



## **Internship Report on Supply Chain Management**

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**Supply Chain Management: A Global Aspect and practice at ACI  
(Advanced Chemical Industries) Limited**



***ACI Limited***

**Letter of Transmittal**

4<sup>th</sup> December, 2017

Mayesha Tasnim

BRAC Business School

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Subject: Regarding submission of internship report

Dear Miss,

I am glad to submit my Internship Report on “Supply Chain Management: A Global Aspect and practice at ACI (Advanced Chemical Industries) Limited” . I tried to comprehend all the areas related to this report and this has certainly enhanced my knowledge considering a practical orientation. I considered your remarks and instructions very carefully while preparing this report. I tried my best to follow your schedule, format and discipline.

I will be pleased to provide further clarification regarding this report whenever necessary. Your acceptance and appreciation would surely inspire me.

Thank you for your consideration.

Sincerely Yours,

-----

Syed Ikram Abdullah

ID: 13304054

## **Acknowledgment**

I am thankful to my faculty Mayesha Tasnim for assigning me this Internship topic to work and practice in real life. All throughout the preparation of the report he has been very supportive. I would like to thank my organization supervisor Mr. Kazi Abdullah, Senior Executive and Mr. Ariful Islam, Senior Executive at ACI Limited, and all my department colleagues for supporting and guiding me. They performed as a source of gathering data and information of the company relating to the topic. I also like to give special thanks to the persons whose ideas, views and supports have co-operated me. And also grateful to the persons whose books, working papers, journals and related materials gave me knowledge and information to prepare this report.

## **Executive Summary:**

The exercise of supply Chain management has end up a vital a part of each agency in today's international of commercial enterprise. Larger groups outside Bangladesh hold efficient deliver Chain control to perform their business in accurate manner as a way to benefit the maximum outcome from business and to create in addition to hold fee amongst customers. The act of deliver Chain a few of the out of doors companies is very massive. In Bangladesh, the situation of supply Chain control is not pretty the same as that of created international locations. Supply Chain exercise of one of the large Bangladeshi conglomerates, ACI restrained has been spotlighted. a thorough research has been performed to find out the usual and great of Supply Chain control at ACI constrained compared to the ones of the larger businesses which are a success in international market. It indicates the deliver Chain management targets, priorities, key demanding situations, general working tactics which help to gain commercial enterprise and corporate desires of ACI limited. It additionally suggests the key supply chain activities - forecasting demands and fabric requirements making plans, stock control, warehousing etc. It further suggests the method of source improvement and procurement. The manufacturing and inventory strategies of ACI constrained is depicted in this part that ensures materials are available for manufacturing and products are available for transport to clients. Then the record consists of an evaluation of the important thing sports of SCM at ACI confined in keeping with supply Chain Operations Reference (SCOR). ACI has types of procurements - nearby buy and import. Then come making or production which eventually finishes off the deliver Chain via handing over the products even though transportation. After successful chain integration deliver Chain management can be defined as a fixed of sports undertaken in an agency to sell effective control of its uninterrupted price chain. supply primarily based management is using the suppliers' processes, technologies, and talents to beautify aggressive benefit, and how the producing, logistics, substances, distribution and transportation functions are coordinated within groups. This study will help our university students because as we know BRAC University introduces Major in Supply Chain Management. By studying this subject student have a great future because every company or industry has SMC and there is a great opportunity in this sector. By studying this subject our university students dominate the large industry sector.

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## Introduction of the Report: Chapter One

### 1.1 Back Ground of the Report

Organizational attachment is an obligatory requirement for the completion of BBA program, BRAC Business School, BRAC University. And accordingly within the internship period at commercial department, ACI Limited Ltd, I find the report work area “supply chain management” (SCM) under the recommendation and close supervision of my internship supervisor MayeshaTasnim. The intern supervisor helped me to find and work on the topic: “Supply chain management: A global aspect and Practice at Advanced Chemical Industries Limited (ACI).

### 1.2 Scope of the Report

The Report particularly demonstrations what is meant with the aid of Supply chain management in addition to what it covers, key activities like call for forecasting, procurement, production, distribution and so forth. And related factors find it irresistible integration, business analytics, supplier courting management, strategic sourcing, stock control, and sustainability problems of Supply chain control. Our intention is to locate how it allows reap business objectives via easy operations and create competitive blessings. The document also specializes in the nice practices of supply chain management at a few globally a success manufacturing corporations around the sector and on the equal time it famous the practice of SCM at ACI limited, one of the developing manufacturing orientated businesses in Bangladesh. Finally, the record shows some likely initiatives that might be beneficial to keep away from interruptions within the deliver chain and to put into effect a worldwide well knownSupply chain control.

### 1.3 Broad Objectives

To clearly understand the complete operations of supply chain management, what it covers, how it works at ACI Limited along with knowing the contemporary state of supply chain management from a global perspective focusing best practices.

## Specific Objectives

- To get the idea about the key activities of supply chain management (i.e. demand and supply planning, procurement (local purchase and import), transportation and logistics, production, distribution),
- Try to know how to control an uninterrupted flow of goods/materials from the suppliers to a satisfied customer.
- To learn about the strategic aspects to develop an integrated supply chain management and also the mechanism that can drive to superior performance and make the supply chain sustainable.
- To know the potential barriers in implementing an integrated supply chain and also to find out likely solutions to overcome those

## 1.4 Origin of the Report

The frame of the report starts off evolved with background, targets, and scope observed by means of literature evaluate of deliver chain control, the first-rate practices and latest developments of deliver chain management at some globally successful agencies around the arena respectively. After that it presents the practices of Supply chain management at ACI. Sooner or later, it includes a few initiatives that during IT and communication systems are probably useful to enforce a worldwide fashionable Supply chain management.

## 1.5 Limitations

One of the major limitations of the report is the limited access to the organizations' confidential data and availability of comprehensive information pertaining to activities of SCM individually. Sufficient records, publications were not completely available as per my requirement. Another limitation insufficient knowledge level as this is my first full formal report on supply chain management.

## 1.6 Literature Review

Supply Chain Management is a network of facilities that produce raw materials, transform them into intermediate goods and then final products, and deliver the products to customers through a distribution system. It spans procurement, manufacturing and distribution. The basic objective of supply chain management 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). Adoption of Supply chain management practices in industries has steadily increased since the 1980s. A number of definitions are proposed and the concept is discussed from many perspectives. However Cousins et al. (2006); Sachan and Datta (2005); Storey et al. (2006) provided excellent review on supply chain management literature. These papers define the concept, principals, nature, and development of SCM and indicate that there is an intense research being conducted around the world in this field they critically assessed developments in the theory and practice of supply management. Gunasekaran and McGaughey (2003) extended the scope of SCM beyond material management, partnership, information technology to the Total Quality Management areas like management commitment, organizational structure, training and behavioral issues. As firms' survival lies on integration, a good understanding of the integration process is a key aspect in SCM. Mouritsen et al. (2003) discussed that basic hypothesis “the more integration (wider the scope) – the better the management of the chain” is not always true and proved that it depends very much on the “environment” of the supply chain and the power relations between the participants in the supply chain. Authors proposed a set of management techniques and tools to analyze successful SCM strategies.

It is also observed that research is not limited to hypothesis testing and data analysis, but more advanced techniques like simulation, Artificial Neural Network, and Fuzzy logic are also used for optimization and decision making in SCM. Koh and Tan (2006) used the principles of fuzzy logic for analyzing and monitoring performance of suppliers based on the criteria of product quality and delivery time whereas Chiu and Lin (2004) showed how the concepts of collaborative agents and artificial neural networks (ANNs) can work together to enable collaborative supply chain planning (SCP).

The advent of the Internet and electronic communication has enabled companies to be more responsive to their customers than ever. Sanchez and Perez (2003); Tarn et.al. (2002); Wieder et.al. (2006) examined functions, current developments and the rationale for IT integration by analyzing the problems of enterprise resource planning (ERP), electronic data interchange (EDI) and presented the solutions of SCM. The rich experience of firms with ERPs tends to deliver higher overall performance, but no evidence was found of a similar effect on supply chain performance. On the contrary EDI adopters perceived more operational benefits, more external pressure and mutual understanding, and fewer technical and organizational difficulties than non-adopters of EDI. Information sharing practices

## Methodology of the study: Chapter Two

### 2.1 Methodology:

The report is qualitative and descriptive in nature and performed ordinarily based totally on realistic reviews accumulated at the time of operating at Supply chain branch of ACI Limited. Being an Intern of that branch it has emerge as feasible to recognize the capabilities, responsibilities, exercise, follow SOPs (standard running processes) of sports related to supply chain management. In doing the task it's miles needed to work, communicate, and interact with all different executives, senior executives, managers, officials, specialists, and head of the branch having variant supply chain responsibilities, all those helped to apprehend sports of supply chain and prepare the record on supply chain. The take a look at became also performed through thinking about information from secondary resources. The secondary information were accumulated from net – professional home web page of various businesses, supply chain council (SCC). data also discovered from Books, posted articles, journals gathered from various sources, internationally posted reviews, enterprise disclosures, online videos, while doing the examiner I attended month-to-month assembly, crew assembly, product launching rite and so on. To recognize the best practices in supply chain management facts become gathered from net, and on-line. Such as vendor-managed inventory (VMI) give manufacturers access to more accurate demand information. Småros et al. (2003) used discrete-event simulation to examine how a manufacturer can combine traditional order data available from non-VMI customers with sales data available from VMI customers in its production and inventory control and what impact this has on the manufacturer's operational efficiency. The key finding was that even for products with stable demand a partial improvement of demand visibility could improve production and inventory control efficiency. Other finding was that the value of visibility greatly depends on the target products' replenishment frequencies and the production planning cycle employed by the manufacturer. Companies encountering problems due to increased reliance on suppliers use a variety of approaches to address the problems. They may reverse their downsizing emphasis and bring outsourced products and services back in-house, secure alternative sources of supply, or work with existing suppliers to increase their performance and capabilities (Watts and Hahn, 1993). Supplier development efforts vary in terms of the effort expended by the buying firm and in the variety of tools used. A recent study found that firms often use supplier evaluation or performance measurement to identify specific supplier deficiencies and to develop plans to address them (Krause, 1997). Such efforts might also contain the measurement of suppliers' shipping, first-class, and cost overall

performance, web site visits, certification of suppliers' merchandise and techniques, and the setting of performance goals. Practices used to successfully manage the deliver base and boom supplier overall performance encompass using best guarantee applications for tracking supplier's techniques and products, the usage of website visits, and the sharing of records with suppliers

## Organization Profile: Chapter Three

### 3.1 About ACI

ACI is one of the largest Bangladeshi conglomerates. ACI Limited has diversified into four major strategic business divisions which include Health Care, Consumer Brands, Agribusinesses and Retail Chain. ICI Bangladesh Manufacturers Limited was a subsidiary of world renowned multinational ICI PLC and was a listed public limited company under Dhaka Stock Exchange. In 1992 ICI PLC divested its shareholding through a management buyout and the company name was changed from ICI Bangladesh Manufacturers Limited to Advanced Chemical Industries (ACI) Limited. ACI Formulations Limited, a Subsidiary of ACI Limited, became a public listed company through direct listing.

### 3.2 ACI Limited Mission Vision and value

#### 3.2.1 ACI Mission

ACI's mission is to enrich the quality of life of people through responsible application of knowledge, skills and technology. ACI is committed to the pursuit of excellence through world-class products, innovative processes and empowered employees to provide the highest level of satisfaction to its customers.

#### 3.2.2 ACI Vision

- To realize the mission ACI will:
- Endeavor to attain a position of leadership in each category of its businesses.
- Attain a high level of productivity in all its operations through effective and efficient use of resources, adoption of appropriate technology and alignment with their core competencies.
- Develop its employees by encouraging empowerment and rewarding innovation.
- Promote an environment for learning and personal growth of its employees.
- Provide products and services of high and consistent quality, ensuring value for money to its customers.
- Encourage and assist in the qualitative improvement of the services of its suppliers and distributors.

- Establish harmonious relationship with the community and promote greater environmental responsibility within its sphere of influence.

### 3.2.3 ACI Values

- Quality
- Customer Focus
- Fairness
- Transparency
- Continuous Improvement
- Innovation

### 3.3 Strategic Business Unit:

- Pharmaceuticals
- Consumer Brands and Commodity Products
- Agribusinesses (Crop Care Public Health, Animal Health, Fertilizer, Cropex, Seeds)
- ACI Retail Chain

### 3.4 ACI has the following subsidiaries:

- ACI Formulations Ltd.
- ACI Agrochemicals
- Apex Leather crafts Limited
- ACI Salt Limited
- ACI Pure Flour Limited
- ACI Foods Limited
- Premiaflex Plastics Limited
- Creative Communication Limited
- ACI Motors Limited
- ACI Logistics Limited

### 3.5 Joint Ventures

- ACI Godrej Agrovvet Private Limited
- ACI Consumer electronics
- Asian Consumer Care (Pvt) Limited

**ACI Formulations Limited:** ACI Formulations Limited (AFL) is a subsidiary of ACI constrained, placed at Gazipur. AFL manufactures majority of the products of ACI Strategic business restrained besides for the Pharmaceutical department. The manufacturing facility is geared up with the nation of the art centers for product formulations and procedure innovation. Those include present day automatic system. The product range synthetic at AFL include Crop safety chemicals like insecticides, herbicides and fungicides in granular, powder and liquid, mosquito pesticides within the varieties of aerosols, vaporizers and coils house hold chemicals like toilet cleaners and hand wash.

**ACI Logistics Limited:** ACI Logistics Limited was formed in 2008 with a vision to setup nationwide retail outlets, named “Shwapno”, to utilize ACI’s strong presence in Bangladesh through implementation of world-class supply chain mechanism.

**ACI Pure Flour Limited:** ACI Pure Flour Ltd is the largest flour producing organization in Bangladesh delivering cleanest, healthiest and most hygienic flour via adopting kingdom of the artwork generation. Coupled with double digit boom and constantly generating pure product make 'Pure' brand a big fulfillment & make it a family product overnight. In a totally short time 'Pure' is able to come to be purchasers' morning bell and snatched prestigious second role overtaking all different gamers inside the marketplace. 'Pure' flour is capable of talk to its consumers that ACI natural is synonymous to Purity. The plant stands through the financial institution of Sitalaksha River with most superior European technology coupling with a properly-equipped laboratory keeping in mind to provide the quality great flour to the purchasers.

**ACI Foods Ltd:** the need of natural meals inside the minds of Bangladesh consumers specifically in the commodity meals business has driven ACI to fill up the market demand via generating meals products together with spice, suitable for eating oil, snacks, confectionary and so forth. ACI is engaged in

production, advertising, and distribution of various branded meals products and condiment. Now the clients of Bangladesh are ensured with 100% pure meals products beneath the emblem call of 'Pure'. Within the very short duration of its front this logo has been enjoying second main function within the marketplace. Amusing candy and amusing Chanachur created from high high-quality imported uncooked substances with nation of the artwork technology have attained massive recognition the various purchasers. ACI foods Ltd. is that specialize in improving the meals addiction of Bangladeshi customers thru supplying extra prepared to cook dinner merchandise and equipped to devour as nicely.

**ACI Salt Limited:** ACI Salt became released in 2005. in the very quick length it's been playing the pride of the emblem chief. The pleasant in its type, ACI Salt is vacuum evaporated, unfastened flowing and well iodized. it's also very porous and free flowing. Iodine is coated in each single grain which makes it an critical product for the youngsters; the absence of right quantity of iodine in their meals can also cause mental disability to them. ACI Salt has gained the "Best Brand OF BANGLADESH AWARD 2008" for unparalleled customer loyalty beating all of the brands in meals & liquids category.

**ACI Motors Limited:** ACI Agribusinesses has released a brand new subsidiary commercial enterprise, ACI motors, from 6th November 2007 with a goal to marketplace high pleasant farm machineries and light commercial motors. ACI Agribusinesses now guarantees whole approach to the farmers with the introduction of the agrimachineries. ACI vehicles are now advertising the various models of Sonalika tractor that is 3rd main role in India as well as the fastest growing emblem. It additionally has delivered high fine Bull power brand strength tiller and mini combine harvester, Hardy Sprayer from China. It has very own sales and service center at Bogra, Comilla, Jessore, and Dinajpur through which make certain highest high-quality after income carrier, repairs and spare parts. It also offers bendy credit centers for farmers for better patron pride and service. ACI cars are planning to introduce mild business automobiles like pickups and mini trucks to aid farmers to carrying agricultural goods. Additionally, high best diesel engines and pumps for irrigation reason will be offered within the near destiny. This enterprise indicates considerable promise in contributing to the rural productiveness of Bangladesh

**Creative Communication Limited:** Creative conversation Ltd. is an incorporated conversation company based in 2000, staffed by dedicated and pragmatic professionals running as one crew. The center competency modern Creative conversation Ltd. is to provide end result - oriented advertisement,

public relation and whole company communique answers. Creative communication Ltd. has unique information in photography, TVC, Conceptualization and Designing latest company manual, annual file, company Brochure, Calendar Dairy, Press advertisement and so forth. Besides that creative communication Ltd. has lengthy revel in in managing outside, occasions and assignment control.

**Premiaflex Plastics Limited:** Premiaflex Plastics Limited is a common soldier Limited party incorporated in 2007 with the register of Joint Stock Companies, Dhaka, People's Republic of Bangladesh under Companies Act 1994 having 80% shares by ACI Limited. The principle natural action of the company are manufacturing and marketing of plastic products, flexible printing and other ancillary business associated with plastic and flexible printing. The factory of the Company is located at Sreepur, Gazipur.

**Pharmaceuticals:** ACI carries the legacy of ICI- world renowned British Multinational in providing the people of Bangladesh with exceptional medicines and healthcare merchandise. Its state-of-the art pharmaceutical plant represents Bangladesh's quest for a sincerely world magnificence production facility. The complete product range of ACI prescribed drugs include products from all major healing instructions and in numerous dosage forms like pill, tablet, dry powder, liquid, cream, gel, ointment, ophthalmic and injectable. ACI Pharma additionally has country of the artwork plant on Novel Drug delivery system (NDDS). It produces international class changed release drug and medicine to cater the requirement of pharmaceutical producer of domestic and international market exports high first-class pharmaceuticals to a terrific quantity of countries of Asia, Africa & South the USA. ACI also markets international-renowned branded pharmaceutical merchandise like Arimidex, Casodex, Zoladex, Atarax and so on. From international-elegance multinational corporations like ASTRAZENECA, United Kingdom and UCB, BELGIUM in Bangladesh. ACI is actively engaged in introducing more recent molecules and Novel Drug shipping structures (NDDS) to fulfill the desires of the destiny. ACI added the idea of pleasant control machine by way of being the primary company in Bangladesh to gain ISO 9001 certification in 1995 and follows the policy of non-stop improvement in all its operations. Aligned with the idea that a pharmaceutical ought to ensure effective control of environment, ACI complies with fashionable surroundings control coverage, as a result decorated with EMS 14001 in 2000. A noticeably professional crew is devoted in producing products with consistent satisfactory under sincerely defined

fashionable running techniques (SOP) in compliance with the strategies and instructions of ISO 9001 quality machine.

**ACI Agrochemicals Limited:** ACI Agrochemicals limited was included in July 2006 with the Registrar of Joint stock organizations, Dhaka, Bangladesh underneath agencies Act 1994. ACI Agrochemicals constrainer's eighty% shares are held by ACI constrained. The principal enterprise of the organization is manufacturing, formulating and packing of insecticides, fertilizers, plant vitamins and animal meals as well as different nutrient products.

**Apex Leather Crafts Limited:** Apex Leather Craft Limited is a private limited company incorporated in 2007 with the registrar of Joint Stock Companies, Dhaka Bangladesh Under companies Act 1994 having 100 % shares by ACI limited.

**ACI Healthcare Limited:** ACI health Care Limited, a public constrained company, is a subsidiary trendy superior Chemical Industries (ACI) restricted was integrated in 18 February 2013 beneath the businesses Act 1994. The most important sports modern day the enterprise are to be manufacturing and advertising and marketing contemporary pharmaceutical merchandise for regulated markets, Specially for us. Pharmaceutical factory in Sonargaon, Narayanganj, Bangladesh

### **Joint Ventures:**

**ACI Godrej Agro vet Private Limited:** ACI Godrej Agro vet private limited is a joint mission organization fashioned via a 50:50 stake of ACI confined, Bangladesh and Godrej Agro vet constrained, India. The organization started out its business in Bangladesh at the quilt of the year 2004 with poultry Feed. It started Hatchery and Breeding Farm Operations in February 2007. The company released and began selling Fish Feed at the same time. In July 2008, it diversified its product portfolio and brought Shrimp Feed and farm animals Feed. ACI Godrej Agro vet private limited is into the commercial enterprise of offering integrated solution to the market via manufacturing and marketing first-rate rooster, Aqua, livestock Feed and Day antique Chicks, now not only for enterprise purpose but also for the improvement of socio monetary circumstance of the farm proprietors of Bangladesh.

At gift a massive quantity of funding is going on for various required initiatives, like: The technical knowhow of this enterprise is being given via the Godrej Agro vet constrained, India which has a

management position in India. ACI Ltd has Joint undertaking with one of the main agencies of India, Dabur India as Asian customer Care Ltd. Dabur has a long range of meals objects which is shipped through the channels of ACI consumer manufacturers. That merchandise are very popular in Bangladesh market. The meals objects are- Dabur Honey and Dabur Chawanprush.

**Asian Consumer Care (Pvt) Limited:** Asian Consumer Care (Pvt.) Ltd. also markets the personal care products of Dabur. The personal care products of Dabur are:

- Dabur Amla Hair Oil.
- Dabur Vatika Hair Oil.
- Vatika Shampoo.
- Dabur Vatika Face pack.

All these products of Dabur are already known to the customers through various satellite channels and bringing good name for both Dabur and ACI.

**ACI Consumer Electronics:** World renowned electronics organization Panasonic and ACI confined has joined together to deliver the Panasonic Audio visual merchandise to Bangladeshi customers. Under this association with Panasonic regional workplace in Singapore, ACI purchaser Electronics, a newly shaped department in ACI patron manufacturers SBU will market the Panasonic AV products in Bangladesh. Panasonic has a wealthy range of AV merchandise comprising of high Definition LCD and Plasma TV, domestic Theatre device, DVD and Blue-ray DVD player, virtual still camera & Camcorder. For the smooth-availability of that merchandise to the customers, ACI patron Electronics has already appointed 11 sellers inner Dhaka and 5 sellers outside, who will convey the Panasonic merchandise for display and sales purpose.

### 3.6 Management Team:

The Management team is the executive Committee of ACI confined coping with the affairs of the business enterprise. The management crew consists of the managing Director and different key Managers throughout the enterprise. The managing Director is the leader of the group. Control team endeavors to gain the strategic goals and undertaking of the corporation set by using the Board of directors.

## Supply Chain at ACI Limited: Chapter Four

### 4.1 The state of affair of Supply Chain Management at ACI Limited

#### 4.1.1 Supply chain department

Supply chain of ACI is one of the maximum critical functional departments of the employer which offers with the deliver chain activities of ACI. In an effort to hold all of the corporations jogging perfectly, the devoted and hardworking employees of this department hold an excellent liaison with the clients, each country wide and international. The industrial department is constantly achieving the high-quality fees for the products that we buy, making sure large amount of cost financial savings for the corporation. It gives invincible professionalism and know-how inside the entire business and supply chain activities of ACI.

**4.1.2 Motto:** Be a partner in achieving business and corporate goal

**4.1.3 Slogan:** We meet the business need at the right price at the right time from right source with right quantity and quality

**4.1.4 Priorities:** Spend savings, Cost savings through operational efficiencies, Innovation, New sourcing, Quick response through increased supplier base, System based process, Compliance, Learning and development

#### 4.1.5 Key Challenges

- Efficient support by partnering with business and stakeholders
- Enhanced efficiency and productivity through proper use of IT
- Be an integral part of business in providing customized support
- Align commercial activities in enhancing profitability of the company
- Execute contingency planning in sourcing
- Ensuring supply by applying due diligence

#### 4.1.6 Forecasting demand and planning materials requirement

The department remains accountable for availing all raw materials and packaging substances at the proper time, in proper amount, at proper region, and of route in right excellent and manner. Business or advertising branch accountable for that enterprise forecasts marketplace demand of an existing product taking some related variables like promotion, seasonal, occasional effect into consideration. Usually the ROFO (Rolling Forecast) is ready for six months. It is essential to have ROFO (Rolling Forecast) to put together MRP (materials requirement making plans) for the time to time production of modern-day merchandise. At ACI confined the above element occurs at both supply chain and advertising department.

#### 4.1.6 Commonly used method to forecast demand

- Historical Data Analysis (for existing goods)
- Sales Trend Analysis or Analysis of Time Series (for existing goods)
- Market Survey Studies
- The Collective Opinion also called as Sales Force Polling or Expert Opinion polls
- Use of Economic Indicators – Regression Analysis and Economic Model Building
- Controlled Experiments – Test Marketing.
- Judgmental Approach
- Depending on the type of goods, the method of forecasting demand varies.

#### 4.1.7 The process of source development

First finding out and list potential cum dependable suppliers. suppliers might also or might not be enlisted. Before enlistment there are a few formalities and analysis conducted. Then request for citation considering specification and different associated topics, and also negotiate fee and first-rate with the great acceptable one. After that pattern development and pattern approval stage, pattern is eventually approved problem to approval from commercial enterprise and great manipulate. Once substances are approved then the middle activities of supply chain begins with close and ordinary monitoring and evaluation of first-rate guarantee group.

#### 4.1.8 Contingency planning

Having multiple enlisted and accepted suppliers for materials sourcing or procurement is really contingency making plans in supply chain. something unexpected might also appear and there need to be sufficient safeguarding guidance so that the sudden can be managed, that is why the required uncooked substances and packaging substances of a fast moving product must be sourced as a minimum multiple dealer. The supply chain branch of ACI confined does contingency making plans for procuring raw materials and packaging materials of those rapid transferring products.

#### 4.1.9 Supplier Relationship Management

Supplier are viewed as outsider who will supply or conveyance the requested materials at preset thought. Extent of relationship is arrangement for value, quality, and materials sourcing.

#### 4.1.10 Production program and production schedule

Production planning need to be carried out based on marketplace demand, sales prospect, promotional software, seasonal variables and so forth manufacturing plan and production schedule have to be organized with proper care.

At ACI in a few corporations manufacturing plan isn't prepared with due care, manufacturing time table is not always fixed considering manufacturing plan. There is a chance of facing materials unavailability or shortage, because maximum of the time substances requirement is planned base on production agenda.

### 4.2 Inventory Management Technique at ACI Limited

#### 4.2.1 Material Requirements Planning

ACI applies the mechanism Material Requirements Planning (MRP) which is a production planning and inventory control system used to manage manufacturing processes. Most MRP Systems are software-based, while it is possible to conduct MRP by hand as well. At ACI there is an own software named 'MATPLAN' developed by ACI-MIS .The software mainly serves the purpose of MRP system and intended to simultaneously meet three objectives

- Ensure available for production and available customers
- Maintain the lowest possible material and product levels in store
- Plan manufacturing activities, delivery schedules and purchasing activities.

The basic function of MRP system includes inventory control, bill of material processing and elementary scheduling. MRP helps organizations to maintain low inventory levels. It is used to plan manufacturing, purchasing and delivering activities.

## 4.3 Production & Inventory Strategy

### 4.3.1 Make to Order

Make-to-arrange is a business generation technique took after to make items to client particulars in low volumes. The make to arrange (MTO) technique just fabricates the finished result once the client submits the request.

### 4.3.2 Assemble to Order

Make-to-arrange is a business creation procedure for delivering a wide assortment of items from moderately couple of gatherings and parts after the client orders are gotten

### 4.3.3 Make to Stock

Make-to-stock is a traditional manufacturing approach used by using agencies to suit manufacturing with patron demand and forecast. The make-to-inventory (MTS) method forecasts demand to determine how plenty inventory need to be produced. If call for the product can be correctly forecasted, the MTS approach may be an green choice. ACI limited, being more often than not a production orientated organization follows Make to inventory production and stock method.

### 4.3.4 Safety Stock

Safety inventory, additionally referred to as buffer inventory is a term utilized by logisticians to describe a level of more stock that is maintained to mitigate risk of stock outs - shortfall in raw cloth or

packaging because of uncertainties in supply and demand. Good enough protection inventory tiers permit enterprise operations to continue consistent with their plans. Safety inventory is held whilst there's uncertainty within the call for level or lead time for the product; it serves as coverage in opposition to stock outs. It is assumed that the much less the protection inventory the greater accurate the forecasting. Generally 5 to 10% safety stock saved based totally on product income fashion

#### 4.3.5 Import Process

Import manner in particular starts with commencing Letter of credit score. After a success letter of credit, documents recognize to it are gathered & dispatched to dealer. Suppliers set up shipment of that ordered item and ship vital documents to importer and bank involved. There are a few principal works to do sequentially – clearing and forwarding, custom clearance, obligation evaluation, transportation and shipping to warehouse

#### 4.3.6 Use of information and communication technology (ICT)

Utilization of data and correspondence innovation that is framework incorporation at ACI Limited is tied in with utilizing MS Outlook, MS Excel, few claim created frameworks. The claim frameworks are to fill various specific needs which are identified with stock administration, charge administration, LC (Letter of Credit) document administration. The frameworks for the most part show the record or current status.

### [4.4 The key Activates of Supply Chain Department of ACI Limited- According to SCOR \(Supply Chain Operation Reference\) Developed by Supply Chain council](#)

#### 4.4.1 Plan – Demand & Supply Planning and Management

Techniques that stability mixture demand and supply to broaden a route of action which best meets sourcing, manufacturing and delivery necessities

## 1. Demand & Supply planning:

Demand forecasting it is called ROFO (Rolling Forecast) in a few case ROFO is given from enterprise or advertising and marketing in a few other cases ROFO is finished through Supply Chan executive

## 2. Prepare MRP

### 4.4.2 Source – Procurement

Processes that procure goods and services to meet planned or actual demand

1. Sourcing at ACI is mainly of two types (local purchase & import). Suppliers must be enlisted before becoming a valid source. There are already some enlisted suppliers for procuring RM & PM.

To develop a reliable sources for procuring materials the below steps are followed

- a. Make list of potential suppliers for that particular material
  - b. Request quotation for materials (RM or PM) mentioning materials type, name, specification, quantity, delivery, and other related matters.
  - c. Negotiating with supplying regarding quality, price, and delivery
  - d. Getting approval of cost-effective price from head of Supply Chain, Business Manager, and Head of Finance
  - e. Collection of sample and getting approval of sample of required material from Business and Quality Control.
2. Procuring materials from approved supplier at approved price, in right quantity, at right time, and at right place.
  3. Procurement related activities such as banking services like issue of 'Letter of Credit', billpayment, amendments if needed
  4. Quality, environment, regulatory, customs certifications and other relevant important certifications such as NOC (No Objection Certificate), HS Code etc.
  5. Transportation & logistics for clearing and forwarding of procured materials.

### 4.4.3 Make – Production

Processes that transform product to a finished state to meet planned or actual demand

Production, specifically production manager is responsible to schedule production, make & ready the finished good for delivery.

### 4.4.4 Deliver – Distribution-Return

Strategies that offer completed items and offerings to meet deliberate or actual call for, normally including order control, transportation control, and distribution control

Distribution is responsible to ensure delivery the right product in the right quantity and in the right condition to the right place at the right time.

Return – Return of Raw Materials and Receipt of Returns of Finished Goods

Processes associated with returning or receiving returned products for any reason. These processes extend into post-delivery customer support.

The Retort physical process is describing the activities associated with the reverse flow of goods back binding from the customer. The Comeback process includes the designation of the need for a coming back, the disposition decision devising, the scheduling of the return, and the shipment and reception of the returned goods. This step is not associated with the ware ACI Limited manufactures

## Conclusion & Recommendation: Chapter Five

### 5.1 Conclusion

The sphere of deliver Chain control is virtually considerable. All form of philosophy in supply Chain discipline should be determined and practiced substantially. ACI limited being a large nearby organization ought to constantly sit up for improving their supply Chain community by using adopting the first-rate practices and assembly benchmarks which can be very much a success in deliver Chain control globally. The established order of a solid supply Chain control at any employer isn't always smooth because it looks from outside. It takes years to put in force a proper deliver Chain gadget. ACI limited has a incredible prospect if it can incorporate the supply Chain ideas from the sector's largest groups who strictly enroll in and maintain the actual programs of deliver Chain control. To sustain and be successful inside the international of competitive business, a perfect supply Chain management is obligatory. Bangladesh remains lagging in the back of in many crucial commercial fields simply due to negative deliver Chain control. To emerge as one step in advance, every Bangladeshi organization, mainly manufacturing like ACI restricted must usually dedicate itself to discover ways to undertake every great practices and get up to date with technologies which might be widely known and utilized in supply Chain subject. It's emerge as unquestionable, pinnacle precedence, and survival want to fit up with more sustainable as well up to date enterprise ideas to sustain in aggressive market. Flourishing with strengths and going possibilities it is also very critical to discover the techniques to conquer the weaknesses and potential threat.

### 5.2 Recommendations

The pre formation of supply Chain management could be very a good deal dependent on statistics generation, uninterrupted flow of goods, provider coordination, and internal and outside purchaser synchronization. To attain exceptional of supply Chain Pre formation it's miles vital to devise simple supply chain system, forecast patron demand efficaciously, plan substances requirement, and have a totally close contact with providers that will offer us with items at right time with least feasible fee. The masterpiece that can assist supply chain get all the very high-quality overall performance is implementation of quite incorporated statistics era.

The primary cause and objective of SCM is to offer a strategic weapon to build up and beautify sustainable competitive gain by means of cost discount without compromising customer satisfaction. An included statistics technology can vastly help to reduce supply Chain price, raise overall performance, and beautify performance. The principle aim and crucial component of supply Chain is leveraging the expertise, experience, capabilities and competencies of the deliver Chain professionals who incorporate this competitive community.

It suggested to follow SCOR developed Process Reference Model which cover three core key facets first 'Business Process Reengineering' that is capturing the "as-is" state of a process and derive the desired "to-be" future state, second 'Benchmarking' which means quantifying the operational performance of similar companies and establish internal targets based on "best-in-class" results, and finally 'Best Practices Analysis' which implies characterizing the management practices and software solutions that result in "best-in-class" performance.

## References

- Agarwal, A., Shankar, R., 2002. Analyzing alternatives for improvement in supply chain performance. *Work Study*, 51 (1), pp.32-37.
- Buxey, G., 2005 . Globalization and manufacturing strategy in the TCF industry. *International Journal of Operations & Production Management*, 25 (2), pp.100- 113.
- Chan F. T.S, Nelson K.H. Tang, H.C.W Lau, R.W.L. Ip., 2002. A simulation approach in supply chain management. *Integrated Manufacturing Systems*, 13 (2), pp.117 –122.
- Gunasekaran, A., Patel, C., Tirtiroglu ,E., 2001. Performance measures and metrics in a supply chain environment. *International Journal of Operations & Production Management*, 21 (1/2), pp.71 – 87.
- Gunasekaran, N., Rathesh, S., Arunachalam, S., Koh, S.C.L., 2006. Optimizing supply chain management using fuzzy approach. *Journal of Manufacturing Technology Management*, 17 (6), pp.737 – 749
- Heng, M.S.H., Wang, Y. C., He, X., 2005. *Supply Chain Management and Business Cycles*. *Supply Chain Management: An International Journal*, 10 (3), pp. 157-161
- Power, D., 2005. *Supply Chain Management Integration and Implementation: A Literature Review*. *Supply Chain Management: An International Journal*, 10 (4), pp. 252-263.
- Storey.,Emberson, C., Godsell, J., Harrison, A., 2006. Supply chain management: theory, practice and future challenges. *International Journal of Operations & Production Management*, 26 (7), pp. 754 – 774
- Varma, S., Wadhwa, S., Deshmukh, S.G., 2006. Implementing supply chain management in a firm: issues and remedies. *Asia Pacific Journal of Marketing and Logistics*, 18 (3), pp.223 – 243.
- Wu, W., Chiag, C., Wu, Y., Tu, H., 2004. The influencing factors of commitment and business integration on supply chain management. *Industrial Management & Data Systems*, (4), pp.322 – 333

## Appendix

Company official home page [www.aci-bd.com](http://www.aci-bd.com)

### **Some external sites**

<http://corporate.walmart.com/our-story/our-stores/logistics>

<http://www.ecommerce-guide.com/news/trends/article.php/1501651/Case-Study-Walmartcom.htm>

[http://findarticles.com/p/articles/mi\\_m3092/is\\_n23\\_v28/ai\\_8284041/pg\\_3/?tag=content;coll](http://findarticles.com/p/articles/mi_m3092/is_n23_v28/ai_8284041/pg_3/?tag=content;coll)

<http://www.usanfranonline.com/wal-mart-successful-supply-chain-management/>

<http://www.nestle.com/aboutus/quality-and-safety>

[http://www.nestle.com/assetlibrary/Documents/Library/Documents/Suppliers/Quality\\_Policy\\_Nestle.pdf](http://www.nestle.com/assetlibrary/Documents/Library/Documents/Suppliers/Quality_Policy_Nestle.pdf)

<http://www.nestleusa.com/About-Us/Suppliers.aspx>

<http://www.shippingline.biz/Logistics/Nestle-Chile-S.A.-Outsources-Distribution-and-Transportation-Operations-to-Ryder.html>

<http://about.hm.com/AboutSection/en/About/Sustainability/Commitments/Responsible-Partners/Supply-Chain.html>

<http://about.hm.com/AboutSection/en/About/Sustainability/Commitments/Responsible-Partners/Supply-Chain-Experts.html>

<http://www.supplychainbrain.com/content/industry-verticals/cpg/single-article- page/article/procter-gamble-uses-consumer-demand-info-to-drive-supply-network/>