

Report On
Supply Chain Management System of Joint Venture Medical
Industry (JMI) Group

By

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An internship report submitted to the ***BRAC Institute of Governance & Development (BIGD), BRAC University***; in partial fulfillment of the requirements for the degree of ***'Masters in Procurement & Supply Management'***

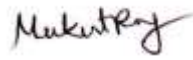
BRAC Institute of Governance & Development
BRAC University
AUGUST 2021

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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at BRAC University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.



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Letter of Transmittal

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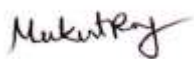
Subject: Submission of PSM-665: Supply Chain Management in Practice-Report/Practicum.

Dear Sir,

With due respect and humble submission, I would like to take the privilege to submit my report entitled 'Supply Chain Management System in Joint Venture Medical Industry JMI Group' as partial requirement to fulfillment of my master's degree in Procurement and Supply Management (MPSM), BIGD, BRAC University.

I have tried my best to complete the report with the essential information and suggested proposition in an exceedingly vital compact and comprehensive manner as possible. I believe that this report will be meeting the benchmark of academic paper in best possible manner.

Sincerely yours,



Student Full Name: Mukut Roy

Student ID: 17-182007

BRAC Institute of Governance & Development (BIGD)

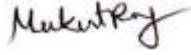
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Date: 31 August 2021

Non-Disclosure Agreement

This agreement is made and entered into by and between JMI Group, and the undersigned student at BRAC University.


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I would like to express my heartiest gratitude to my honorable Supervisors Mir Mehbubur Rahman, Faculty, BIGD, BRAC University, Dhaka; and my industry supervisor Mr. Amirul Islam, Assistant General Manager of NIPRO JMI Company Ltd. for sincerely guiding me to complete this report work. Without their continuous encouragement and caring attitudes towards me it would have been difficult to accomplish my report.

I am grateful to those people who uploaded their valuable writings, research blogs and experiences in the websites which helped me very much to fulfill the contents and articulate this report.

Special thanks to the supply chain team members of JMI Group for helping me to bring the practical working scenario in my report. I am grateful for their excellent co-operation, positive attitude and knowledge sharing approach which made it possible to finish my report successfully.

Abstract

Joint Venture Medical Industry (JMI Group) is the most inspiring and fast developing companies in Bangladesh. The first name of JMI Group is JMI Bangla Company Ltd (later it was renamed as JMI Syringes & Medical Devices Limited) was established in 1999 as the first SBU of this Group. The Group is now extended around twenty-two companies having direct investment of around BDT 10 billion from China, Turkey, Japan, and South Korea. Through development in pharmaceutical sector by manufacturing syringes and other types of sophisticated medical devices JMI goal is to protect human lives and continue to bring development in the medical sector.

The report has been organized based on Author's hands-on work involvement at JMI Group during the working period. Author's internship report is on "***Supply Chain Management System in JMI Group***". The operation of the department highlighted in this report is Supply Chain Management Department of JMI Group. The study is prepared based on both primary data and secondary data.

In this report, in the first chapter the introductory part has been covered. Here the background of the report, the report scope, objectives of the study, sources of the information and the constrained faced during preparing this report has been covered.

The second chapter contains the profile of JMI Group. It's History, Vision & Mission, products, and services offered by this Group, departments of this Group and organizational structure etc. Chapter three and four cover the supply chain activities of JMI Group. Author focuses on SCM in JMI, two major business **JMI Syringes & Medical Devices Ltd.** and **JMI Industrial Gas Ltd.** Supply Chain Network, Company wise Supply Chain, Centrally Controlled Supply Chain, Group Supply Chain Integration, Flow Diagram of JMI Group, Sourcing & Procurement system of SCD. In this report SWOT analysis of SCD in JMI group are also covered.

Based on the overall report author provided some recommendations for JMI group supply chain management.

Keywords: Supply Chain Department, Joint Venture Medical Industry, Strategic Business Unit, Manufacturing, Services Integrated Models,

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List of Acronyms

JMI	JOIN VENTURE MEDICAL INDUSTRY
JG	JMI GROUP
SCM	SUPPLY CHAIN MANAGEMENT
SCD	SUPPLY CHAIN DEPARTMENT
JSMDL	JMI SYRINGES & MEDICAL DEVICES LTD.
JHRML	JMI HOSPITAL REQUISITE MFG. LTD
JML	JMI MARKETING LIMITED
JIGL	JMI INDUSTRIAL GAS LTD
NJMI.	NIPRO JMI COMPANY LTD.
NJPL	NIPRO JMI PHARMA LTD
NJDCL	NIPRO JMI DIALYSIS CENTRE LTD.
JPPL	JMI PRINTING & PACKAGING LTD.
JBCL	JMI BUILDERS & CONSTRUCTION LTD.
JLPL	JMI LPG & PETROLEUM LTD.
JCDL	JMI CNG DISPENSING LTD.
JR	JMI RESTORA
JEICL	JMI EXPORT IMPORT COMPANY LTD.
JVL	JMI VACCINE LTD.
JSAL	JMI SONLU APPLIANCES LTD.
JSTL	JMI SAFE TRANSPORTATION LTD.
JP	JMI PHARMACY
ATPL	ADVANCE TRAVEL PLANNER LTD.
JSATL	JMI SANKUR AUTO TANK LIMITED
JHBCL	JMI HOLLOW BLOCK Co. LTD.
CS	CUMULATIVE STATEMENT
SRM	SUPPLIRE RELATIONSHIP MANAGEMENT
CSCMP	COUNCIL OF SUPPLY CHAIN MANAGEMNT PROFESSIONALS
APICS	AMERICAN PRODUCTION AND INVENTORY CONTROL SOCIETY
MD	MANAGING DIRECTOR
HOD	HEAD OF THE DEPARTMENT
LPG	LIQUID PETROLIAM GAS
JIT	JUST IN TIME
RFI	REQUEST FOR INFORMATION
RFQ	REQUEST FOR QUOTATION
COA	CERTIFICATE OF ANALYSIS

Chapter 1 INTRODUCTION

1.1. Introduction

The Joint Venture Medical Industry (JMI Group) is one of the leading and most diversified global conglomerates in Bangladesh. The company was established in April 1999, having offices in all major cities, employing over 7000+ employees and dedicated to bringing the highest quality products and services to our customers. We have good annual turnover with such diversified interests Syringes & Medical Devices, Pharmaceuticals, Lifesaving Vaccine manufacturing, Hospital Requisite manufacturing, Printing & Packaging Services, Export & Import businesses, the Construction sector, Safe Transportation sector to name a few.

The conglomerate has an outstanding record of all around excellence in growth in the different business activities.

1.2. Background of the Study

For MPSM Alumni, it is necessary to submit a Practicum or a thesis report. Author choose to continue with a report / practicum to gain a deeper understanding of supply chain theory and practice by examining how particular theories relate to real-world situations or how particular theories offer advantages over others. This will also help to develop my investigative, analytical and communication skills, including the use of secondary and, if required, primary research where appropriate.

The topic of the Author focuses on: Supply Chain Management System of JMI Group. This descriptive analysis exemplifies various events in sequence to design conceptual Supply Chain Management (SCM) model for JMI Group to explain different functions integration under SCM department. Major highlights are JMI Syringes and Medical Devices Ltd. & JMI Industrial Gas Limited Supply Chain network. JMI Group, one of the prominent and diversified universal corporations in Bangladesh, was established in April 1999 and comprised of 22 subsidiary enterprises covering both manufacturing and service industries.

1.3. Origin and Background of the Topic

Supply Chain comprises all parties related to satisfying customer demand directly or indirectly. Raw materials and finished products, Suppliers and customers, and flow of goods (services), information and funds are the three entities of basic supply chain. Manufacturing and service industries have different basic supply chains as these contain supplier, manufacturer, distributor, retailer, customer and supplier, service provider, customer, consumer respectively. Goods/ service, information, and fund flow in both directions in both the circumstances where all the above steps may not exist. The management of flows between and among supply chain phases to increase overall supply chain profitability is defined as supply chain management (SCM).

JMI Group is one of the encouraging and fast-growing companies in Bangladesh. JMI Bangla Company Ltd (later it was renamed as JMI Syringes & Medical Devices Limited) was founded in 1999 as the first concern of this Group. The Group is now expanded to twenty-two companies having direct investment of BDT 10 billion from Japan and South Korea. Saving lives by manufacturing state-of-the-art and inventive produces and work for the benefit of the humanity are the commitments of this Group. This report designs conceptual structure of SCM

for JMI group, Group Supply Chain Integration and Supply Chain Network for JSMDL & JIGL. The individual models demonstrate distinctive supply chain management for all the subsidiary concerns. Suppliers in terms of internal and external, process through the manufacturing and service industries, customers i.e., internal, and external, and finally the end users are revealed methodically in every framework. The integrated models show how the supply chains of all the subsidiary companies of JMI Group are interlinked with each other by performing either as internal supplier or internal customer.

1.4. Scope of the Study

This paper develops conceptual structure for JMI group, Establishment process of Supply Chain Department, Company wise Supply Chain Activities, Centrally Controlled SCD functions, Supply Chain flow diagram of JMI, Supply Chain Group Integration and Supply Chain Network for two major business. The individual models exemplify distinct supply chain management for all the subsidiary companies. Each framework methodically establishes suppliers in terms of internal and external, process through the manufacturing and service industries, customers, i.e., internal, and external, and finally the end users. The integrated models illustrate that the subsidiary companies of JMI Group are interlinked with each other through complex networks for ensure quality, save time and cost in over all process in SCM.

1.5. Objectives of the Study

- i. The Primary objective of the research is to understand a comparatively new term “supply chain management” in the business world along with its impacts and benefits. The research has a definite focus on the company JMI Group. This research will have a reflection on the supply chain activities of the mentioned company.
- ii. The core objectives of the study have been to understand what activities of JMI Group has been entitled to supply chain activities and how this activity has been performed by JMI. In detail, the objective of the study is:
 - To learn the procedure of the Supply Chain in JMI Group
 - To learn how JMI integrates its Supply Chain
 - Supply Chain Network for JSMDL & JIGL

1.6. Methodology

1.6.1. Data collection:

As this research was exploratory in nature, the report has been written based on both the primary as well as the secondary form of information. The details of these sources are highlighted below:

Primary Sources: Primary data were the collected data directly from the officials. Author has discussed the aspect of the relative supply chain activities to the related executive official and used their responses as primary data. Also, the author of this report has worked in that organization as an employee in the supply chain department. This department controls all the supply chain activities of JMI. Author has working experience in JMI, and he is also a source of primary data in this report.

Secondary Sources: The secondary data were, company's yearly business review report, marketing report, annual budget, in-house training material, company manual, internal meeting minute, textbook, and information from internet etc.

1.6.2. Research design and Philosophy

The research is designed in such a way that the reader of this can easily get an idea of the entire message of the report very easily. Here the data that are used to complete the research are collected from both primary and secondary source. There only qualitative data is used to climb the stair of the decision because of the nature of the subject itself. The research philosophy followed here is pragmatism philosophy. Pragmatism is a rejection of the idea that the function of thought is to describe, represent, or mirror reality. Instead, pragmatists develop their philosophy around the idea that the function of thought is as an instrument or tool for prediction, action, and problem solving. Pragmatists contend that most philosophical topics. Such as the nature of knowledge, language, concepts, meaning, belief, and science, are all best viewed in terms of their practical uses and successes rather than in terms of representative accuracy.

1.6.3. Limitation

It is important to stress several limitations of the research method used for this research:

- Since the research is limited in time and resources, it was impossible to perform an in-depth research into all the aspects for all supply chain activities of all the consumer goods business companies of Bangladesh. Rather, Author tried to introduce a detail description and discussion on the supply chain activities of the JMI Group.
- Lack of sufficient sources prevented verification of information.
- Some aspects of the report may be considered confidential by the organization.

Chapter 2 ORGANIZATIONAL OVERVIEW

2.1. Organizational Overview

The JMI Group is one of the leading and most diversified global conglomerates in Bangladesh. The company was established in April 1999, having offices in all major cities, employing over 7000+ employees and dedicated to bringing the highest quality products and services to our customers. JMI has good annual turnover with such diversified interests Medical Devices & Pharmaceuticals, Printing & Packaging Services, LPG & Cylinder Manufacturing, Export & Import businesses, Electronics, Construction sector, Safe Transportation sector to name a few. The conglomerate has an outstanding record of all around excellence in growth in the different business activities.

2.2. Corporate Vision, Mission & Objective

2.2.1. Corporate Vision

We view business to increasing the material and social well-being of the investors, employees and the society at large, leading to an acceleration of wealth through financial and moral gains as a part of the process of the human civilization.

2.2.2. Mission

Our Mission is to play a significant role in total business operation also ensuring benefit to the shareholders, stakeholders, and the society at large. We view ourselves as partners with our customers, our employees, and our environment.

2.2.3. Corporate Objective

Our objectives are to conduct transparent business operation based on market mechanism within the legal & social framework with aims to attain the mission reflected by our vision.

2.3. Strategic Business Unit

2.3.1. SBUs of JMI Group:

SL No	Manufacturing Units	Sector
1.	JMI SYRINGES & MEDICAL DEVICES LTD	Health
2.	JMI HOSPITAL REQUISITE MFG. LTD. [Mfg., Suture, Alcohol Prep Pad, Mask & Workshop]	
3.	NIPRO JMI COMPANY LTD.	
4.	NIPRO JMI PHARMA LTD.	
5.	JMI VACCINE LTD.	
6.	JMI INDUSTRIAL GAS LTD. [Unit 1 (Bausia), Unit 2 (Barobkundu) & Unit 3 (Mongla)]	Gas
7.	JMI LPG & PETROLEUM LTD.	Gas

8.	JMI CYLINDERS LTD.	
9.	JMI SANKUR VALVE & BUNG LIMITED	
10.	JMI PRINTING & PACKAGING LTD.	Printing & Packaging
11.	JMI SONLU APPLIANCES LTD.	Electronics
12.	JMI BUILDERS & CONSTRUCTION LTD.	Construction
SL	Trading Unit	Sector
1.	JMI HOSPITAL REQUISITE MFG. LTD. Trading Unit	Health
2.	JMI SANKUR AUTO TANK LIMITED	Gas
3.	JMI EXPORT IMPORT COMPANY LTD	Export & Import
4.	JMI ENGINEERING LTD	Electrical & Electronics
SL	Service Unit	Sector
1.	NIPRO JMI DIALYSIS CENTRE LTD.	Health
2.	JMI PHARMACY	
3.	JMI CNG DISPENSING LTD.	Gas
4.	JMI RESTORA	Other
5.	JMI SAFE TRANSPORTATION LTD	
6.	ADVANCE TRAVEL PLANNER LTD.	

Table 1: Represents the JMI Group SBUs

Chapter 3 REVIEW & ANALYSIS

3.1. Definitions of SCM

American Production and Inventory Control Society (APICS, 1990) define the supply chain as the processes from the initial raw materials to final consumption of the finished products linking across supplier-user industries. The supply chain constitutes all functions within and outside an industry, which enable the value chain to make products and provide services to customers [D]. Some researchers suggested a clearer SCM definition by adding the information system necessary to monitor all the activities [G], [H], [M].

Recently, the Council of SCM Professionals (CSCMP), which is the premier organization of supply chain practitioners, researchers, and academicians, has defined SCM as: “SCM encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all Logistics Management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, SCM integrates supply and demand management within and across companies.” [A]

Scott and Westbrook [L] described SCM as the chain linking each element of the manufacturing and supply process from raw materials to the end user. This management philosophy focused on how firms utilized their suppliers’ processes, technology, information, and capability to enhance competitive advantage [C], and the coordination of the manufacturing, materials, logistics, distribution, and transportation functions within an organization [F]. SCM is an integrative philosophy to manage the total flow of a distribution channel from supplier to the ultimate user [B].

SCM is defined as the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular organization and across businesses within the supply chain, for improving the long-term performance of the individual organization and the supply chain as a whole [N].

The customized definition for the service industry is as follows: The SCM for the service industry is the ability of the company/firm to get closer to the customer by improving its supply chain channels. The services supply chain will include responsiveness, effectiveness, efficiency, and controlling [E]. One of the primary suppliers of process inputs is customers themselves in service organizations. This concept of customers being suppliers is recognized as ‘customer-supplier duality.’ The duality implies that service supply chains are bi-directional [I].

SCM, from the viewpoint of a manufacturing sector, may be defined as “taking control of all goods within the supply chain, all materials, no matter how to handle or manage [J].” SCM is the process of effectively managing the flow of materials and finished goods from retailers to customers using the manufacturing facilities and warehouses as potential intermediate steps [K].

3.2. Brief Understanding of SCM

3.2.1. Basic Supply Chain

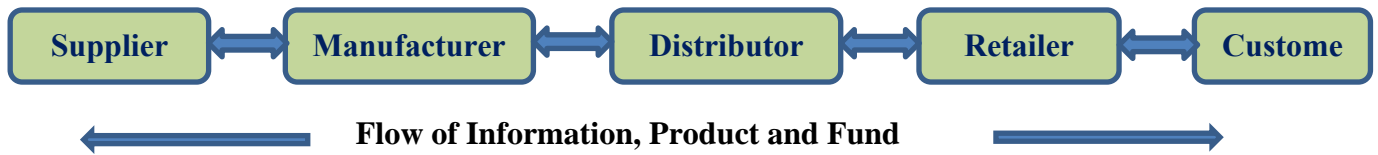


Figure 1: Basic Supply Chain

Above the figure represents all parties involved, directly or indirectly, in fulfilling a customer request which we call supply chain management.

3.2.2. Objective of Supply Chain

Maximize the overall value generated /profit.

$$\text{Customer value} - \text{Supply Chain Cost} = \text{Supply Chain Surplus /Profit}$$

3.2.3. Supply Chain Flow

Below the figure indicates that Supply chain management can be defined as a systematic flow of funds, materials, goods, and related information among suppliers, companies, retailers, and consumers. A supply chain is a network of activities from supply side to demand fulfillment via various channels till the end customers; it is not an isolated process; it is an integrated system – interlinking various activities interwoven with value chain.

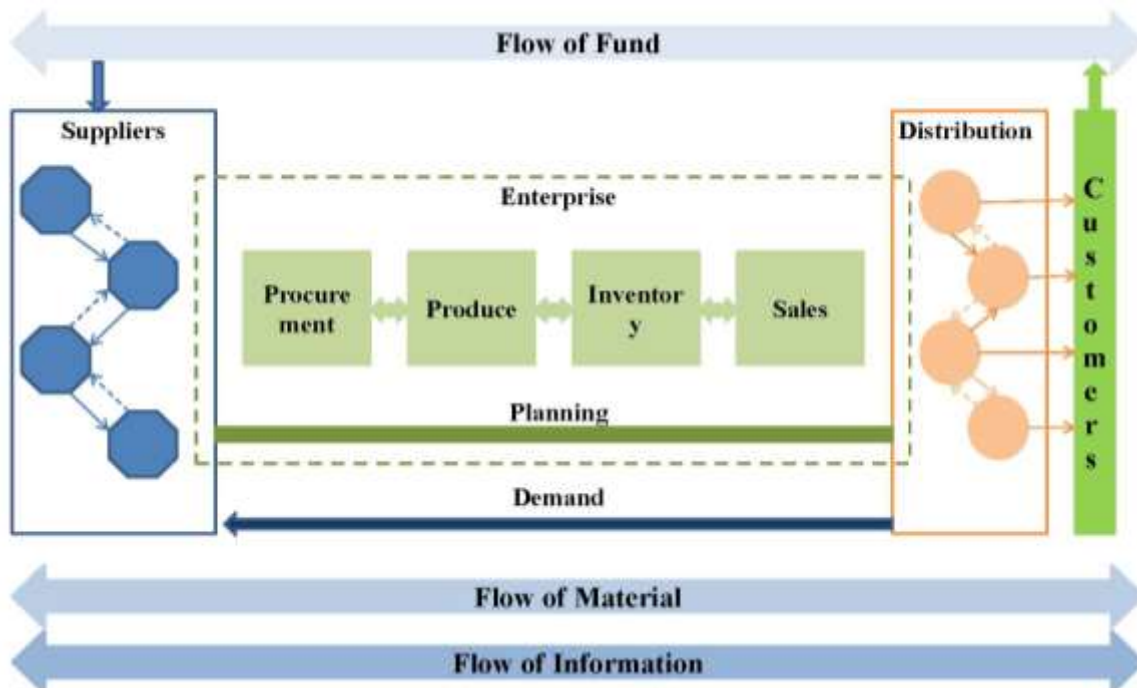


Figure 2: Represents the Supply Chain Flow

3.2.4. Supply Chain Decision Making Framework

Supply chain drivers are responsible for the performance of a supply chain. We need to have a good understanding about supply chain drivers to understand supply chain performance. Absence or weakness of some drivers can be an obstacle to the supply chain. In terms of responsiveness and efficiency how much a supply chain can perform we must examine both logistical and cross-functional drivers: facilities, inventory, transportation, information, sourcing, and pricing. Some time's location is also considered as a supply chain driver. These drivers interact with each other to determine the supply chain performance.

Supply Chain Decision-Making Framework

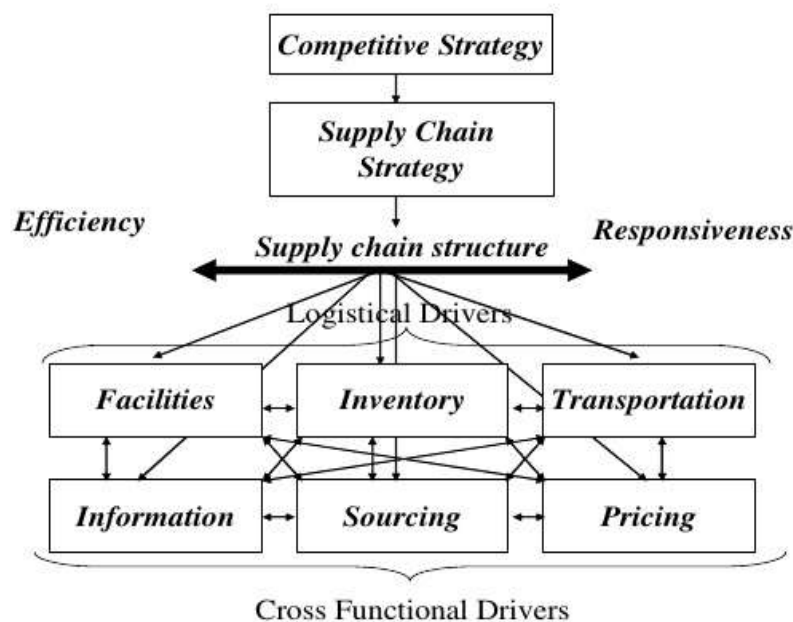


Figure 3: Supply Chain Drivers

3.3. Supply Chain Management System in JMI Group

3.3.1. Objective:

To create a competitive advantage for JMI's through planning, procuring, manufacturing, and distributing products and services which provide superior value to our customers and maximizing profit.

3.3.2. Attributes:

To achieve our Objective and continual development, we integrated the following attributes to qualify all our Supply Chain functions:

Fundamental attributes:

- Traceability
- Accountability

Auxiliary attributes:

- Transparency
- Accuracy
- Simplicity

3.4. Before establishment of Supply Chain Department:

From the inception of JMI Group, functions of Supply Chain like International Procurement, Local Purchase and WH operations had been functioning separately.

In addition, few of the functions were executed by different dept./ persons in a disintegrated fashion e.g.,

- Sourcing by Management
- Planning by Product Management Dept.
- Warehouse by Production Dept.

3.5. After Establishment of Supply Chain Dept.:

Below the figure represents the evaluation of supply Chain internal departments which perform the Supply Chain activities in JMI Group.

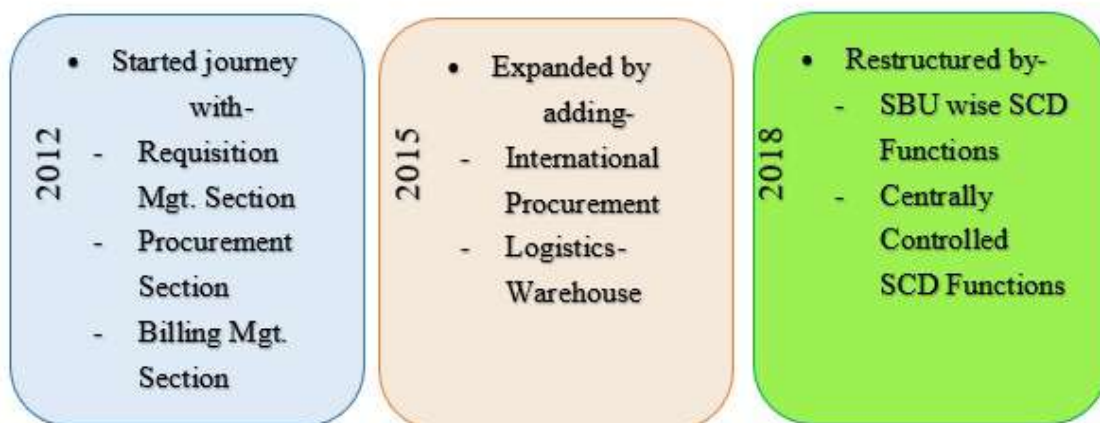


Figure 4: Evaluation of Supply Chain in JMI Group

3.6. Company wise Supply Chain

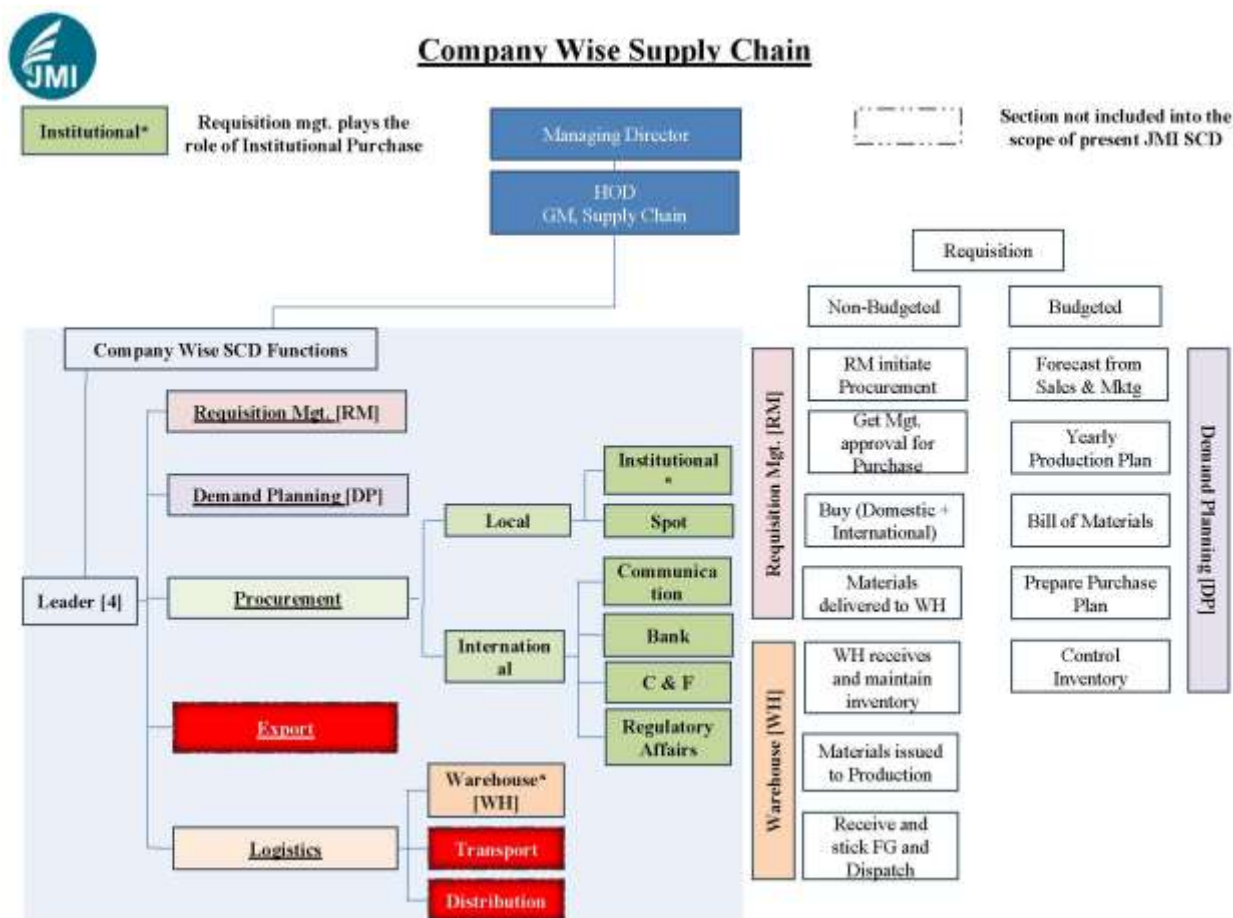


Figure 5: Company Wise Supply Chain in JMI Group

Above the figure represents company wise supply chain in JMI Group. Under the supervision of MD, HOD of SCM is responsible for lead all the group of companies supply chain activities. All the company SCD functions lead by Managers, and they monitor Requisition management, Demand Planning, Procurement, and Logistics. Export, Transportation and Distribution activities are part of supply chain management but in JMI this departments are not under control SCM Department. Right hand side sections indicate the responsibility of each department.

3.7. Centrally Controlled Supply Chain:

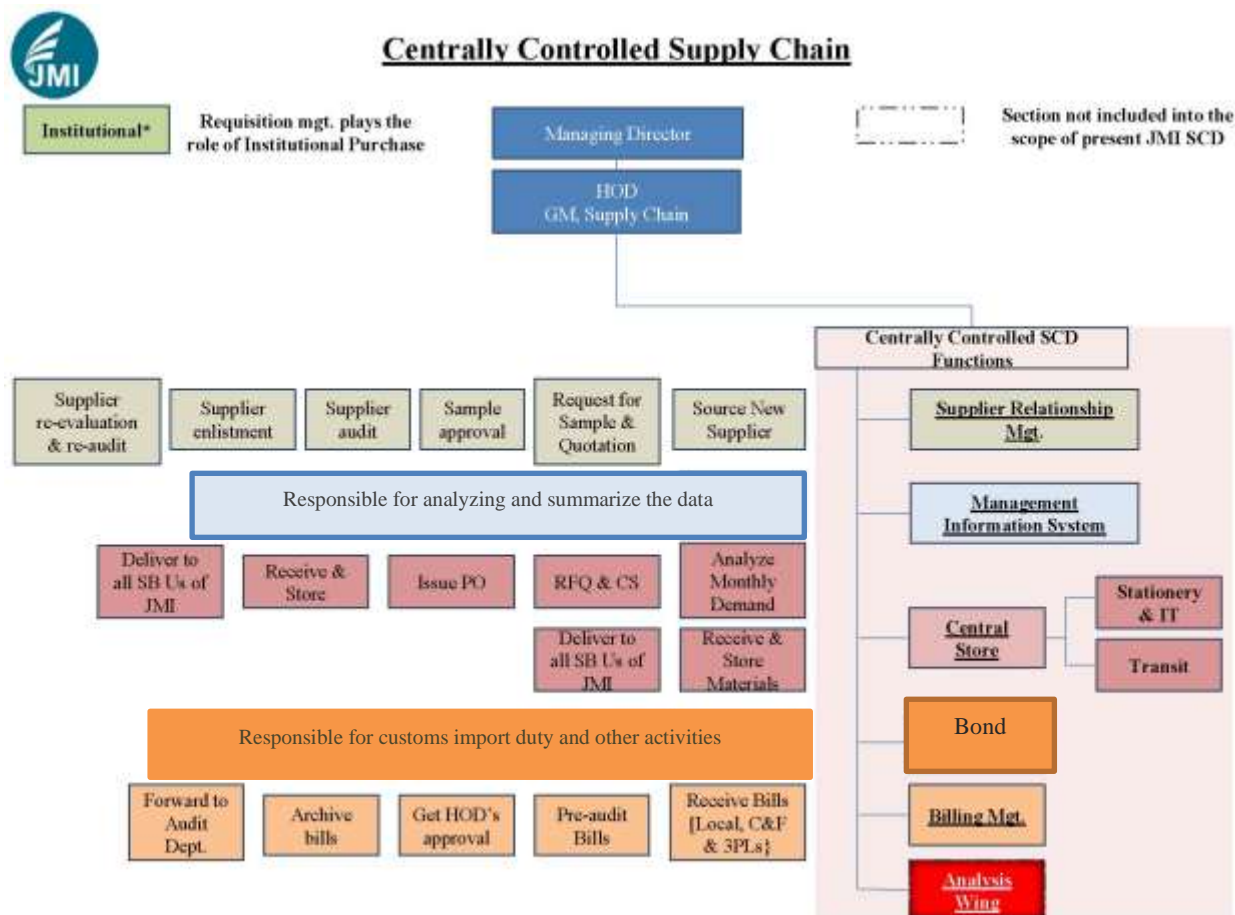


Figure 6: Centrally Controlled Supply Chain in JMI Group

Above the figure represents the structure of centrally controlled supply chain functions. In the right-hand side, there are five individual units working together as centrally control supply chain. On the left-hand side, the individual responsibilities of each unit are shown. Note that the Analysis wing at the bottom of the right-hand side is not functional yet.

3.8. Supply Chain Integration in JMI Group

Supply chain integration is a large-scale business strategy that brings as many links of the chain as possible into a closer working relationship with each other. The goal is to improve response time, production time, and reduce costs and waste. Every link in the chain benefits. Integration may be done tightly through a merger with another firm in the supply chain, or loosely through sharing information and working more exclusively with suppliers and customers. In the latter case, the supply chain isn't truly "owned" by one company, but the various links operate almost as if one company to increase efficiency and benefit everyone through steady, reliable business.



Integration of JMI Group Supply Chain

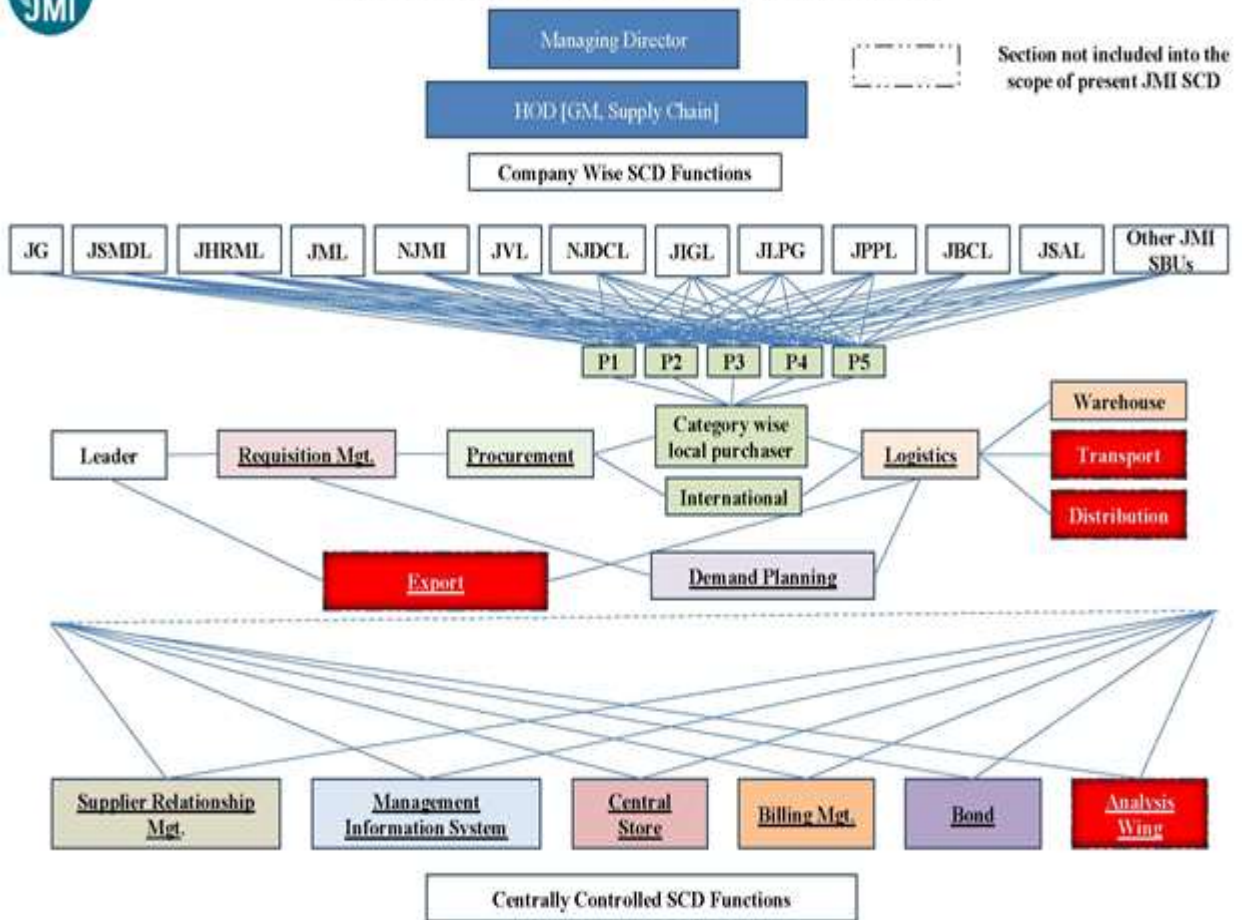


Figure 7: Integration of Group Supply Chain

3.9. Flow Diagram of JMI Supply Chain:

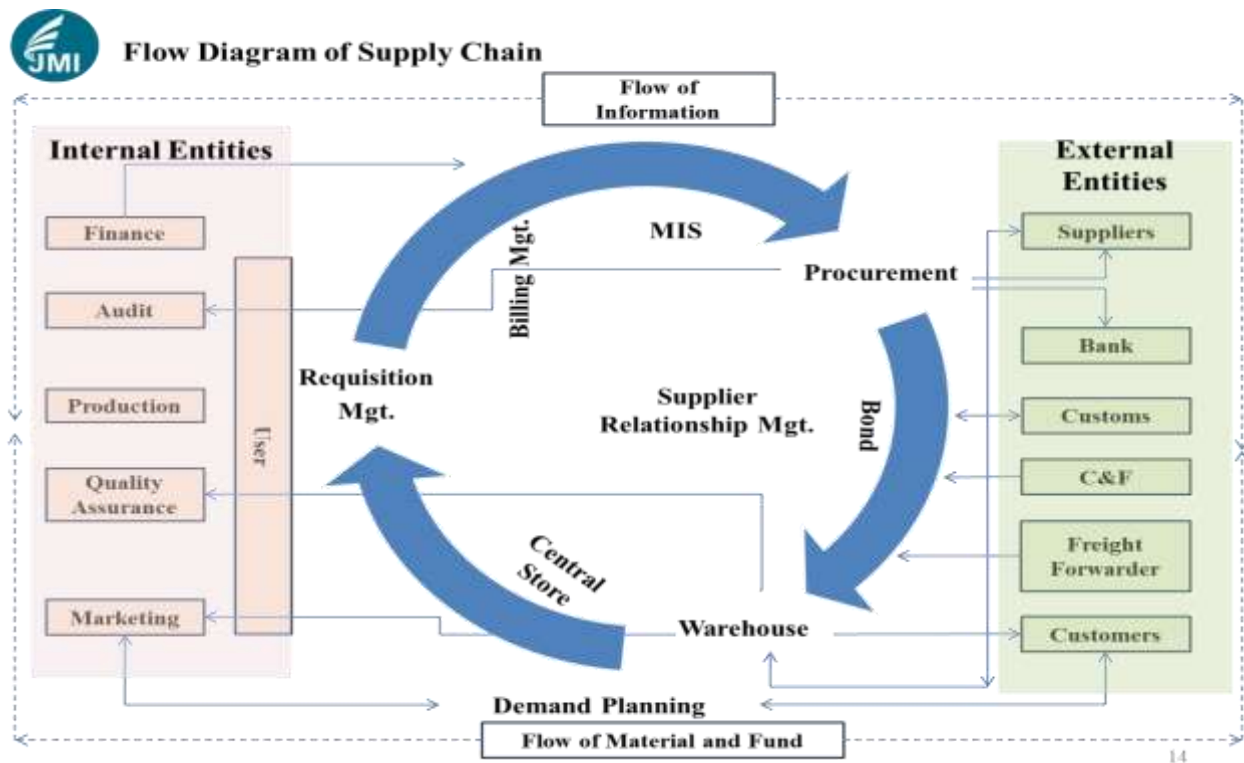


Figure 8: Flow Diagram of JMI Group.

3.10. Two Major Businesses in JMI Group Supply Chain Network

3.10.1. JMI Syringes and Medical Devices Ltd. Suppliers, Production and Distribution Network

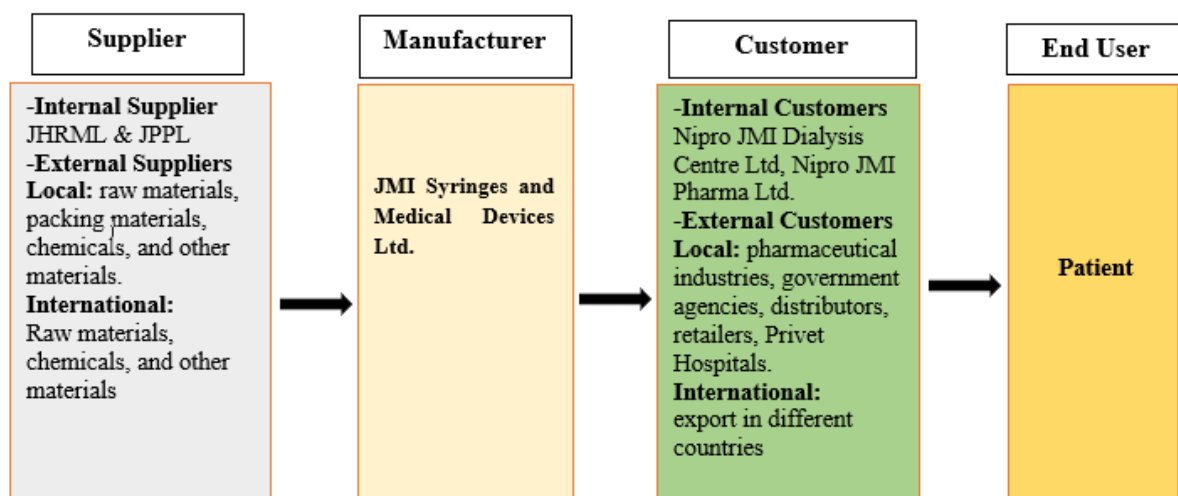


Figure 9: Suppliers, Production and Distribution Network of JSMDL

Internal suppliers (JMI Hospital Requisite & Manufacturing Ltd, JMI Printing & Packaging Ltd), external suppliers (local market – raw materials, packing materials, chemicals and other materials, international markets– raw materials, chemicals, and other materials), internal customers (Nipro JMI Dialysis Centre Ltd, Nipro JMI Pharma Ltd), external customers (local market – pharmaceutical industries, government agencies, distributors, retailers), international market (export in different countries) and patient identified as an end user. JMI Syringes & Medical Devices Ltd is processing as manufacturer.

3.10.2. JMI Industrial Gas Ltd. Suppliers, Production and Distribution Network

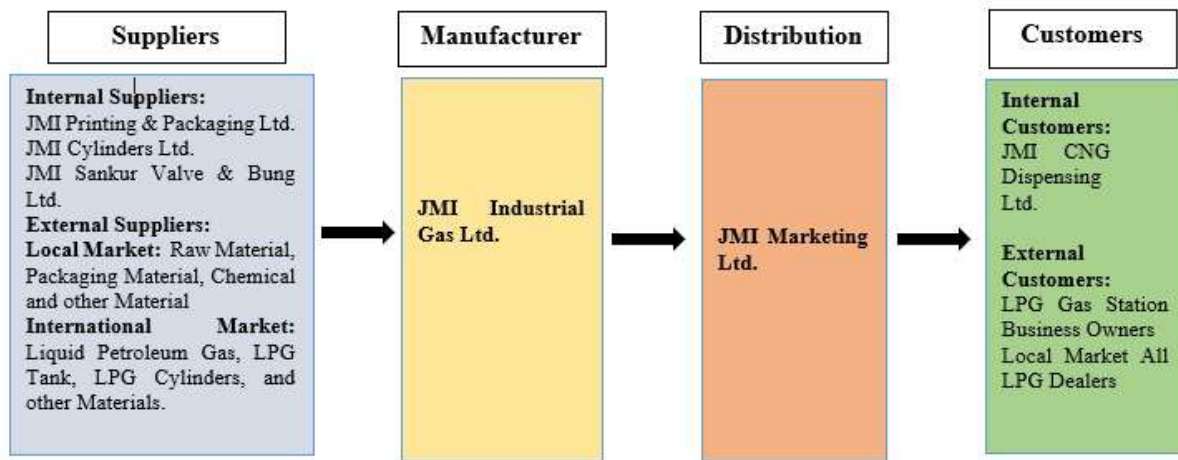


Figure 10: Suppliers, Production and Distribution Network of JIGL

Internal suppliers (JMI Printing & Packaging Ltd, JMI Cylinders Ltd. JMI Sankur Valve & Bung Ltd), external suppliers (local market – raw materials, packing materials, chemicals and other materials, international markets– raw materials, chemicals, and other materials), (International Market: Liquid Petroleum Gas, LPG Tank, LPG Cylinders, and other Materials.) JMI Industrial Gas Ltd is processing as manufacturer. All the distribution process covered by JMI Marketing Ltd. (Internal Customers: JMI CNG Dispensing Ltd), External Customers: LPG Gas Station Business Owners Local Market All LPG Dealers)

3.11. Sourcing Procedure of Supply Chain Management:

A successful sourcing strategy requires a thorough understanding of a company’s business strategy, the resources required to deliver that strategy, the market forces and the unique risks within the company associated with implementing specific approaches. A periodic review of the sourcing strategy ensures achievement of desired results and continued alignment with business objectives. Some of the sourcing strategies that are used in supply chain management today include:

Single sourcing: A method whereby a purchased part is supplied by only one supplier. A JIT manufacturer will frequently have only one supplier for a purchased part so that close relationships can be established with a smaller number of suppliers. These close relationships

(and mutual interdependence) foster high quality, reliability, short lead times, and cooperative action.

Multisource: Procurement of a good or service from more than one independent supplier. Companies may use it sometimes to induce healthy competition between the suppliers to achieve higher quality and lower price.

Outsourcing: The process of having suppliers provides goods and services that were previously provided internally. Outsourcing involves substitution—the replacement of internal capacity and production by that of the supplier.

Insourcing: The goods or services are developed internally.

3.12. Sourcing System in JMI Group:

60% for the raw material imported from different countries, 30 % of the materials, semi-finished goods or services are produced internally(insourcing) and rest of 10% materials, goods and other services source from local market which are directly related with production and other operations. JMI is maintaining its supply chain sourcing process in multiple ways for ensure the quality save time, cost.

3.12.1. Strategic Sourcing of JMI Group

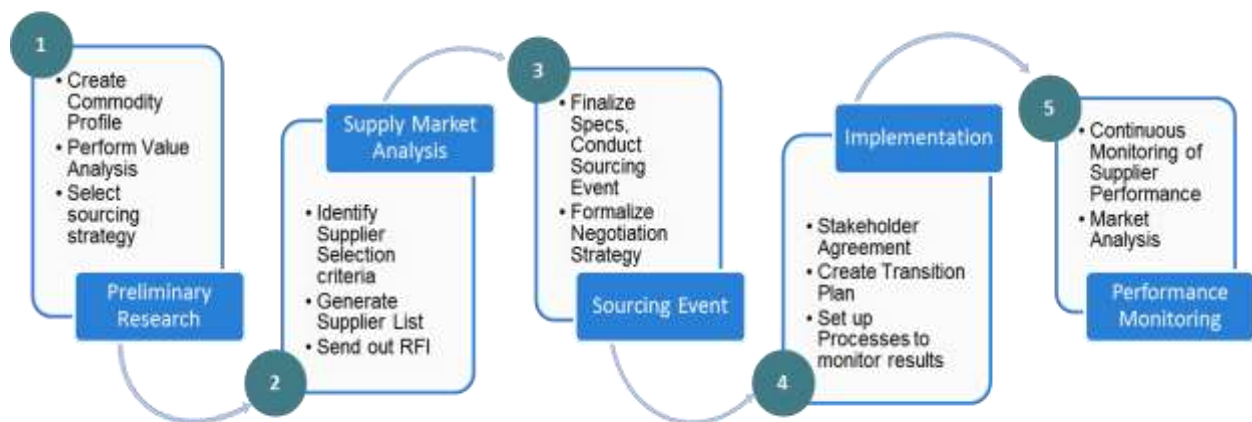


Figure 11: Represents the Strategic Sourcing Process of JMI Group

3.12.2. Sourcing procedure in JMI Group:

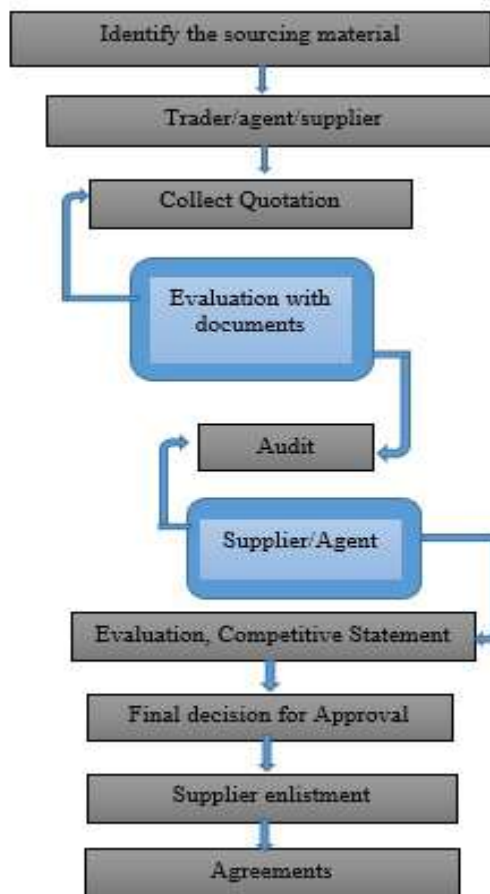


Figure 12: Sourcing Procedure of JMI Group

If SRM get any order to source any item, they first find out the specification of that item with the requirement of the company. Then they do source for the item and list out some suppliers for that item and request for information (RFI) to the suppliers. After receiving RFI SRM do cross check the information with the company required product or service specification. If RFI match with the required item, then SRM go for a visit of that suppliers' factory (if they manufacture that) or Shop (if they sell ready-made or finish goods only) for survey. If the survey report shows positive result, then SRM request for quotation (RFQ) to the suppliers. After receiving quotation of different suppliers, they make a comparative statement with all quotations of different suppliers. For doing CS Quotations should be on same level play field or same level. For doing CS They follows some criteria, which should be considered, those are-

- Same specification
- Price
- Product or service quality
- Supply capability
- Payment terms

- Lead time
- Transportation

Based on these criteria, they create CS for any item. From the CS they select one or multiple suppliers for different product specifications which will be more profitable for the company. Then, which suppliers has been selected SRM provide supplier enlistment form to the suppliers to fill up with all the requirements and documents. Which documents suppliers must provide, those are-

- Trade License
- TIN
- VAT registration certificate
- Certification of Quality Assurance from authorized organization

After collect all this from the suppliers, SRM take an approval on that form from the higher authority with all attached documents and enlist that supplier. By this steps SRM in supply chain management of JMI group make strategic sourcing procedure done.

3.13. JMI Group Procurement Procedure:

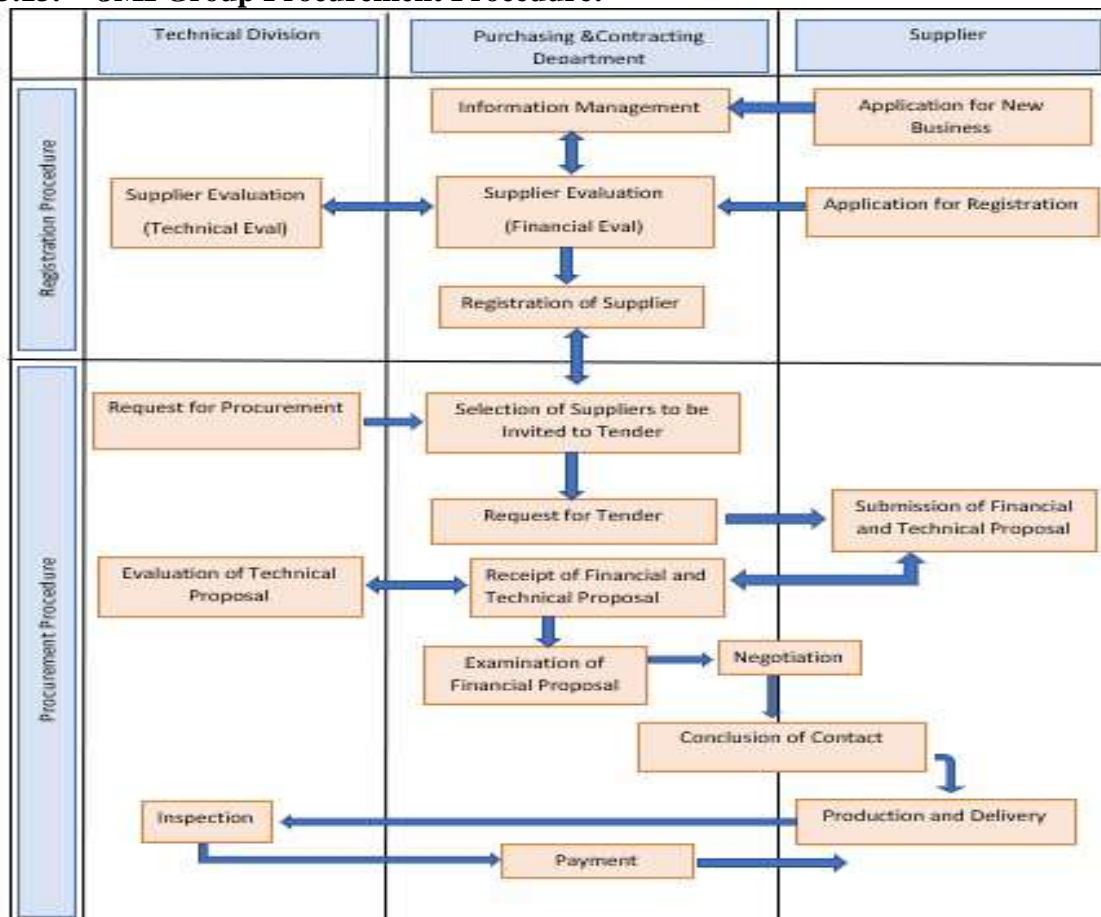


Figure 13: Procurement Procedure of JMI Group

3.14. SWOT Analysis on JMI Group- Supply Chain Department

SWOT Analysis is a useful technique for understanding your Strengths and Weaknesses, and for identifying both the Opportunities open to you and the Threats you face. Used in a business context, it helps you to carve a sustainable niche in your market.

3.14.1. Strengths:

- i. **Lean Supply Chain:** JMI Group Supply Chain department always focuses on LEAN way of working that means no wastage of time, cost, and process. In all its activities starting from Planning, then Procuring, then Logistics, Warehousing, Production and Primary Sales to Distribution to Distributors everywhere they work with LEAN by optimizing costs and time in below ways:
 - Optimized Inventory planning to reduce wastage of inventory
 - Smaller Lead time in procurement to reduce wastage of time
 - Cost optimization with suppliers by robust negotiation to reduce wastage of costing
- ii. **Structured and diversified functional areas:** JMI Supply Chain is very well structured with a diversified functional set up. JMI Supply Chain has 3 major functions:
 - Demand and Supply Planning
 - Procurement and
 - Logistics.

This functional diversity of supply chain function made it possible for contributing from Planning to Sales in each phase. Beyond any doubt it can be said that JMI Group has a much organized and diversified Supply Chain comparing to any other companies in Bangladesh.
- iii. **Internal and External Alignment:** JMI Supply Chain has a strong alignment with internal stakeholders (all other departments in JMI Group) and with External stakeholders (like Suppliers, Vendors, Govt. Authorities etc.).
- iv. **Efficient and highly skilled people:** The strength of JMI supply chain contribution is fully dependent on its people. Outstanding people are hired, developed, and retained with integrity. As a team they nurture their development and actively help them develop the business skills and experiences they need to fulfill our mission and objectives.

3.14.2. Weakness:

- i. **Not Provide Certificate of Analysis (COA) by the Local Supplier:** As JMI Group main business is medical devices and a hospital requisite item, that's why need the COA for every direct items. Some of suppliers can't provide the COA as per requirement.
- ii. **Import-dependency:** JMI Group always believes in delighting consumers with highest quality and that's why still the local suppliers are not ready with that quality. Almost 60% of Raw Materials are imported from different countries across the earth. This creates complicity in the import process and costing.

- iii. Very High Lead time: As most of the Raw materials and finished goods are imported it has a very long lead time varies from 2 months to 4 months sometimes. This high lead time of Order to Factory Delivery process creates high risks in times of product shortages and makes the process lengthy.

3.14.3. Opportunities:

- i. Developing Local Suppliers: Now-a-days in terms of quality products and materials our local companies are also doing well. Here JMI Group has a great opportunity to develop the local suppliers.
- ii. Bad Goods Reduction Project: Every month many imported goods are damaged or dented during transportation from abroad by (road or sea). Even local products are also damaged during transportation from JMI warehouse to Distributor warehouse. Here Supply Chain arranges Training for transportation authorities and takes extra cautions to prevent these unexpected costs.

3.14.4. Threats:

- i. Unfavorable Govt. Policy: Bangladesh Govt. has imposed very high import tax and duty for some imported materials which are directly involved with production. There are unethical practices of local companies, so they don't even need to pay tax or duty at port.
- ii. Political Unrest: The Distribution function of JMI Bangladesh Supply Chain is now catering the national demand. It becomes so tough to manage National supply during the Political Unrest as JMI don't have any regional depot.

Chapter 4 FINDINGS & RECOMMENDATIONS

4.1. FINDINGS

While working in JMI Group, Author has attained a newer kind of experience. After collecting and analyzing data Author identified some problems. These problems are completely Author personal view to this report work.

- i. The main aim of SCM software is to solve the problems and optimize activities and resources in the supply chain. For smooth SCM software is very much required in JMI supply chain department. There is no software yet, but they are trying for integrated software.
- ii. The entire fixed asset approved by the Managing Director of JMI Group. That's why the approval process is lengthy sometimes in JMI. For lengthy process SCD doesn't process the urgent item immediately.
- iii. Transportation refers to the movement of product from one location to another as it makes its way from the beginning of a supply chain to the customer's handle. In JMI Group Transportation is not under in Supply Chain Department. So, it creates problem for better service of SCD.
- iv. Mainly sourcing means to negotiate with different suppliers and purchase from the suitable one but here JMI has fixed vendor for raw materials. So normally they don't need to communicate with new suppliers.
- v. JMI Group most of the raw materials are imported and for most of them the lead time (Order to Factory arrival time) is very high. Average lead time is 2 months to 4 months. For this reason, sometimes company facing timely production problem and on time delivery to the customer.
- vi. There is some running project of the group and which investment budget is very high. like LPG Project, Home Appliance Project, Cylinder Manufacturing Project, Auto Tank Manufacturing Project etc. That's why most of the working capital already invested in the running project. For this reason, SCD are facing some problem to purchase or clear the supplier payment.
- vii. As the Supply Chain is the new concept in the business. Sometimes management of the JMI Group can't understand the importance of the Supply Chain concept.

4.2. RECOMMENDATIONS

JMI Group has gained its reputation in medical devices & hospital requisite items within very short period; still, they are yet not the market leader. The Group must overcome the shortcomings soon and offers new innovative products to retain its position as a leader. Based on my observation and data analysis, a set of these recommendations have been generated to transform the weakness of the organization into possible strength and counter the potential threats of the organization so that the management is too able to navigate the organization in the turbulent ocean of fierce competition. The pertinent suggestions are as follows:

- i. Use of supply chain software for better inventory management and operations is recommended. There are two types of supply chain software, planning software and execution software. This software is available for renting by different organizations in Bangladesh. JMI Group can easily rent the software from these organizations to improve their Supply Chain Management effectiveness.
- ii. For smooth operation of SCD, the management of the JMI Group can delegate the approval authority to department head. Then the SCD of JMI can do the emergency job as just time.
- iii. Transportation is the vital driver for smooth operation of SCD. So, management of JMI can include the transportation department in the supply chain department of JMI Group.
- iv. At present most of the raw materials are imported and for most of them the lead time (Order to Factory arrival time) is very high. Average lead time is 2 months to 4 months. JMI needs to reduce lead time by negotiation with international suppliers.
- v. To mitigate the fund crisis of JMI Group, they can take loan for complete the upcoming or new project.

4.3. CONCLUSION

This report exemplifies various sequential procedures from design conceptual SCM model for JMI Group to outline different functions under SCM department. Supply Chain Network, Group integration, Company wise supply chain, centrally controlled SCD functions, Sourcing procedure, Procurement process, SCM flow model indicate that JMI Group created its supply chain function very diversified way. Network models can be described in terms of suppliers, industry, customers, and consumers. Internal suppliers, external suppliers (local market and international markets), internal customers, external customers (local market and international markets) and end user are identified. This Group is processing from the raw materials to finished products as a manufacturer and as a service provider. Integrated models help the whole group of companies for ensuring the product quality & service, saving costs and time in many ways. JMI Group is interconnected with all SBUs for performing as either internal supplier or internal customer, depending on their connectivity shown by arrows and their relative positions on the diagrams.

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