling Details from Buyer**

Labeling details contain the list of labels required for the garments. In case of some buyers, the labels come from a convenient source or the buyer's nominated source. In other cases, labels are produced by Alfa Fashion.

### **Step 10: L/C to Factory**

Once the contract is raised, the buyer opens the L/C for the purchase in favor of the manufacturer for the goods to be purchased and then it is transferred to the manufacturer's bank. Receipt of this master L/C is the real 'Trigger Point' of the order because, after getting this, the garment manufacturer can start purchasing raw materials required for the order. These raw materials can be divided into two main classes-

- Fabric
- Trims and Accessories

### **Step 11: Color Standards from Buyer**

In the order confirmation mail, the color of the fabric is clearly mentioned. So, after the order confirmation, the office of buyer sends the standard color cards/swatches that it wants to be replicated on the fabric to be used in the garments.

### **Step 12: Lab Dips on Hand**

Once the color standard is received, the color on the required fabric needs to be replicated. The production of the specified color on the required fabric is called 'Lab Dipping' and the colored fabric piece is known as Lab dip. However, the exact color of the standard cannot be obtained on the fabric. There will be some variation in shade from the standard to lab dip.

That is why the lab dips are made from buyer's reference to show them actually how close the color may match in the bulk production.

### **Step 13: Lab Dips Approval**

Once the lab dips are made, they are sent to the buyer for approval. The buyer has to choose from a range of lab dips which color he/she would like to go for in the bulk production. Once the lab dip is approved, the standard color on the required fabric is established and this approved lab dip become the starting of the dyeing of the fabric.

### **Step 14: Yarn Procurement**

The main raw material for garment is fabric. And the raw material for making the fabric is yarn. So, once the manufacturer receives the L/C from the buyer, he/she opens back to back L/C for obtaining the required yarn. Generally, the yarn is booked with a yarn manufacturer and then the yarn manufacturer gets the back to back L/C for the yarn. For an average quality and quantity of yarns, it takes about 10 days to get them.

### **Step 15: Knitting**

After getting the yarn, the knitting unit starts production. There are certain specifications to produce the required quality of fabric. The knitter orders the yarn accordingly and then sets machines accordingly. An average quantity of fabric takes about 7 days to knit. For a larger quantity, more machines are allocated.

### **Step 16: Dyeing & Finishing**

After the fabric is knitted, it is colored. The knitted fabric has the natural color of cotton. This fabric has to be dyed in the color based on the approved lab dip. After dyeing, the fabric goes through some stabilizing to make the fabric suitable for use in the garment.

### **Step 17: Fabric Approval**

Once the fabric is finished, it is sent to the buyer for approval. The buyer has to decide whether he/she is satisfied with the color. Some laboratory testing is also performed to test the fabric quality. Every buyer has his/her own quality parameters for any specific fabric. So, if the color of the fabric is acceptable to the buyer and the fabric meets the quality requirement, the fabric is approved by the buyer. This approval is essential to go for cutting of the fabric for manufacturing the garments.

### **Step 18: Fit Sample Approval**

After settling the price, the technical spec and sketch is sent to the manufacturer. According to this sketch and spec, the garment manufacturer has to make one sample in the prescribed size and send to the buyer. This sample is called fit sample. Once this fit sample reaches the buyer, the buyer fits it on a model and sees how it actually looks like when worn. If they are satisfied with it, they approve it.

### **Step 19: Size-set Approval**

After the approval of the fit sample, the buyer asks for samples in different sizes to see whether those are acceptable. So, after getting the approval of the fit sample, the manufacturer produces the size set and sends it to the buyer for approval.

### **Step 20: Accessories & Trims on Hand**

After receiving the L/C and labeling details, the garment manufacturer opens back-to-back L/C for trims and other accessories. These mainly include different types of labels, buttons, sewing threads, poly-bags etc.

### **Step 21: Pre-Production (PP) Sample Approval**

After receiving the approved fabric, trims and accessories, pre-production samples are made. These production samples are the actual representations of the bulk production of the garments. PP samples are made with actual fabric, actual trims, actual accessories etc. and sent to the buyer for their final approval.

### **Step 22: Garments Production**

Once the buyer approves the production sample, the manufacturer is in a position to start the bulk production of the garments. For a moderate quantity, this takes about 7 days. If the quantity is big, more machines are allocated.

### **Step 23: Final Inspection**

After the garments are produced, the final inspection takes place. The quality control department of the Alfa Fashion carries out this final inspection according to the standard set by the buyer. They take a sample size based on the order quantity and inspect those samples for measurements and other quality parameters of the garments.

### **Step 24: Shipment**

If the garments pass the final inspection, they are shipped to the buyer's destination.

### **Step 25: Order follow up tools**

The main problem with export oriented garment factories is the absence of any order follow up tools. That is why, the factories struggle to stick to the delivery dates and maintain required quality. It also imposes immense pressure on merchandisers. Practicing order follow

up with simple checklists or MS project software can be suitable solutions. Merchandisers need not memorize the whole order standing. They can recall any part of the order anytime from the follow up tools.

#### 4.7 SWOT Analysis of Alfa Fashion



##### **S=STRENGTH**

###### **⌘ ISO 9001-2000**

Alfa Fashion is certified under ISO 9001-2000 and so it meets the requirement of international standard and has a value in the mind of concern people.

###### **⌘ Strong security system**

Alfa Fashion has a greater security system. There are different hidden security cameras which capture the all moments.

###### **⌘ High quality product**

Alfa Fashion using advance technology like they have modern machinery by which the quality of product produced is very high.

###### **⌘ Latest mechanized machinery.**

They are using modern looms which they have purchased from Japan and France and by using that latest machinery the productivity of the employees are very high.

■ Tremendous market positioning

Alfa Fashion is one of the pioneer garments in the Bangladesh. So it got the position in the mind of its customer.

■ Highly qualified and skilled management

The management of Alfa is skilled and also experienced.

■ Highly motivated workforce

They are providing better pay to their employees and also bonus to them which motivate the workforce and they are doing well at work setting.

■ Equipped with marketing information system

They have a marketing information system by which the departments and employees are connect with each other and they have a data ware house by which they can share their resources easily.

**W=WEAKNESS**

■ High cost of production

The production cost is high because of not properly utilization of its resources.

❏ Centralized decision making

The decisions are made by the upper management which is weakness of the Alfa because they have no proper idea about the situation and their decision can be not fruitful for the company.

❏ Less promotional activities

The advertising and promotional cost of the Alfa Fashion is very low it can take advantage for more turnouts.

❏ Lack of benefits and rewards for the employees

Some facilities that other providing to their employees, Alfa not providing to their employees because of which the productivity of the employees decrease.

**O=OPPORTUNITY**

❏ Organization can expand product lines

Currently the Alfa not dealing in knitwear they can expand their product line by producing knitwear. They have plants and the extra cost for the production will be low for Alfa and they also have better market repute.

❏ Organization can reduce the cost by proper utilization of resources

If the cost of different matters which is not utilizing properly is controlled by the Alfa Fashion management they can produce more in a few costs. It has to develop a further systematic process for controlling and managing resources.

❏ Organization can hire more well-educated and experienced person



They can take advantages by hiring more skilled people and they should hire young, fresh and energetic staff for their betterment.

### **T=THREAT**

#### **✚ Buyer needs demands changes**

Because of the research and development the design and the product of Alfa Fashion is just satisfactory as compare to competitors in the globally and they are not fulfilling the demand of customer.

#### **✚ Political instability**

Political instability effects the Alfa Fashion because of the quota system the company can be restrict by the government to export.

#### **✚ Changed of government policies**

Government policies are changing day to day so it is a threat for the Alfa Fashion to survive in such a changeable situation.

#### **✚ Globally Economic instability**

Because of the economic instability the Alfa Fashion affected a lot. Dumping system which is rising on daily basis in the world can create many problems for the company and any uncertainty in the world like 9/11 may affect also the overall export.

### **4.8 Measuring Supply Chain Performance Based on SCOR**

The case company established several metrics in 3 perspectives by referring to the SCOR model and from the global viewpoint in order to check the effectiveness of 3 overall evaluation performance indicators. After completing the SCOR model the company must decide a threshold value of the gap rate according to its operation state. Indicators exceeding the threshold value of the gap rate are considered to have a poor performance. Because the threshold value of the gap rate is determined by high-level administrators' experiences and

the culture of an enterprise, the optimistic administrators will generally set up higher values of threshold of the gap rate. For instance, the efficiency of decision-making has a larger gap rate than the required cycle time of customers at the perspective of responsiveness, providing that the threshold value of gap set up by the administrator is 1.5, indicating that the particular enterprise needs to focus on its improvement of efficient decision-making. Similarly, at the perspectives of reliability and cost, when the index has a higher gap rate than the threshold value of gap, the index indeed needs a great deal of adjustment and improvement.

Table No1. SCOR Model (Responsiveness)				
Metric	Actual	Target	Gap	Gap Rate
The cycle time for responding customer's requirements	14 Days	7 Days	7 Days	1
Decision processing time	2 Days	0.5 Days	1.5 Days	3

Table No 2: SCOR Model (Reliability)				
Metric	Actual	Target	Gap	Gap Rate
On- time delivery rate	70%	90%	20%	0.22
The supply cycle time of main material	28 Days	24 Days	4 Days	0.17

Table No.3. SCOR Model (Cost)				
Metric	Actual	Target	Gap	Gap Rate
Air transportation cost	12 Million	6 Million	6 Million	1
Order processing cost	18 Million	6.8 Million	11.2 Million	1.65

## **CHAPTER 05: DATA ANALYSIS & FINDINGS**

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## 5.1 Data Analysis

In analyzing the data were collected for this study, Likert's Summative Rating scale has been used in this section for easy construction of table analysis and reliability of data. Mean rating has been used to rate the variables. Likert's Summative Rating method of analysis has been used in the analysis of this study's questions as per questionnaire. The assigned weight to the various alternatives is:

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

Here,

90% to 100%, it means Supply Chain is - 'Highly Effective'

70% to below 90%, it means Supply Chain is - 'Moderately Effective'

60% to below 70%, it means Supply Chain is - 'Marginally Effective'

51% to below 60%, it means Supply Chain is - 'Ineffective'

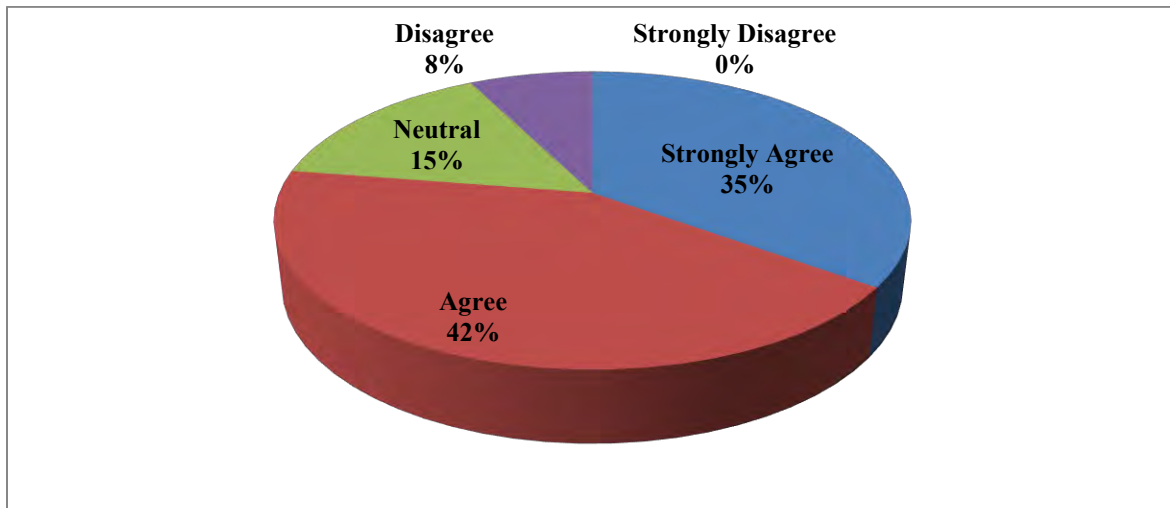
Below 50%, it means Supply Chain is - 'Highly Ineffective'

### 5.1.1 Production

**Statement 01:** Order lead time of The Alfa Fashion is good enough to compare with the industry's order lead time.

**Table No.4: Production related**

Number of Respondents	
Strongly Agree	13
Agree	18
Neutral	6
Disagree	3
Strongly Disagree	0
<b>Total</b>	<b>40</b>



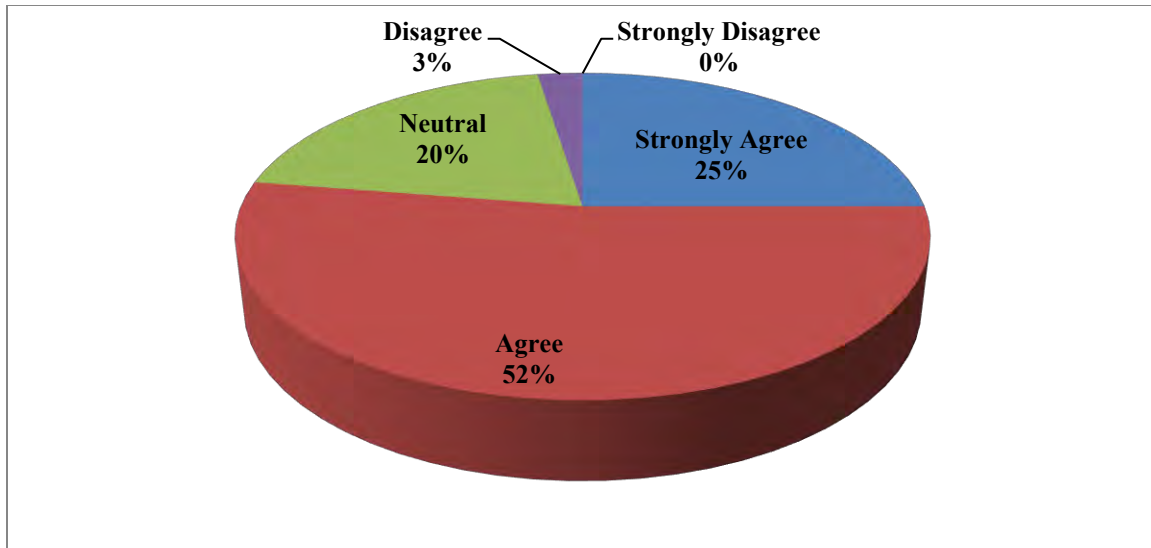
**Figure No.6: Production related analysis**

From analysis of the above table it is seen that almost 35% of respondents strongly agree and 42% of respondents agree that the company's order lead time is good enough to compare with the industry's order lead time, which indicate that in term of order lead time, the supply chain is moderately effective.

**Statement 02:** Production management department maintains frequent communication with marketing and distribution department.

**Table No.5: Production related**

	Number of Respondents
<b>Strongly Agree</b>	<b>10</b>
<b>Agree</b>	<b>21</b>
<b>Neutral</b>	<b>8</b>
<b>Disagree</b>	<b>1</b>
<b>Strongly Disagree</b>	<b>0</b>
<b>Total</b>	<b>40</b>



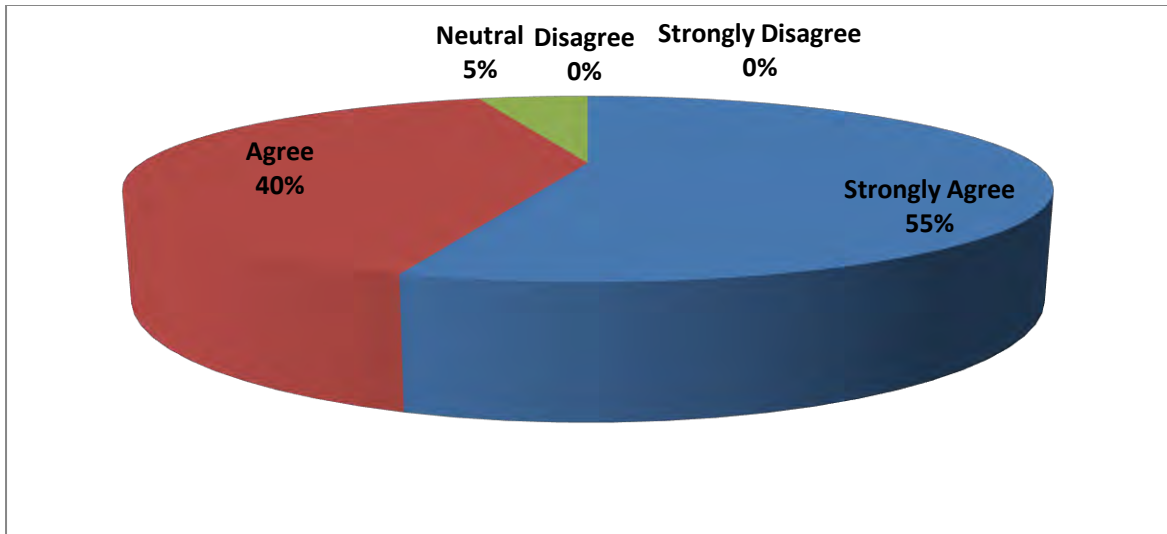
**Figure No.7: Production related analysis**

From the analysis, it is seen that almost 77% of the respondents strongly agree & agree that production management department maintains frequent communication with marketing and distribution department which has positive impact on supply chain. It indicates that supply chain of The Alfa Fashion is moderately effective in terms of production management.

**Statement 03:** Company has production facility which ensures sufficient production during the time of excessive demand.

**Table No.6: Production related**

	Number of Respondents
Strongly Agree	22
Agree	16
Neutral	2
Disagree	0
Strongly Disagree	0
<b>Total</b>	<b>40</b>



**Figure No.8: Production related analysis**

From the above, it is seen that 95% of the respondents strongly agree and agree that company has production facility that ensures sufficient production during the time of excessive demand. It indicates that the supply chain of The Alfa Fashion is highly effective in terms of production facility.

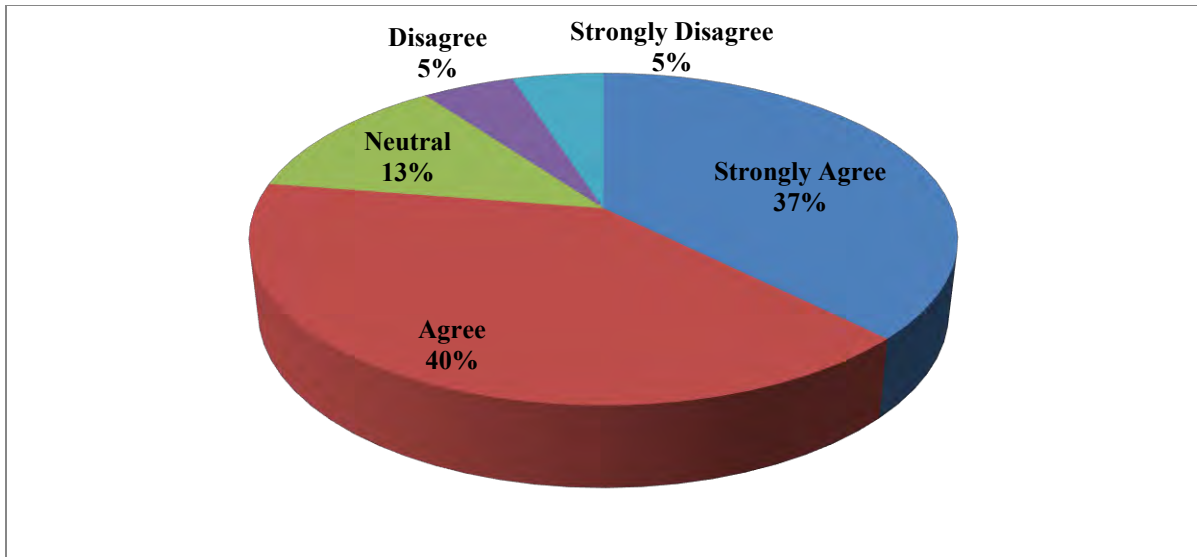
### 5.1.2 Inventory Management

**Statement 04:** Inventory management department maintains enough inventories that allow uninterrupted production.

**Table No.7: Inventory management related**

	Number of Respondents
Strongly Agree	15
Agree	16
Neutral	5
Disagree	2
Strongly Disagree	2
<b>Total</b>	<b>40</b>





**Figure No.9: Inventory Management related analysis**

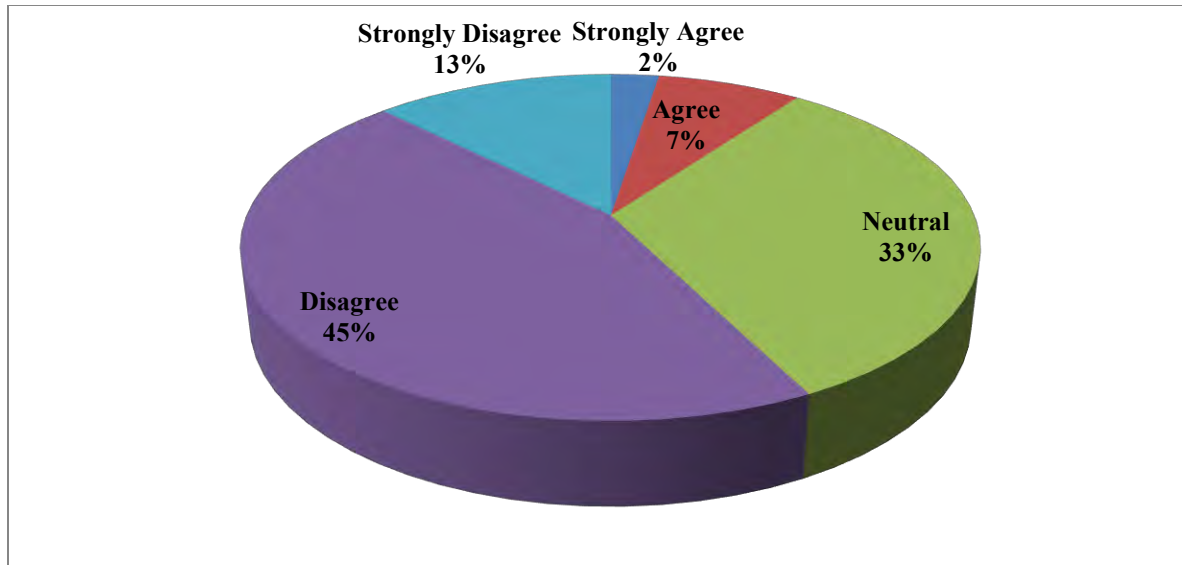
From the above, it is seen that almost 77% of respondents agree and strongly agree that inventory management department maintains enough inventories that allow uninterrupted production. This ensures that in terms inventory management, the supply chain of The Alfa Fashion is moderately effective

### 5.1.3 Forecasting

**Statement 05:** Current forecasting system can accurately predicts price of raw materials.

**Table No.8: Forecasting related**

	Number of Respondents
Strongly Agree	1
Agree	3
Neutral	13
Disagree	18
Strongly Disagree	5
<b>Total</b>	<b>40</b>



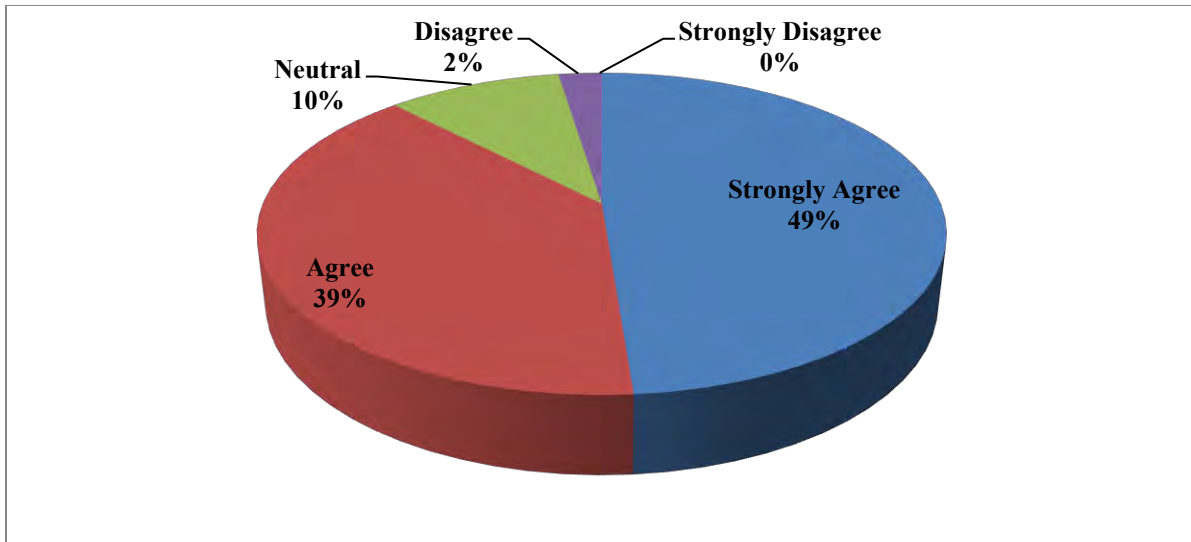
**Figure No.10: Forecasting related analysis**

From the above, it is found that 9% of the respondents strongly agree and agree that current forecasting system can accurately predicts price of raw materials and 58% of the respondents strongly disagree and disagree that current forecasting system can accurately predicts price of raw materials. So in terms of price forecasting, the supply chain of The Alfa Fashion is ineffective.

**Statement 06:** Current forecasting system can predict future demand for buyer.

**Table No.9: Forecasting related**

	Number of Respondents
Strongly Agree	20
Agree	16
Neutral	3
Disagree	1
Strongly Disagree	0
<b>Total</b>	<b>40</b>



**Figure No.11: Forecasting related analysis**

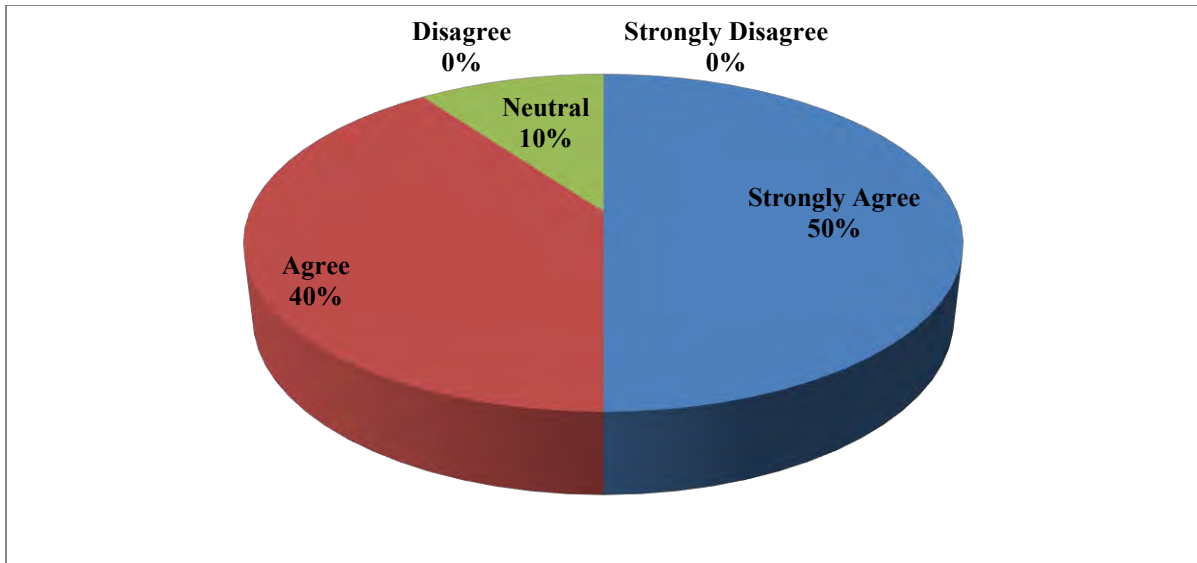
From the above shows that almost 88% of respondents agree and strongly agree that inventory management department maintains frequent communication with production department, which makes the supply chain of Alfa Fashion is effective.

#### 5.1.4 Communication

**Statement 07:** Inventory management department maintains frequent communication with production department.

**Table No.10: Communication related**

	Number of Respondents
Strongly Agree	20
Agree	16
Neutral	4
Disagree	0
Strongly Disagree	0
<b>Total</b>	<b>40</b>



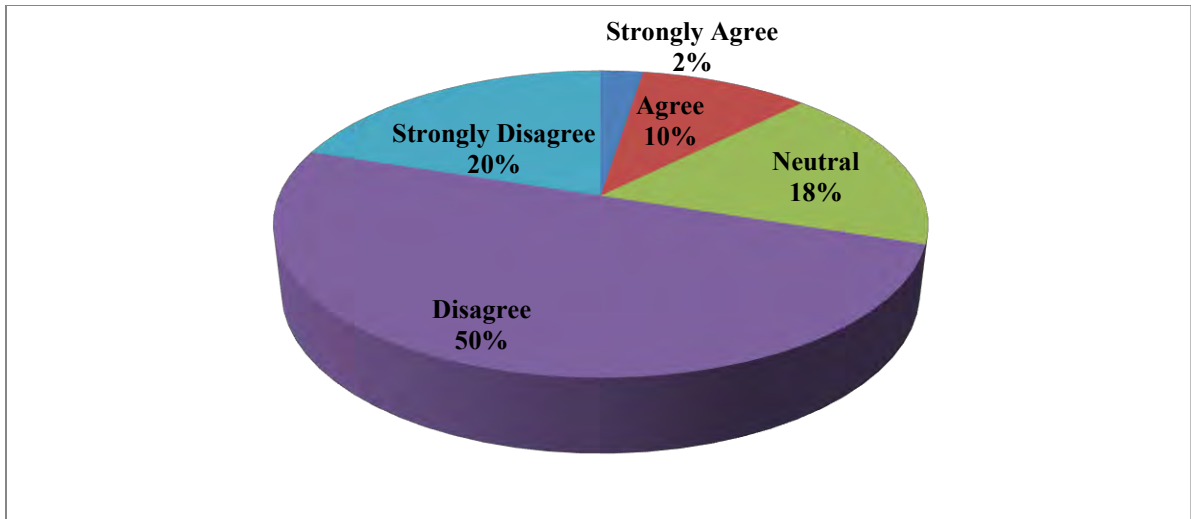
**Figure No.12: Communication related analysis**

From the above shows that almost 90% of respondents agree and strongly agree that inventory management department maintains frequent communication with production department, which makes the supply chain of Alfa Fashion is effective.

**Statement 08:** Current supply chain helps in obtaining useful feedback from the suppliers.

**Table No.11:Communication related**

	Number of Respondents
Strongly Agree	1
Agree	4
Neutral	7
Disagree	20
Strongly Disagree	8
<b>Total</b>	<b>40</b>



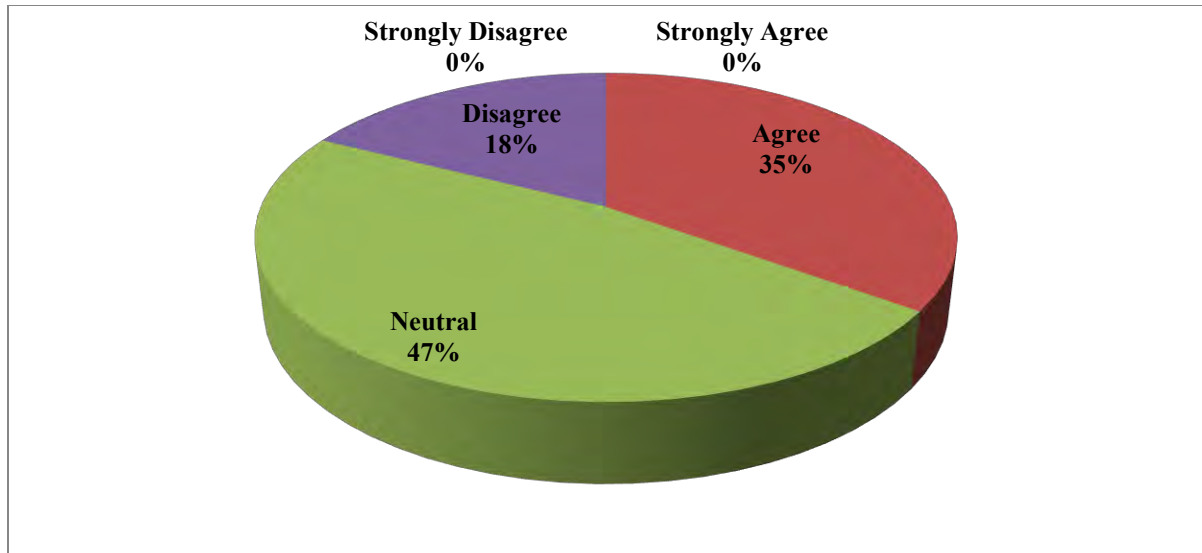
**Figure No.13: communication related analysis**

From the above, it is found that only 70% of the respondents strongly disagree and disagree that current supply chain helps in obtaining useful feedback from the suppliers. So in terms of obtaining feedback from the suppliers, the supply chain is ineffective.

**Statement 09:** Current supply chain management makes communication among supply chain members frequently.

**Table No.12: Communication related**

	Number of Respondents
Strongly Agree	0
Agree	14
Neutral	19
Disagree	7
Strongly Disagree	0
<b>Total</b>	<b>40</b>



**Figure No.14: Communication related analysis**

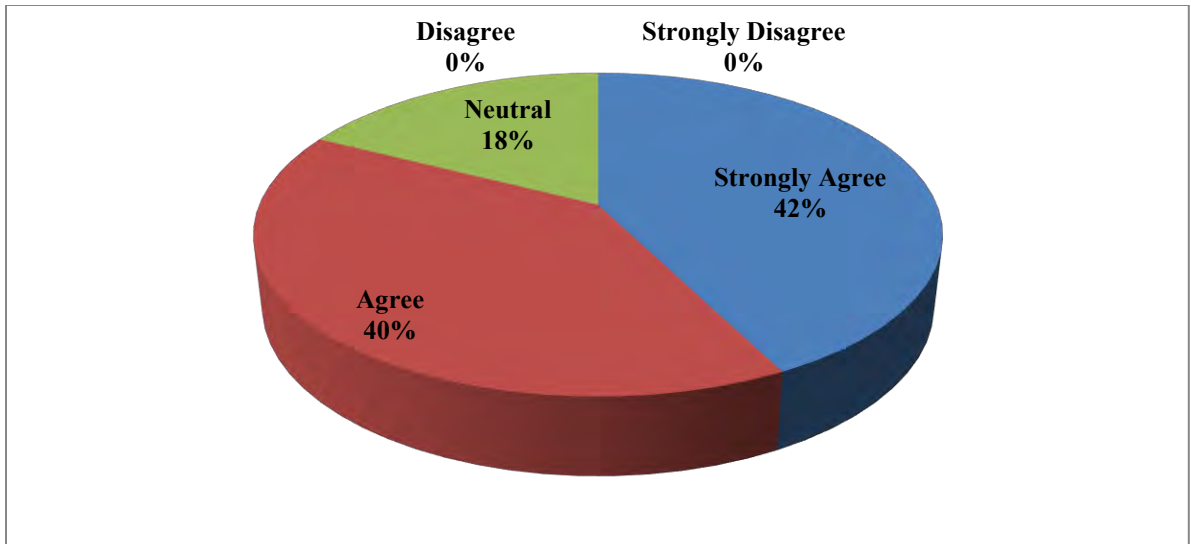
The above analysis shows that only 35% of respondents agree and strongly agree that current supply chain allows making communication among supply chain members faster, easier and more frequently. The mean is that the supply chain is marginally effective in this particular measure.

### 5.1.5 Order Placement

**Statement 10:** Current supply chain system allows the reduction of response time within the supply chain which makes order placement faster.

**Table No.13: Order placement related**

	Number of Respondents
Strongly Agree	17
Agree	16
Neutral	7
Disagree	0
Strongly Disagree	0
<b>Total</b>	<b>40</b>



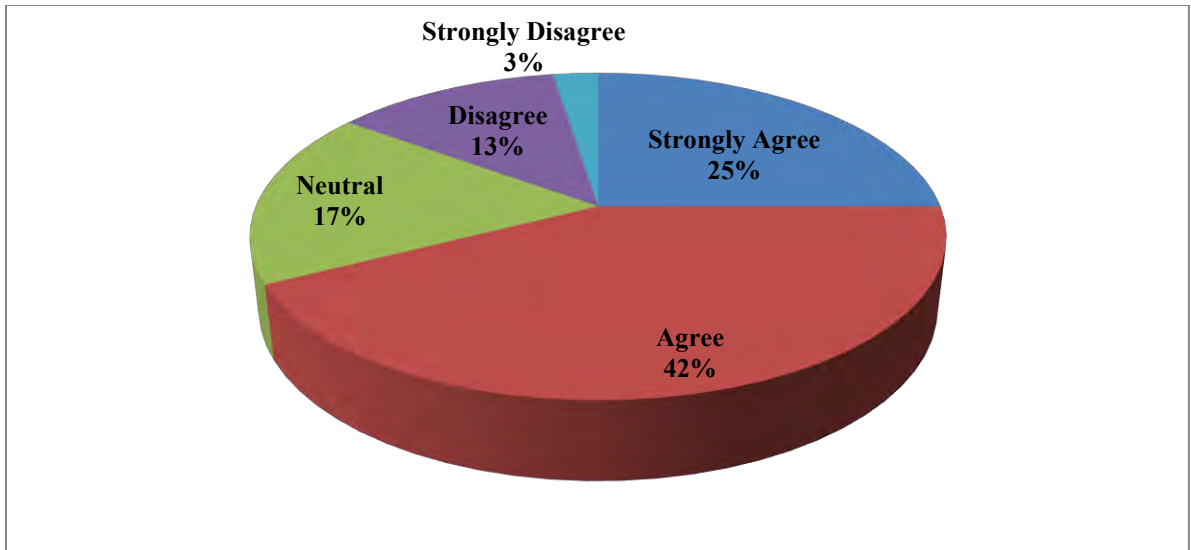
**Figure No.15: Order Placement related analysis**

From analysis of the above table, it is seen that almost 82% of respondents agree and strongly agree that current supply chain system allows the reduction of response time within the supply chain which makes order placement faster. It indicates that the supply chain of The Alfa Fashion is moderately effective in terms of order placement.

**Statement 11:** The customer order path is simple.

**Table No.14: Customer order realated**

	Number of Respondents
Strongly Agree	10
Agree	17
Neutral	7
Disagree	5
Strongly Disagree	1
<b>Total</b>	<b>40</b>



**Figure No.16: Customer order related analysis**

From the above, it is seen that over 67% of the respondents strongly agree & agree that the customer order path is simple and effective. It indicates the order placing process is simple that eventually satisfies its customers and it can be concluded that the supply chain of The Alfa Fashion is moderately effective in terms of order placement procedure.

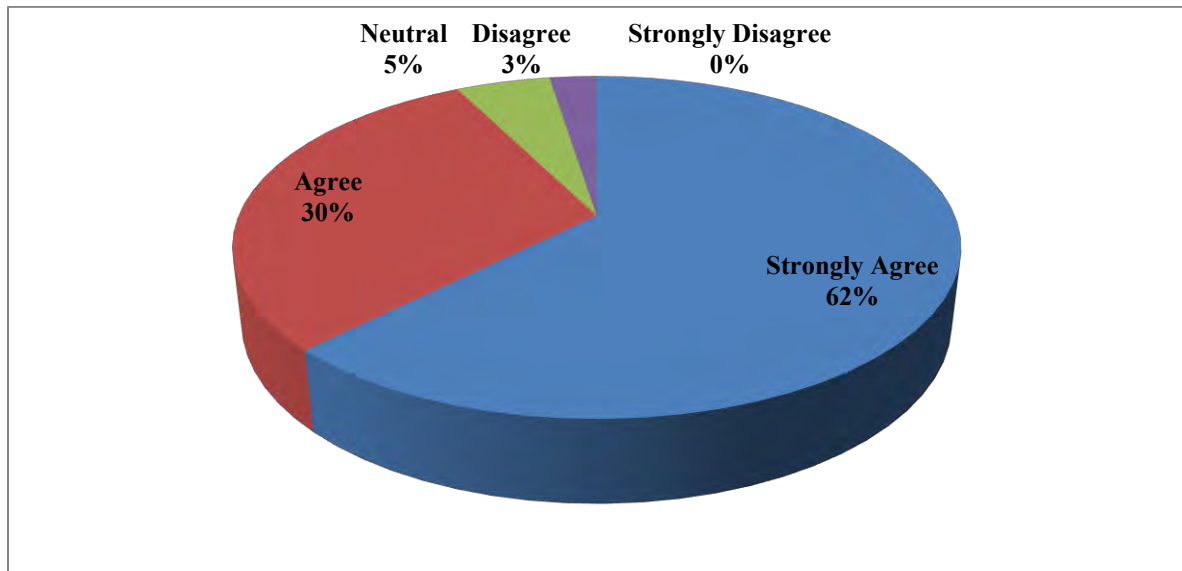
### 5.1.6 Managing Distribution

**Statement 12:** Shipments are delivered as per the dateline.

**Table No.15: Distribution related**

	Number of Respondents
Strongly Agree	25
Agree	12
Neutral	2
Disagree	1
Strongly Disagree	0
<b>Total</b>	<b>40</b>





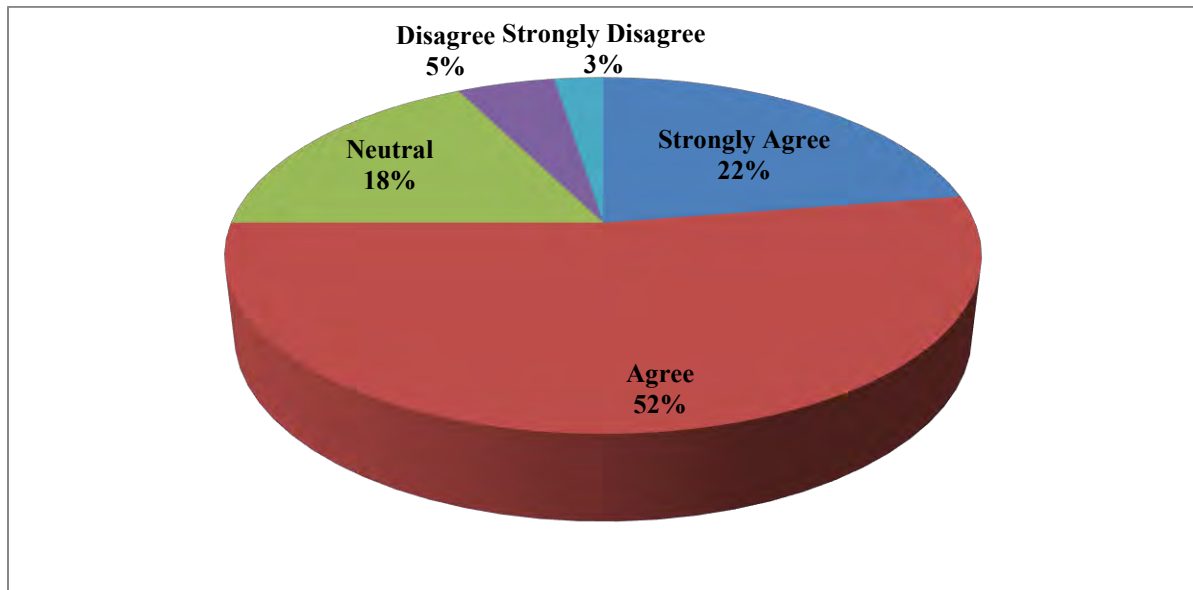
**Figure No.17: Distribution system related analysis**

From the above, it is found that 92% of the respondents strongly agree & agree that shipments are delivered as per the dateline. So in terms of delivery the supply chain of The Alfa Fashion is highly effective.

**Statement 13:** Distribution system is flexible enough to meet particular customer demands.

**Table No.16: Distribution system related**

	Number of Respondents
Strongly Agree	9
Agree	21
Neutral	7
Disagree	2
Strongly Disagree	1
<b>Total</b>	<b>40</b>



**Figure No.18: Distribution system related analysis.**

From the above analysis, it is found that almost 74% of the respondents strongly agree & agree that distribution system is flexible enough to meet particular customer demands. So in terms of flexibility, the supply chain of The Alfa Fashion is moderately effective.

## 5.2 Interpretation Regarding the Findings of the Study

- In terms of order lead time, the supply chain of The Alfa Limited is moderately effective. Because on average above 50% of the respondents strongly with the positive attitude.
- Supply chain is moderately effective in terms of production management.
- Supply chain is highly effective in terms of production facility.

- Supply chain is moderately effective in terms of inventory management.
- In terms of current forecasting system can predict future demand for buyer, the supply chain of Alfa Fashion is effective.
- In terms of price forecasting system for raw material, the supply chain of The Alfa Fashion is ineffective. Because less than 20% of the respondents strongly disagree with the positive attitude.
- In terms of communication with supply chain partners supply chain is marginally effective. As around 40% of the respondents strongly agree with the positive attitude.
- Supply chain of The Alfa Fashion is ineffective in terms of communication with the suppliers. As around 80% of the respondents have shown negative attitude.
- Supply chain of The Alfa Fashion is effective in terms of communication with the other departments.
- Order placement system of The Alfa Fashion is moderately effective.
- Supply chain is highly effective in terms of shipment of delivery.
- In terms of distribution flexibility, the supply chain of The Alfa Fashion is moderately effective.
- To investigate the effectiveness of SCOR, researcher use the process reference model in SCOR to analyze the current state of a famous garment manufacturer's business processes and its goals, and quantify the operational performance.

## **CHAPTER 06: RECOMMENDATION & CONCLUSION**

## 6.1 Recommendation

In this study the researcher have found a fewer number of factors, which impede the achievement of ultimate goals of Alfa Fashion. It is not easy to find out the solution for the researcher. But believe that the suggestions mentioned below will obviously increase the efficiency of Alfa Fashion. Alfa Fashion should improve their supply chain practice in those areas in which are currently ineffective or marginally effective.

- ✘ Inventory management system of Alfa Fashion is moderately effective. So inventory management system should be improved..
- ✘ Price forecasting system of Alfa Fashion is ineffective. If future price of raw materials are not accurately predicted, the production cost will be increased as consequence. So, price forecasting system raw material should be improved.
- ✘ Feedback from the suppliers of Alfa Fashion is moderately effective. So feedback from the suppliers should be improved.
- ✘ Communication among supply chain members of Alfa Fashion is moderately effective. So it should be improved.
- ✘ Communication and feedback should be more frequent.
- ✘ Alfa Fashion must better human resource management for retaining supply chain member.
- ✘ The supply chain performance is one of the most important factors for the success of a company since it considerably affects the ability to provide customer value. It is, thus, very important for a company to develop independent criteria to evaluate the performance, compare with competitors, and monitor the operation.

## **6.2 Conclusion**

The Ready-Made-Garment (RMG) industry is playing a vital role in the overall development of Bangladesh. In the business world today no major player in apparel industry can ignore capability of Bangladesh in offering qualitative and valuable products. Alfa Fashion has the capability of providing a bridge between overseas customers/buyers and local manufacturers in Bangladesh to ensure quality, services, timely deliveries and adherence to buyer's quality standards. Alfa Fashion is a large garments industry in Bangladesh and it has a very good reputation. Alfa Fashion started its journey in garment industry in 2002 with the apparel business. The company is constantly providing customers across the world with garment sourcing solution, with manufacturing facilities.

Supply chains are effective when the exchange value of the system fulfills expectations of the supply chain members. Today's business environment is more global and competitive than it had been in the past. The modern business is characterized with shorter product life cycles, rapid new product introductions, increasingly knowledgeable, well informed, and sophisticated customers. This forces supply chains to be more effective. If Alfa Fashion takes proper initiatives to improve its ineffective supply chain areas then it may be able to provide better customer service to the customer.

Alfa Fashion plays a very important role in garments industry in local as well as international market. In economy sector, these industries have significant contribution.

## **BIBLIOGRAPHY**

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*Designing and Managing the Supply Chain* by David Simchi-Levi, Philip Kaminsky and Edith Simchi-Levi.

*Logistics and Supply Chain Management* by Martin Christopher.

*Operations Management- Strategy and Analysis*, Krajewski and Ritzman (2000), 6th Edition.

*Supply Chain Management- Strategy, Planning and Operation*, Sunil Chopra and Peter Meindl (2000), 2<sup>nd</sup> Edition.

*Supply Chain Logistics Management-* By Donald Bowersox & David Closs. (Fourth Edition)

*Annual report* of Alfa Fashion.

*Other report and paper*, Alfa Fashion.

[www.alfafashionbd.com](http://www.alfafashionbd.com)

[www.assignmentpoint.com](http://www.assignmentpoint.com)



## **APPENDIX**

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## Appendix 1

**Questionnaire on:** Effective Supply Chain in Ready Made Garments in Bangladesh: A Study on Alfa Fashion.

Respondent Name	Age	Occupation	Designation	Work place

On a scale of 1 to 5, please rate the following:

Strongly Disagree- 1, Disagree- 2, Neutral- 3, Agree- 4, Strongly Agree- 5

### ➤ Production related statement:

Serial	Statement	1	2	3	4	5
01	Order lead time of The Alfa Fashion is good enough to compare with the industry's order lead time.					
02	Production management department maintains frequent communication with marketing and distribution department.					
03	Company has production facility which ensures sufficient production during the time of excessive demand.					

➤ **Inventory Management related statement:**

Serial	Statements	1	2	3	4	5
04	Inventory management department maintains enough inventories that allow uninterrupted production.					

➤ **Forecasting related statement:**

Serial	Statements	1	2	3	4	5
05	Current forecasting system can accurately predicts price of raw materials.					
06	Current forecasting system can predict future demand for buyer.					

➤ **Communication related statement**

Serial	Statements	1	2	3	4	5
07	Inventory management department maintains frequent communication with production department.					
08	Current supply chain helps in obtaining useful feedback from the suppliers.					

09	Current supply chain management makes communication among supply chain members frequently.					
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➤ **Order Placement related statement**

Serial	Statements	1	2	3	4	5
10	Current supply chain system allows the reduction of response time within the supply chain which makes order placement faster.					
11	The customer order path is simple.					

➤ **Managing Distribution related statement**

Serial	Statements	1	2	3	4	5
12	Shipments are delivered as per the dateline.					
13	Distribution system is flexible enough to meet particular customer demands.					