

**Report On
Procurement and Supply Management of WALTON HI-TECH INDUSTRIES PLC**

By

Biswojit Saha

Student ID: 22382005

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

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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/We have acknowledged all main sources of help.

Student's Full Name & Signature:

Biswojit Saha

Student ID: 22382005

Supervisor's Full Name & Signature:



Dr. Amitabha Chakrabarty

Professor, Department of Computer Science & Engineering

BRAC University

Supervisor's Full Name & Signature:



Mir Sharif Ahammad
Head of Commercial Dept.
Walton Hi-Tech Industries P.L.C.
ID No. 45112

Mir Sharif Ahammad

HEAD OF THE DEPARTMENT, SCM
(COMMERCIAL PROCUREMENT), WHIL

Letter of Transmittal

Dr. Amitabha Chakrabarty

Professor, Department of Computer Science & Engineering,

BRAC University

66 Mohakhali, Dhaka-1212

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

Dear Sir / Madam,

I would like to request the opportunity to present my internship report titled "Procurement and Supply Management of WHIL" as a partial requirement for the completion of my MPSM program at BIGD, BRAC University. Drawing upon my past work experience with WHIL, I have endeavored to encapsulate the comprehensive procurement and supply chain management practices employed by the company in this report.

I have devoted my utmost effort to compile the report, ensuring it contains all necessary information and proposed recommendations in a highly crucial, concise, and comprehensive manner. I am confident that this report meets the standards expected of an academic report.

Sincerely yours,

Biswojit Saha

Student ID: 22382005

Masters in Procurement and Supply Management

BRAC Institute of Governance and Development (BIGD), BRAC University

Date:

Non-Disclosure Agreement

This agreement has made and entered into by and between WALTON HI-TECH INDUSTRIES PLC as the First Party and the undersigned student at BRAC Institute of Governance and Development, BRAC University as the Second Party. The First Party has allowed the Second Party to prepare a report on the former Supply Chain Management and Procurement requirements for the degree of Masters of Procurement and Supply Management. The Second Party will have the opportunity to work closely with the officials of the organization and have access to official data and information. Based on work experience, data, and information collected the Second Party will prepare a report. The Second Party will use all sorts of data and information for academic purposes and will not disclose to any party against the interests of the First Party.

Acknowledgement

First and foremost, I would like to express my heartfelt gratitude to the Almighty, the most merciful, for His unwavering blessings. I also extend my profound appreciation to my beloved parents, who have consistently served as my primary source of inspiration and motivation throughout my journey towards earning a Master's in Procurement and Supply Management (MPSM). Their unwavering support has been instrumental in my successful completion of this report and practicum.

I am truly at a loss for words to convey my gratitude to Dr. Amitabha Chakrabarty, my academic supervisor at BIGD, BRAC University. His invaluable support and guidance during these challenging global pandemic times have been exceptional. Dr. Amitabha Chakrabarty has been a guiding light, assisting me at every step of producing this report with utmost clarity.

Furthermore, I extend my deep and sincere thanks to my industry supervisor, Mir Sharif Ahammad, HEAD OF THE DEPARTMENT, (COMMERCIAL PROCUREMENT) of Supply Chain Management. Their willingness to provide me with the opportunity to undertake this practicum and their invaluable guidance throughout this period have been of immeasurable value. It has been an absolute privilege and honor to work and study under their supervision. Their professionalism, extensive industry experience, knowledge, dynamism, vision, sincerity, and motivation have left a lasting impression on me.

Lastly, I wish to acknowledge my profound gratitude and humility for the enriching learning experiences afforded by the MPSM program offered by BIGD, BRAC University.

I would like to say thanks to my MPSM fellows and colleagues for their constant support, understanding and encouragement. Nevertheless, my special gratification and humbleness to them, who constantly supported me to accomplish this Report/Practicum.

Sincerely yours,

Biswojit Saha

Student ID: 22382005

Executive Summary

Walton Hi-Tech Industries PLC is the pioneer and first complete manufacturer of Refrigerator, Freezer, Air Conditioner and Compressor under Electrical and Electronics Industry. It started business as a trader then gradually started manufacturing of Refrigerator, Freezer, Air Conditioner and Compressor. Subsequently, Walton expanded its operation in Television, Electrical Appliances and Home Appliances that provide the foundation for nearly every aspect of modern life.

Walton Hi-Tech Industries PLC was incorporated as a private PLC company on April 17, 2006 under the Companies Act of 1994, vide registration certificate no. C-61272 (3281)/06 and started its business operation from 2008. Subsequently the company was registered as a “Public PLC Company” with RJSC on May 14, 2018. The factory of Walton hi tech industrial limited (WHIL) is located at Chandra, Kaliakoir, Gazipur, Bangladesh. This factory is treated as one of the sophisticated manufacturing plants in Bangladesh as well as in South Asia.

The report has been organized based on Author’s hands-on practical involvement at WALTON Group during the working period. The operation of the department highlighted in this report is Procurement and Supply Chain Management Department of WHIPLC compared to the established electronics industry.

In this report, in the first chapter the introductory part covered 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 Walton 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 WALTON Group. Author focuses on SCM in Based on the overall report author provided some recommendations for WALTON group supply chain management.

List of Acronyms

DPIM	Demand Planning and Inventory Management
ISO	International Organization of Standardization
L/C	Letter of Credit
SLA	Service level agreements
ERP	Enterprise Resource Planning

Contents

Declaration.....	ii
Letter of Transmittal	iii
Non-Disclosure Agreement	iv
Acknowledgement	v
Executive Summary	vi
Chapter 1	1
Introduction.....	1
1.1 Mission.....	2
1.2 Vision.....	2
1.3 Go global.....	2
1.4 Background of study	2
Chapter 2	3
Overview of Organization.....	3
2.1 Purpose and Scope:	3
2.2 Organogram:	3
2.2.1 Roles and Responsibilities	4
2.3 Procurement Policy.....	4
2.3.1 Procurement Method.....	4
2.3.2 Procurement Approach	5
2.4 Demand Planning.....	5
2.4.1 Purchase Requisition (PR)	5

2.5 Supplier Communication and RFQ/RFP	5
2.5.1 Supplier Selection and PI Collection	5
2.5.2 Purchase Order Creation (PO)	6
2.5.3 LC/TT/CAD Payment.....	6
2.5.4 Logistics Support, Shipment & Documentation	6
2.5.5 Document Collection and Customs Clearance	6
2.5.6 Customs Clearance and Goods Release.....	7
2.5.7 Goods Receipt and Quality Assurance	7
2.5.8 Special cases	7
2.5.9 Sensitive Supplier analysis	7
2.5.10 DG goods import.....	8
2.5.11 Pre-supplier inspection.....	8
2.6 Planning	8
2.6.1 Master Production Schedule (MPS).....	9
2.7 Analysis.....	9
2.8 Material Requirements Planning (MRP)	9
Chapter 3	10
Procurement and Supply Chain of WALTON.....	10
3.1 Sourcing	10
3.2 Purpose and Scope	10
3.3 Roles and Responsibilities	11

3.3.1 In-charge of Planning and Sourcing (all products)	11
3.3.2 In-Charge of Sourcing (Product-wise).....	11
3.4 Identify Supply Source	12
3.4.1 Sample Collection.....	12
3.4.2 Sample Confirmation.....	12
3.4.3 Supplier Quality Audit.....	12
3.5 Technical and Purchase Agreement pp.....	13
3.5.1 Technical Agreement.....	13
3.5.2 Purchased Agreement	13
3.5.3 Comparative Statement.....	13
3.5.4 Supplier Verification.....	13
3.5.5 Trial Order Execution	13
3.5.6 Supplier Enlistment.....	14
3.5.7 Order Scheme.....	14
3.5.8 Mass Order.....	14
3.5.9 Workflow: Sourcing and Development for New Raw Material from New and Existing Source	15
3.5.10 Workflow: Sourcing and Development for New Raw Material from New and Existing Supplier	16
3.6 Commercial:.....	16
3.6.1 Commercial Concern	17
3.6.2 Shipment Arrangement/Follow up.....	18

3.6.3 Shipping documents.....	18
3.6.4 Duty Payment.....	19
3.6.5 Delivery Follow Up	20
3.6.6 LC Settlement, Work Settlement (IMPORT)	20
3.7 Inventory:.....	22
3.8 Material Planning Procedure:	22
3.9 Overview Flow Chart of Material Planning.....	23
3.10 Order Quantity Calculation.....	24
3.11 SOP of Material issue by FIFO method:.....	24
Chapter 4.....	25
Observations and Recommendation:	25
4.1 Observations:	25
Recommendation:	26
References.....	27

List of Figures

Figure 2.1: Organogram of Supply Chain Management Department, WHILPLC	4
Figure 3.1: Sourcing and Development for New Raw Material from New and Existing Source.....	15
Figure 3.2: Sourcing and Development for New Raw Material from New supplier.....	16
Figure 3.3: Reporting path for Inventory.....	22
Figure 3.4: Flowchart of material planning.....	24
Figure 3.5: Raw material Order sheet.....	24
Figure 3.6: SOP of Material Issue using FIFO method.....	25

List of Tables

Table 3.1: purchase Order Report	17
Table 3.2: The approval path for each individual duty payment.....	19
Table 3.3: LC Settlement, Work Settlement (IMPORT).....	20

Chapter 1

Introduction

Walton Hi-Tech Industries PLC (WHIPLC) is the pioneer and first complete manufacturer of Refrigerator, Freezer, Air Conditioner and Compressor under Electrical and Electronics Industry. It started business as a trader then gradually started manufacturing of Refrigerator, Freezer, Air Conditioner and Compressor. Subsequently, Walton expanded its operation in Television, Electrical Appliances and Home Appliances that provide the foundation for nearly every aspect of modern life. The factory of WHIL is located at Chandra, Kaliakoir, Gazipur, Bangladesh. This factory is treated as one of the sophisticated manufacturing plants in Bangladesh as well as in South Asia. Walton Hi-Tech Industries PLC was incorporated as a private Limited company on April 17, 2006 under the Companies Act of 1994, vide registration certificate no. C-61272 (3281)/06 and started its business operation from 2008. Subsequently the company was registered as a “**Public PLC Company**” with RJSC on May 14, 2018. Walton Hi-Tech Industries PLC is now the listed company in two stock bourses of Bangladesh called Dhaka Stock Exchange PLC & Chittagong Stock Exchange September 14, 2020 with a view to ensuring continuous expansion of its business in a sustainable manner.

Walton is the first ever company in Bangladesh, completely reliant on **Research & Innovation (R&I)** for the production of Electrical and Electronics (E&E) Appliances in Bangladesh, a resounding factor which separates Walton from all of its local competitors. The increasing availability of electricity supply in the rural areas, rising buying capacity of the people and the scope to buy a refrigerator through installments are among the factors that are driving the market. Above all, people in the rural areas are getting the appliance at their **doorsteps**. The Company reduced the domestic dependence on imports and simultaneously started exporting since 2015 in the various countries like; Nigeria, Slovakia, Austria, India, Malawi, Yemen, East Timor, Denmark, Uganda, Nepal, Turkey, Poland, Iraq, Ireland, Tanzania, Myanmar, Seychelles, Bhutan, Sri Lanka, Lebanon, Kenya, Croatia, Germany, Greece etc. Moreover, the company is making leaps of progress into the penetration of the consumer markets of Australia, Europe, USA, South Africa, Singapore, Poland, Romania, Saudi Arabia, Sri Lanka and the CIS Countries in near future. For current global operations, WALTON maintains international representative offices located throughout Qatar, China, Thailand, Nepal, India and USA. Walton created a landmark by establishing the country's first-ever Compressor manufacturing Plant at Chandra, Kaliakoir, Gazipur in 2017. With the inauguration of the plant, Bangladesh is one of the countries among the 15 countries having such type of plant in the world and only 2nd within SAARC Countries.

1.1 Mission

Aspiring to be a bold leader among the top global brands in Electrical & Electronics Industry

1.2 Vision

Responding to the ever-changing consumer and market demands through responsible innovative brilliance and recognized quality standards.

1.3 Go global

Walton always strives for the technological excellence across the domestic and global markets for sustainable growth. With the continuous success of local market during the years, the Company also entered in the global market by exporting Refrigerator & Freezers, Air Conditioners and Televisions in different region of Europe, Asia and Africa.

1.4 Background of study

For MPSM Alumni, the submission of a Practicum or thesis report is a mandatory requirement. The author has chosen to pursue a report/practicum to gain a deeper understanding and practical application of supply chain theory and practice within their own organization. This endeavor also serves to enhance their investigative, analytical, and communication skills, including the utilization of secondary research and, if necessary, primary research.

The author's chosen topic centers on the Procurement and Supply Chain Management System of WALTON HI-TECH INDUSTRIES PLC. This descriptive analysis entails a chronological presentation of various events, culminating in the design of a conceptual Supply Chain Management model and framework for WHIPLC. This model elucidates the integration of different functions within the SCM department. The report places special emphasis on the newly adopted strategies in supply chain management and the procurement process by WHILPLC, aimed at remaining competitive in the rapidly expanding Electronics Industry.

Chapter 2

Overview of Organization

Supply chain management (SCM) 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 & efficient ways possible. Generally, supply chain activities cover everything from product development, sourcing, production, and logistics, as well as the information systems needed to coordinate these activities. However, in Walton, supply chain Department excludes production part.

2.1 Purpose and Scope:

Under SCM Procurement and Sourcing persons are Managing supplier relationships and acquiring necessary materials or services. Commercial persons are managing sales, contracts, pricing, and customer relationship management Inventory Management involves to optimize stock levels to balance availability and costs. Logistics and Transportation department is working to Plan and execute efficient movement of goods. Demand Planning and Customer Service section is understanding customer demand and providing satisfactory service.

2.2 Organogram:

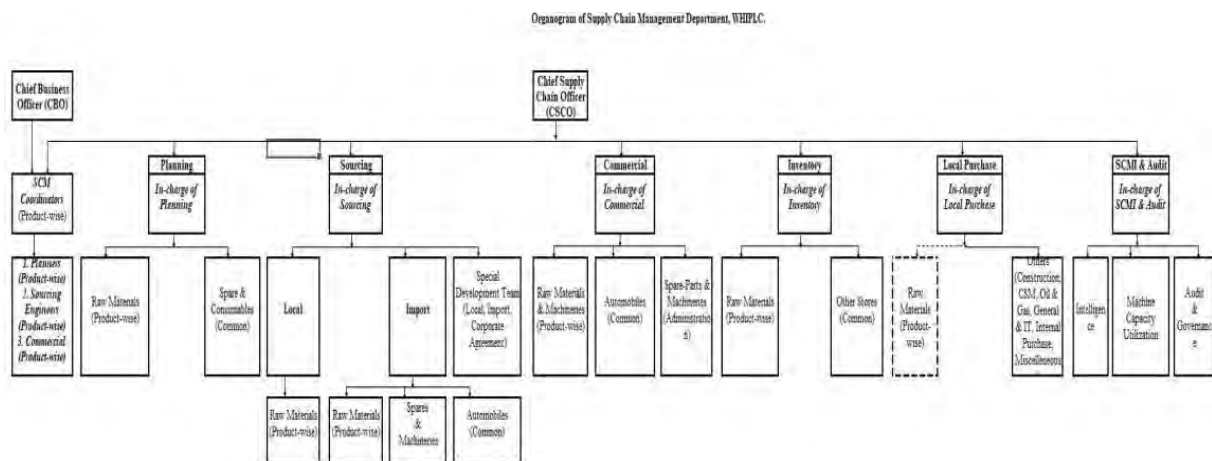


Figure 2.1: Organogram of Supply Chain Management Department, WHILPLC

2.2.1 Roles and Responsibilities

Chief Supply Chain Officer (CSCO)

CSCO directs overall supply chain operations, including purchasing, import operations, inventory monitoring, logistics, and insurance. He develops and implements a strategy to ensure that critical processes run effectively and achieve organizational goals and performance KPIs. He utilizes data monitoring and analytics to evaluate past performance and trends and forecast inventory and distribution requirements.

SCM Coordinator (Product-wise): In-charge of Supply Chain Management for Specific Product, cooperate with In- Charge of Commercial, Logistics, Inventory, Sourcing & Planning sections and Production, R&I and other departments for running production smoothly and keeping the inventory at optimized level. They are also called In-Charge of SCM for individual products.

In-Charge of Sections: Job Description and SOP of Individual Section In-Charges are mentioned within respective Sections' SOP.

2.3 Procurement Policy

The Procurement Policy of WALTON Hi-Tech Industries PLC outlines the standardized procedures and guidelines followed by the Supply Chain Management Department for efficient and transparent procurement processes. This policy ensures that the procurement of materials, whether locally or through imports, is conducted in a structured manner that aligns with the company's goals and objectives, starting from planning till the goods are received in factory. Additionally, SOP of each section is mentioned in details separately.

2.3.1 Procurement Method

The decision to procure items locally or import materials shall be based on approved (Bill of Material) BOM/user requirement/ based on availability or profitability.

Purchasing Method can be Tender, RFQ, RFP (for project & machineries), Approved and/or enlisted suppliers (with proper CS).

For any kind of procurement, vendor/supplier must be enlisted, or vendor code must be open in system.

2.3.2 Procurement Approach

Local items will be purchased following the SOP of local purchase section.

Imported items will be sourced following the SOP of Sourcing and Planning(S&P) section.

Commercial activities will be performed following the SOP of Commercial Section.

Goods receive at factory premises will be done following the SOP of Inventory Section.

2.4 Demand Planning

The upcoming 6-months sales forecast and production plan are uploaded in the system to generate Material Requirement Planning (MRP) considering available FG stocks, raw materials in inventory and pipeline.

Planning engineer will check system generated MRP and aligning with company's business plan, strategic movement, sales target, forecast and market trends, do needful modification (if required) with prior approval from DCBO, CBO & CDO.

2.4.1 Purchase Requisition (PR)

The planner, inventory concern, or user will create PR based on RM requirement and final approval is done through approved hierarchy matrix.

2.5 Supplier Communication and RFQ/RFP

The Sourcing Engineer will communicate with suppliers and provide them with Request for Quotation (RFQ) or Request for Proposal (RFP).

For Tender, list of suppliers from all concern personal (which may include purchase monitor, R&I, Production, QC, Process, other departments) will be collected and requirement will be sent to multiple potential suppliers.

Tender quotations from different vendors will be opened in front of CBO/CDO/DMD with the presence of audit or any third party within the organization and decision will be taken based on CS or recommendation from senior management.

2.5.1 Supplier Selection and PI Collection

The Sourcing Engineer will perform a comprehensive comparison of different quotations.

A Comparative Statement (CS) will be prepared to evaluate and select the most eligible quotation/supplier.

The best quotation (final supplier selection- based on criteria mentioned in SOP) will be confirmed, and the supplier will be provided with a Purchase Order (PO) and asked for a Pro-Forma Invoice (PI).

2.5.2 Purchase Order Creation (PO)

The Commercial Concern will receive the PR, PI, and CS from the Sourcing and/or Planning Engineer.

A PO will be created in the system based on the provided information and final approval is done through approved hierarchy matrix.

2.5.3 LC/TT/CAD Payment

Upon final approval of the PO, the Commercial Concern will initiate payment proceedings, such as Letter of Credit (LC), Telegraphic Transfer (TT), Cash Against Document (CAD), etc. based on the information provided in approved PO.

The Commercial Concern will follow up the payment, shipment and delivery process according to the Commercial SOP.

2.5.4 Logistics Support, Shipment & Documentation

Quotation from freight forwarding company will be collected and commercial concern will provide booking to the best suited forwarder following the incoterms and mode of shipments mentioned in PI & PO.

Freight forwarding organizations may follow their own company policy but must need to fulfil WHIPLC requirements.

Based on booking and goods readiness, the freight forwarder will collect/receive goods and ensure shipment with proper documentation.

2.5.5 Document Collection and Customs Clearance

After the goods have been shipped, the Commercial concern will collect all required documents from suppliers through banking channel.

Necessary corrections on documents, if any, will be done in collaboration with the suppliers for customs clearance purposes.

2.5.6 Customs Clearance and Goods Release

The Commercial concern will hand over all documents to the selected C&F agent for the release of goods from the port to ensure OTIF (On- Time In-Full) delivery to the factory premises.

If there is no significant price benefit between Walton in-house C&F against external agent, preference will be given to the internal organizational C&F agent.

2.5.7 Goods Receipt and Quality Assurance

Upon arrival of goods at factory premises, Goods Receive Note (GRN) will be executed.

The store department will receive the goods after successful completion of Incoming Quality Control (IQC) testing.

2.5.8 Special cases

In case of special scenarios e.g. emergency, critical issues or unavoidable circumstances, some decisions are taken defying the procurement policy, which are published as notices and have been attached under Annex for further reference.

2.5.9 Sensitive Supplier analysis

To safeguard the integrity of Walton's (WHIPLC) final product, the company employs a meticulous supplier evaluation and selection process, especially when engaging with sensitive suppliers. This rigorous procedure aims to ensure that chosen suppliers are fully aligned with Walton's (WHIPLC) commitment to quality. Recognizing the heightened importance of sensitive supplier relationships, Walton (WHIPLC) places significant emphasis on assessing and managing potential risks throughout the entire supply chain, criteria, price fluctuations, Inconsistency, incoterms, limited experience, financial instability, Hospitality over business, factory visit reluctance, manufacturer vs. trader, lack of export license, delivery delays, on-compliance based on those criteria supplier sensitivity analysis has been done by Walton .

2.5.10 DG goods import

The procurement of Dangerous Goods (DG) ensures the acquisition of hazardous materials is done safely, efficiently, and in compliance with regulatory requirements. This overview outlines key elements involved in procuring DG (Petroleum, CFC, Coal, TNT, Nitro products, etc.), including identifying reliable suppliers, ensuring regulatory compliance, and maintaining safety standards throughout the procurement process. Apply for required licenses from authorities (BAEC/BERC/DGDA/BSTI) and ensure regulatory compliance. Ensure timely release of dangerous goods from the port within 72 hours of arrival.

2.5.11 Pre-supplier inspection

Before conducting a supplier inspection for Walton, it is crucial to ensure that all necessary preparations and standards are in place to maintain the company's commitment to quality and innovation. As a leading organization in the industry, Walton emphasizes the importance of a robust supply chain to support its diverse product range. The pre-inspection phase involves a thorough review of the supplier's processes, quality control measures, and compliance with industry standards. This includes assessing the supplier's capacity to deliver materials and components that meet Walton's stringent quality requirements. Moreover, the inspection team will evaluate the supplier's adherence to ethical practices, sustainability measures, and innovation capabilities. By maintaining these high standards, Walton ensures that it can continue to offer cutting-edge products to its customers while fostering a culture of continuous improvement and creativity.

2.6 Planning

The planning section is dedicated to provide essential insights and strategies for effective supply chain planning, a critical aspect of operational success. This section focuses on meticulously coordinating and optimizing various processes throughout the supply chain to ensure seamless material flow, timely product delivery, and cost efficiency.

Supply chain planning involves accurate forecasting, demand management, and inventory optimization to meet customer needs and market demands. By employing data-driven decision-making, manufacturers can streamline their operations, minimize stock outs, and reduce excess inventory, leading to improved working capital management.

Overall, the Planning section equips manufacturers with the knowledge and tools to optimize their supply chain planning, ultimately leading to improved resource utilization, enhanced customer satisfaction, and increased competitiveness in the market.

Each month, a three-month rolling forecast is provided by the Sales and Marketing department to the Planning Section within the allocated time agreed upon by the concerned personnel's. The forecast for the immediate next month is considered unchangeable. Upon receiving the forecast, a production plan is prepared after assessing the production capacity by the Production department and/or Planning Section (depending upon the Operating Unit). The production plan is based on the approved market forecast, sales trend, historical data analysis, current FG stock and inventory status, strategic business plan etc.

2.6.1 Master Production Schedule (MPS)

Depending upon the Operating Unit/Product, the Master Production Schedule (MPS) is prepared either by the Production department or the Planning Section for the following six months. The MPS is prepared after reviewing the sales forecast, production plan, historical data, and strategic business plan for the upcoming months and production target approved by the stakeholders. The MPS is uploaded in the MRP Automation system as well. The MPS must be approved by the respective Operating Unit/Product Chief Business Officer (CBO) before implementation.

2.7 Analysis

Materials are categorized as A, B or C based on their importance and usage depending upon the respective Operating Unit/Product. A minimum stock level of each category is maintained in the factory varying upon the Operating Unit/Product. C category items may be stocked for up to six months, considering shelf life, lead time, and other relevant factors depending upon the requirement of the Operating Unit/Product.

2.8 Material Requirements Planning (MRP)

The Material Requirements Planning (MRP) is generated based on the approved MPS by the assigned planner. Factors such as inventory stock (raw materials and finished goods), pipeline, and R&I instructions are also considered for MRP.

Chapter 3

Procurement and Supply Chain of WALTON

3.1 Sourcing

The sourcing section aims to provide manufacturers with crucial elements for operational success, focusing on material management, waste elimination, and working capital optimization. It covers supply chain planning, which involves accurately planning the journey of materials or products from the raw material stage to the final consumer.

Additionally, the section emphasizes the importance of strategic sourcing in supply chain management. Strategic sourcing is an approach that formalizes the way information is gathered and used, allowing an organization to leverage its consolidated purchasing power to obtain the best possible values in the marketplace. This approach aligns the purchasing strategy with the overall business goals.

Furthermore, the section addresses the strategic and operational activities implemented by a company to meet the requirements of existing customers efficiently and responsively. It also highlights the importance of agility in fulfilling customized and personalized product demands within the complex supply chain environment.

Overall, this section serves as a valuable resource for manufacturers seeking to optimize their sourcing and supply chain processes for improved operational efficiency and customer satisfaction.

3.2 Purpose and Scope

The purpose and scope of sourcing in supply chain management is to identify and secure reliable suppliers, optimize procurement processes, and obtain the best possible values in the marketplace. Strategic sourcing helps organizations leverage their purchasing power, align their purchasing strategy with business goals, and drive cost efficiencies. By emphasizing effective sourcing practices, companies can ensure a steady supply of high-quality materials, reduce costs, and enhance overall supply chain performance.

3.3 Roles and Responsibilities

3.3.1 In-charge of Planning and Sourcing (all products)

Lead the Planning and Sourcing team to work towards accomplishing the ultimate vision of the key stakeholders of Walton in accordance to the direction of Chief Supply Chain Officer. Achieving assigned KPIs through coordination with SCM Coordinators (product-wise), SCM Section In-Charges and other HODs/In-Charges.

3.3.2 In-Charge of Sourcing (Product-wise)

To source quality suppliers for different materials and components for electrical and electronic products based on the effective specifications.

To study and analyze the markets and availability for each item and source from the best possible sources available.

To develop contract terms and negotiate contract with suppliers ensuring best available practices of procurement.

To cooperate with production and planning Section and follow up raw material stock and confirm purchase order to suppliers based on the requirements and maintain reorder point of each items ensuring stock of supplies at an optimum level.

To cooperate with R&I and costing Section and help analyzing feasibility of any new projects providing required information.

To collect and analyze suppliers' quotations and select the best alternative bids considering five rights of procurement.

To prepare LC permission form as per organization's policy and take approval from honorable management. To cooperate commercial/import operations Section to establish Letter of credits and follow up shipment.

To cooperate commercial staffs to procure materials or components considering all available Customs and VAT SROs and suggesting proper HS Codes to ensure maximum customs benefits.

To develop supplier relationship and ensure suppliers' competitiveness at time to time for any straight rebuy bids through proper negotiation.

To prepare budgetary report for raw material purchase and make monthly procurement report for management.

3.4 Identify Supply Source

Emphasize on the initiatory requirements and standardized specifications from R&I and follow the similar material check-list. Following parameters are considered initially to identify possible supply source:

Ability to consistently comply with the agreed material specification requirements.

Previous experience in supplying similar type of materials / components

Perceived reputation of the manufacturer within the industry and with regulatory authorities (communication, newsletters).

Level of technical support where required

Country of Origin, Price, Lead Time, Payment and Trade term, capacity, financial capabilities and R&I facility.

3.4.1 Sample Collection

Collect samples for testing as per negotiated specification of material between concern R&I and potential supplier.

3.4.2 Sample Confirmation

Select potential supplier's after getting confirmation from R&I, Process, Material Manager Sourcing Concern, QM and Production following New Material/ Supplier Approval Form. R&I confirmation will take into account as a final confirmation for very new material or directly suggested by customer.

3.4.3 Supplier Quality Audit

1. Supplier Audit to be conducted by SQA Engineer and/or Sourcing Concern and/or Sourcing Head. In Charge of Sourcing and Planning
2. The Supplier audit will be conducted by following Walton Supplier Quality manual. Walton defined check list will be used to evaluate the risk for the product conformity and uninterrupted supply.
3. If a supplier gets 80% or more than 80% marks, he will be considered as an "Approved" supplier.

4. If a supplier gets 60% to 79% marks, he will be considered as a “Probationary” supplier.

5. If a supplier gets less than 60% marks, he will be considered a “Not Approved” supplier.

3.5 Technical and Purchase Agreement pp

3.5.1 Technical Agreement: R&I may standardize the specification of material, based on the confirmation of R&I, Process, QM & Sourcing. Technical agreement with supplier may be completed based upon approved specification, warranty policy, shelf-life information, and storage condition and packaging information.

3.5.2 Purchased Agreement

Purchased Agreement with supplier may be completed based upon material list along with settle price, tenure of Agreement, Trade term, Payment term, lead time, compensation policy and other’s applicable terms and condition.

3.5.3 Comparative Statement

Before placing trial order, CS is ensured by the concerned Sourcing personnel with required approval from key stakeholders. In some case, to develop suppliers, trial orders are placed without CS which also requires necessary approval.

3.5.4 Supplier Verification

Before Trial order is executed, we ensure the physical existence, factory capacity and financial stability, among other things, of the supplier. This is either done by the regional offices or the product-wise Sourcing Concern.

3.5.5 Trial Order Execution

Proceed trial order to the approved or Probationary (in consideration) supplier by enumerating MOQ and container capacity. Before shipment, supplier need to provide all necessary documents (i.e., OQM report, COA, MTC, reliability test report, photo of packing etc) R&I will confirm the trial order as per engineering pilot production (new development) and process, production, material manager & QM will confirm the lot as per line pilot production. If there is any minor issue in 1st trial lot, will redact consequent 2 trial order (if need 3rd trial can be redacting) for further checking. If there is any major issue in trial lot, supplier will be considered as disqualified for this material.

3.5.6 Supplier Enlistment

Sourcing Concern will enlist the potential supplier as an authorized Supplier for the material as per Vendor Enlistment Form (Annexure-1). The enlistment must be approved in the system through the approval path. No regular orders will be provided to unlisted suppliers. The procurement officer will enter the necessary information about the respective vendor into the information system. The vendor's entry will be finalized through approval in the system. The entry must be completed in a specific format, and if any mandatory information is missing, the vendor will not be eligible. The vendor category will be determined based on product quality, compliance, and sustainability. The procurement officer/purchase monitor will collect quotations from multiple vendors and enter the prices into the system. These prices will be presented in the form of a Comparative Statement (CS) in the subsequent steps. The CS format is attached. It should be noted that prices of vendors other than approved vendors would not be entered into the system. Based on the CS system, the quality and price of vendors that are approved will be considered, and the purchase order (PO) will be made for all such vendors. The PO will follow the existing approved system for further processing.

3.5.7 Order Scheme

Corroborate disciplined order based upon strategic planning and market situation. Assigned planner & import operation personnel of SCM, will conduct the procedure. Before shipment, supplier need to provide all necessary documents (i.e., OQM report, COA, MTC, reliability test report, photo of packing etc.)

3.5.8 Mass Order

After trial order is successful from the supplier, mass order is placed following the procedures.

Sourcing of New Material from New Source

Sourcing of New Material from Existing Source

Technical and Purchase Agreement:

New Agreements must be signed between the companies. All the points except Supplier Enlistment are followed.

Sourcing of Existing Material from New Source

All the points mentioned in above

All the points mentioned in point in above which are followed except Identify Supply Source, Sample Collection, Sample Confirmation, Agreements, Trial Order Execution, Supplier Enlistment for regular business.

3.5.9 Workflow: Sourcing and Development for New Raw Material from New and Existing Source

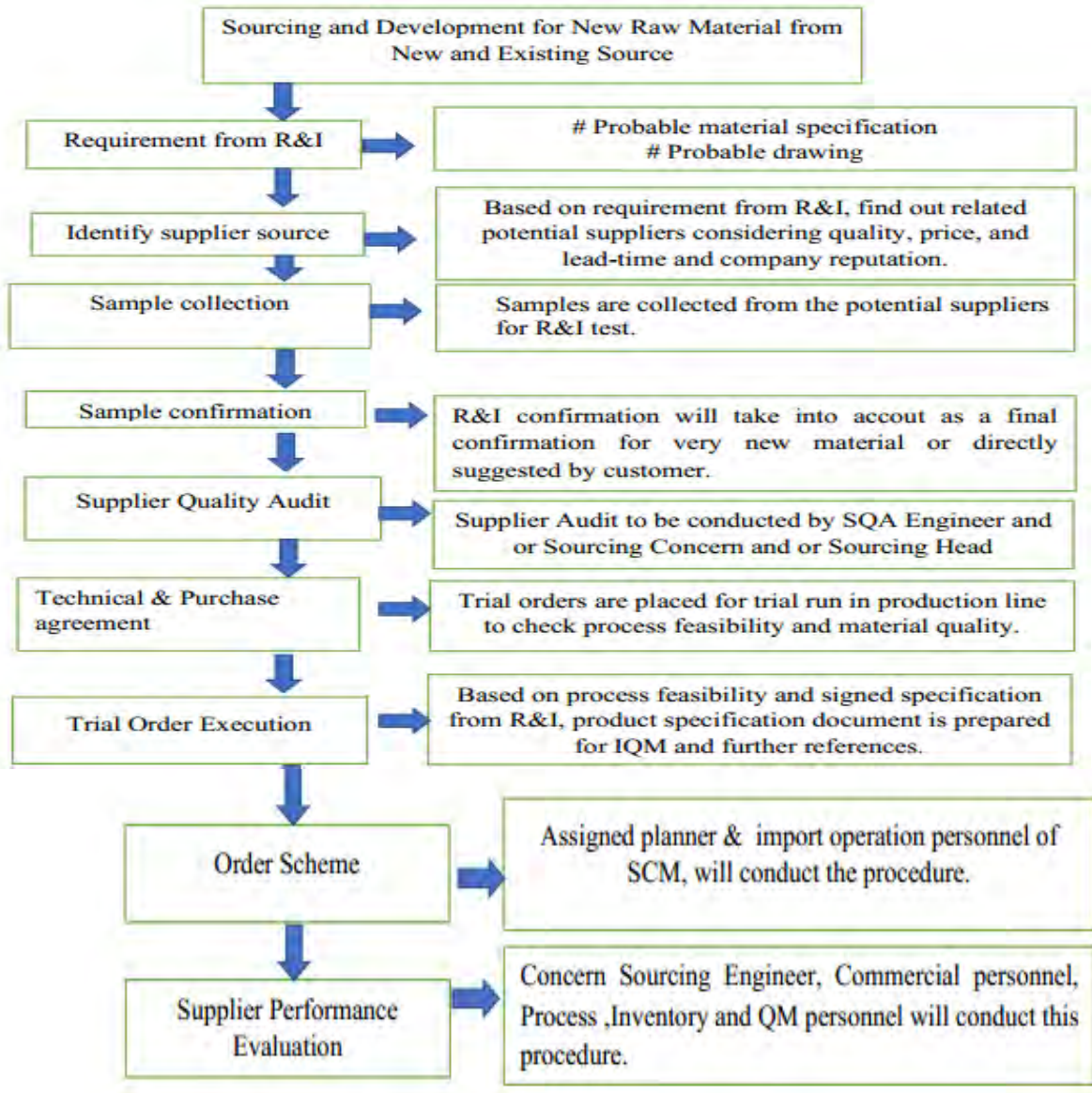


Figure 3.1: Sourcing and Development for New Raw Material from New and Existing Source

3.5.10 Workflow: Sourcing and Development for Existing Raw Material from New Supplier

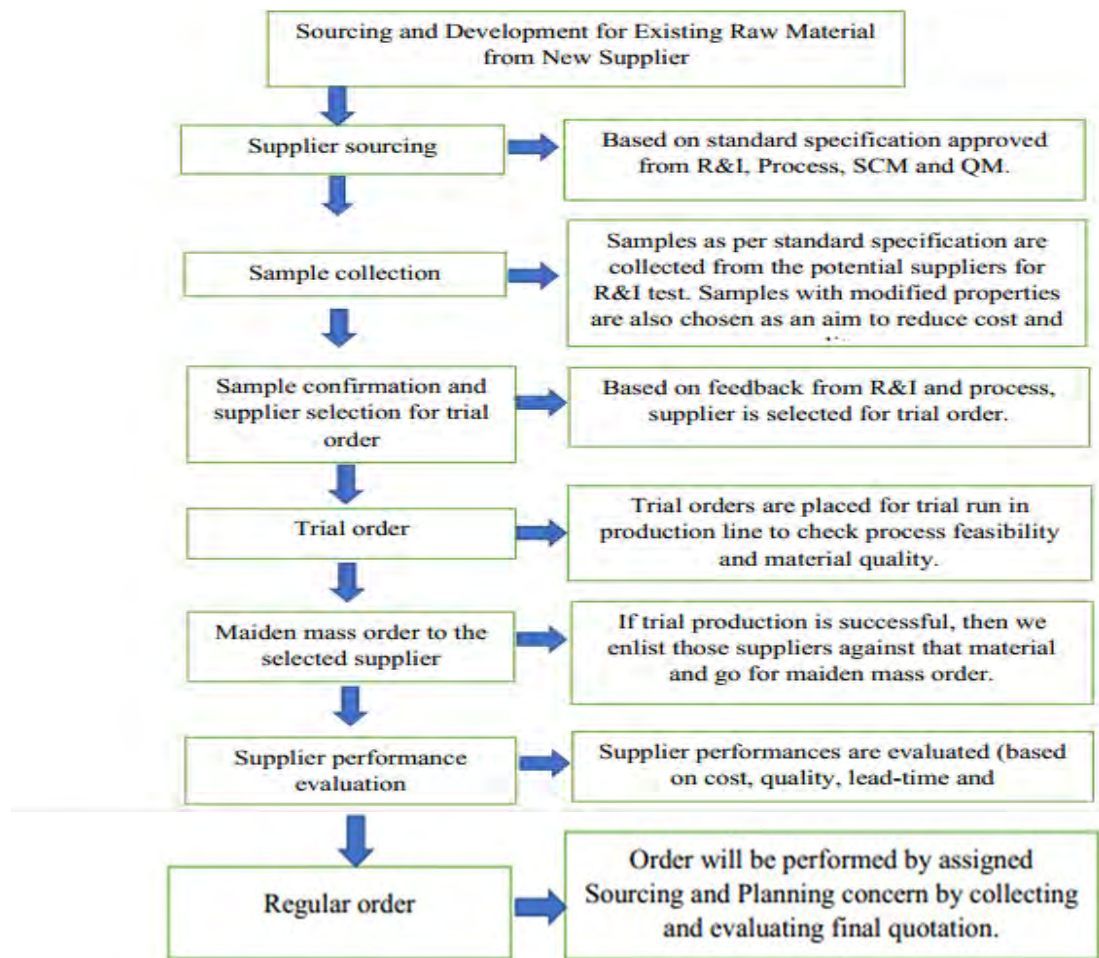


Figure 3.2: Sourcing and Development for New Raw Material from New supplier

Controlling Anomaly of Bulk Orders: An approval sheet format has been developed consisting present stocks, next four month forecasted consumption, and next three month forecasted price and settled quantity & price. The format is shown below.

3.6 Commercial: Under the banner of SCM, commercial procurement section is responsible for the import of raw materials, semi-finished goods, finished goods, service payment (CH-10), capital machinery & equipment, spare parts, consumable tool and any other miscellaneous item for the operating unit of Walton Hi-Tech Industries PLC.

Table 3.1: purchase Order Report

		Date:								ETD:				
S L		Material Name	Present Stock (Ton)	Next 4 month ExpectedConsumption				Current LME Price (USD/Ton)	Forecasted Lowest Price(within next three month)			Order Qty (Ton)	Settled LME for the Order (USD/Ton)	
				Month1	Month2	Month 3	Month 4		Month h1	Month h2	Month3			
1														
2														
3														
		Prepared By				Checked By						Approved By		
		(Planning In-charge /SCM In-charge)				(CBO or his representative)						(CSCO)		

The commercial procurement section tries to achieve efficiency, quality output and uniformity of performance, speed of work, dependability and flexibility while reducing errors, cost, miscommunication and failure to comply with industry regulations in their routine activities. The ultimate goal of the section is to help to complete the procurement cycle in timely manner to support to run the production in smooth way. Commercial procurement section always emphasizes on cooperation, collaboration and alignment with intracompany and intercompany SCM stakeholders to achieve the strategic goals of the organization. At the same time, this section believes in effective cross-functional working to create supply chain surplus.

The focus point of the commercial section is to place on time order to supplier, arranging on time delivery and shipment in cost efficient way, on time goods releasing from port & customs minimizing unwanted cost and dispute resolution if arises any. Thus, each commercial concern can ultimately contribute to the overall organizational growth & profit.

3.6.1 Commercial Concern

1. Arrange to create Purchase Order as per approved PR & final PI received from Sourcing & Planning/ supplier.
2. Ensure timely Order Confirmation to supplier by LC/TT/CAD method maintaining proper description of goods, H. S. Code and compliance of government regulatory bodies.

3. Co-ordinate with supplier & WSL to arrange timely shipment in cost competitive way to replenish the inventory in a view to support the smooth running of production.
4. Closely monitoring of document preparation, checking, submission as per LC/TT/CAD terms and conditions with supplier and WSL. Arrange timely documents retirement from bank.
5. Co-operate & co-ordinate with C&F team for smooth cargo release from customs minimizing unwanted cost.
6. Follow up delivery in timely manners. Resolving any dispute regarding quality, quantity, and specification, model, shortage and damage etc. maintaining proper communication with all stakeholders including supplier.
7. Sample goods import for new product development as per R&I requirement.
8. Liaison with Bangladesh Bank, CCI&E and other trade bodies for service payments & machinery-spare parts export cum import for repairing/replacement cases. (For machinery, spare and service payment related concern).

3.6.2 Shipment Arrangement/Follow up

Commercial Procurement Manager will co-ordinate with Sourcing & Planning and Supplier and get necessary plans for shipment(s) under advance payment/CAD/LC.

For Shipment under Freight Prepaid: Supplier will be notified/confirmed by Commercial Procurement Manager about shipment arrangement. Based on that Supplier will arrange shipping schedule and share shipping advice accordingly.

For Shipment under Freight Collect: Concern Commercial Manager will place shipment booking with necessary details with accurate shipping term (INCO term). He/She will collect necessary pre-alert after vessel sailed/flight date from respective Shipping concern.

Commercial Procurement Manager will follow up shipment and transshipment status, as well as about vessel/flight arrival date at destination port.

3.6.3 Shipping documents

Commercial Procurement Manager will collect respective shipping documents followed by below points:

Commercial Procurement Manager will check drafts of all necessary shipping documents especially Commercial Invoice, Packing List, Goods Description (GD), HS code, Net Weight/

Gross Weight (NW/GW), Bill of Lading/Air Way Bill/ Lorry Receipt, Country of Origin before issuing original copies.

Commercial Procurement Manager will track courier status of original documents (if applicable) and collect original documents from respective bank.

Commercial Procurement Manager will apply for respective insurance policy against subject shipping documents (where applicable). Collect insurance policy from respective insurance company.

Commercial Procurement Manager will check original shipping documents and original insurance policy to find any discrepancies in the documents (if any).

If necessary and possible, Commercial Procurement Manager will rectify all discrepancies in the documents or insurance policy by the assistance from supplier, bank, C&F, WSL etc.

Commercial Procurement Manager will forward originally shipping documents with insurance policy and other necessary documents (if applicable) to respective C&F team.

Commercial Procurement Manager will follow up with C&F team to know status of assessment, examine and clearance of respective consignment

3.6.4 Duty Payment

Table 3.2: The approval path for each individual duty payment.

SL NO	Work	Approval process	Responsibility
1	Issue Purchase Requisition (PR)	Approved by Head of the Dept./Concerned	SCM Planning / Inventory
2	Sourcing & Development (If. New materials/goods need)	R&D. QC & Production	SCM Sourcing
3	Price collection (Quotation Analysis) from enlisted suppliers	Email or RFQ (Analysis) /Others	SCM-Import Operations & Sourcing
4	Prepare Management Approval for Import LC/TT (Prescribed format)	Approved by management	SCM - Import & Sourcing
4.1	PR Approval by Management	Approved by management	SCM-Import Operation & Inventory
5	Purchase Order (PO) Creation (refer PR. PI & Management approval)	Approved by HOD/Concerned, SCM	SCM - Data Entry official

6	Approach to Finance & Account for Bank Selection with all source document*	For LC Opening- as per sanction letter	Import Operations & Finance
6.1	LC/TT Issue bank related info [Bank name, Branch. Interest Rate	LCA Form distribution	Finance & Accounts

Commercial Procurement Manager will arrange necessary duty payment through accounts Section based on the assessment copies received from respective C&F team.

3.6.5 Delivery Follow Up

Commercial Procurement Manager will follow up delivery status of a respective consignment from respective C&F team.

3.6.6 LC Settlement, Work Settlement (IMPORT)

Table 3.3: LC Settlement, Work Settlement (IMPORT)

	& Libor. Tenure (Days). Finance by own/Third Bank Discounting (if any), LCA Form Number entry in Oracle Software. **Office notice		
7	LC/TT Processing with Bank & SWIFT with Insurance cover note	By Concern Commercial person	Import Operations & LC Opening Bank
8	LC/TT info entry and match with PO	In Oracle software	SCM - Import Operations
8.1	Mgt Approval, PI, LC Copy. Insurance Policy, Sales Contract in WDMS (if any)	Entry in WDMS	SCM - Data Entry official
9	LC/TT Pre Shipment cost booking/necessary actions	Concern Finance dept, person	Finance & Accounts
10	For Air/Sea/Road shipment (For FOB/Freight collect)	Place booking confirmation to WSL	SCM - Import Operations
11	Shipment Entry in Oracle software	After collect original docs/Shipping Guarantee from Bank	SCM - Import Operations
12	Upload Shipping Documents (CI.CO. WBL. PL)	Entry in WDMS	SCM - Data Entry official
13	Handover complete shipping documents to C&F with Insurance policy	For goods release purpose	SCM - Import Operations

14	Loan Creation after Bill payment to Supplier from Importer Bank/Post shipment	Goods In-transit	Finance & Accounts
15	Customs Examine & Assessment	By C&F (Bill of Entry Generated)	SCM C&F
16	Import Duty Paid by Pay order/Cash through C&F	SCM-Import Operations provide Bill of Entry & Assessment Notice to Finance & Accounts Dept.	Finance & Accounts
17	Landed Cost Management Entry(LCM)	Post shipment jobs	Inventory Section
18	In bound/Freight payment arrangeas per contract with Importer & Forwarder	Freight Invoice issued byWSL	SCM WSL
19	Collect Delivery Order (DO)	From Forwarder & Shippingline	SCM C&F
20	Transport management & delivery	From Chittagong/Benapole/Dhakato Factory Side	SCM C&F
21	Delivery Report inform by email/Software daily basis to all concerned	Actual Delivered vehicle information	SCM C&F
22	Gate Entry Number (With Date & Time) in Software	Need Develop in Oracle software	From Factory side/Admin(Parking mode)
23	Costing (Final costing of goods) checklist source document	Before GRN costing will be done	Finance & Accounts
24	Goods Receive Note in software (GRN)	Goods received complete	From Factory side / Admin
25	Inspection	After GRN goods will be inspected	Purchase Monitoring
26	Store Received (Respective PR - Store)	After inspection goods will be received by store	Inventory Section
27	Adjustment/Matching of AP Accrual-Foreign (If Any)	Store received complete adjustment will be done	Finance & Accounts
28	Goods Missing/Broken/Shortage/Insurance claim procedure	Costing complete total LC goods will be received. After GRN Missing/Broken/ Shortage/Insurance claim negotiations	Import Operations, SCM-Inventory, Insurance, Purchase Monitor,

			Finance & Accounts, Admin
29	Gate out number (With Date & Time) refer the LC or PO number in software. *For the attention of IT Department [Mr. Ali Abbas (ID- 12977)]	Return of empty Container /Covered Van/Truck to C&F/Transport agent after unload the Goods at Factory	SCM- Inventory, Purchase Monitor, Finance & Accounts, Admin
	* Responsibility be looked after by department head.		

3.7 Inventory:

The material management of warehouse is an essential part of the Organization's operations. The material management function assumes special significance in Walton Hi-Tech Industries PLC. Planning and receiving of the materials, then handling, proper storage and accuracy in accounting during issue are of paramount importance in the efficient operation of the warehouse.

Reporting Path



Figure 3.3: Reporting path for Inventory

3.8 Material Planning Procedure:

Calculates net requirements for all the requirement (Local Raw material, spares & Consumable items) quantities that are to be planned. Thereby compares available warehouse stock or the scheduled receipts from Purchasing and Production with planned independent requirements, material reservations and incoming sales orders. In the case of a material shortage, that is, if the available stock is smaller than the quantity required, creates procurement proposals.

Analyze the quantity recorded in the procurement proposal according to the sales forecast, Production Plan and MPS.

The procurement proposal is also scheduled which means that, for materials procured externally, the delivery and release dates are determined, and for materials produced in house, the production dates are calculated.

For materials produced in-house, the dependent requirements of the components are determined during the BOM explosion. For each component, the dependent requirements date is displaced by the in-house production time of the higher-level material.

Additional requirements (unplanned goods issues, excess consumption of components in Production, and so on) can be covered by using the materials forecast within Material Planning. The historical values of unplanned requirements form the basis of the forecast. These requirements are then considered along with the exact requirement quantities.

3.9 Overview Flow Chart of Material Planning

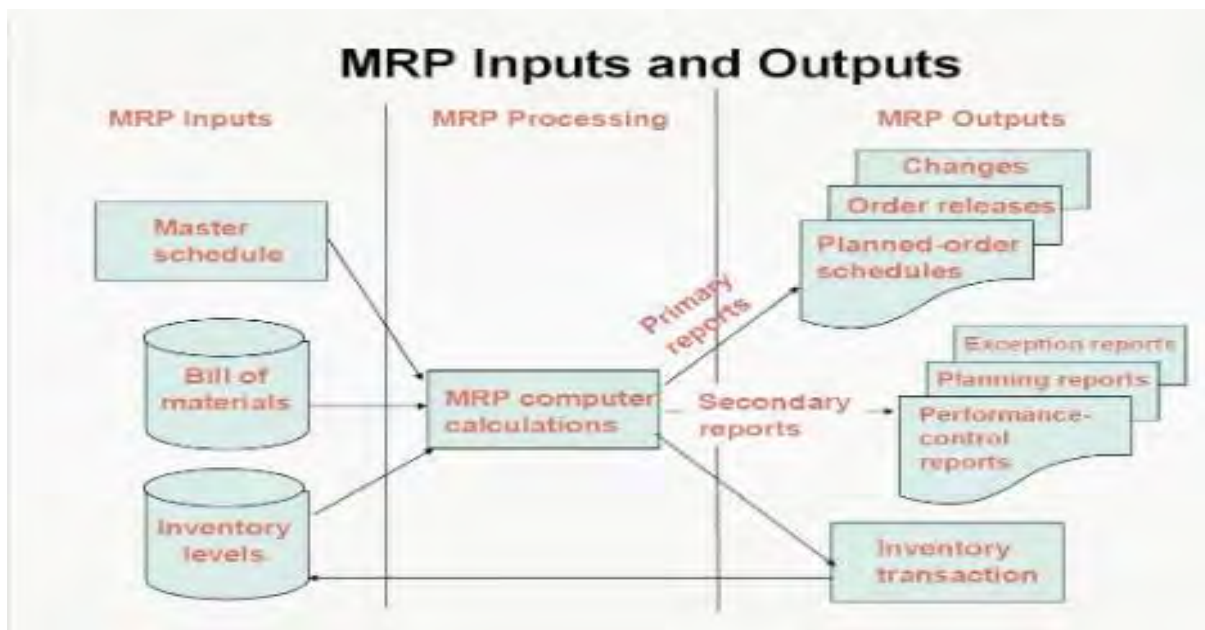


Figure 3.4: Flowchart of material planning

3.10 Order Quantity Calculation:

Walton Hi-Tech Industries PLC. (WFR)

(A Concern of WALTON Group)

Purchase Requisition Report

Requisition No	: 1095999	Status	: APPROVED (25-JUL-24 02:41:55 PM)
Description	: EPP order for R&I trial purpose., PR Type: Import, Product: Refrigerator	Req Date	: 15-JUL-24 11:43:13 AM
PR Type	: Import (REGULAR)		
Subinventory	: INJMLD ST	Need Date	: 15-OCT-24
Item Type	: Current Asset (REGULAR)	Attached File	: Attachment
Asset	: 0	Project Budget	: 0
Purchased	: 0	Remain	: 0
Product	: Refrigerator	Dealing Person	: Bidhan Chandra Paul:38050

SL	Line ID	BOM	Category	Item Code	Item Description	Item Info	Brand	Model	Origin	UOM	All St	Sub St	PR Qty	PR Price	PR Value	Last Price	Low Price	PO Price	Sft Stk	Price Appr	PO	View	Status
1	3066348	B	RAW MATERIALS	301402	ABS Metallized Resin (48-48-69-70-66-58-1193)* LIGHT-SILVER (L163)* DARK-SILVER (L193)* DARK-GRAY (ML48)* BK-CAJARI (ND)	Please Proceed.	NA		Korea, Republic of	KG	886.99318	400	250	370.13	92532.5	370.13						4128433	Active
												Total Quantity:		250	92,533								

Approval History

Seq No	Action	Action Date	Emp Name	Note
6	APPROVE	25-07-2024 02:41:55 PM	Md. Mashur Islam (40001)	For Ref. Door Decorative Parts.
5	FORWARD	16-07-2024 06:14:29 PM	Mr. Anisur Rahman Mollick, (5075)	
4	APPROVE	16-07-2024 06:14:29 PM	Mr. Anisur Rahman Mollick, (5075)	
3	APPROVE	16-07-2024 09:01:22 AM	Md. Alam Mollah (40947)	
2	APPROVE	15-07-2024 02:46:30 PM	Md. Niaz Morshed (19160)	
1	SUBMIT	15-07-2024 11:45:28 AM	S. M. Waled Bin Alam (44006)	EPP order for R&I trial purpose. Please Approve.

Purchase Monitor Note

1				
PR Monitor Note:				

Figure 3.5: Raw material Order sheet

3.11 SOP of Material issue by FIFO method:

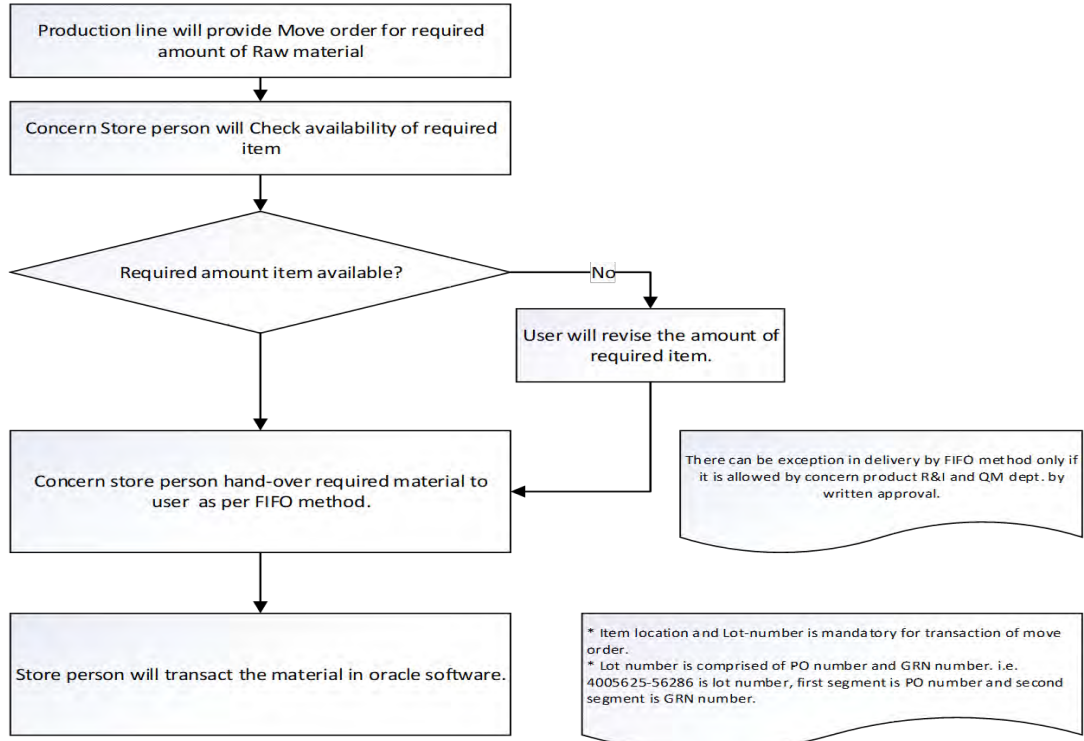


Figure 3.6: SOP of Material Issue using FIFO method

Chapter 4

Observations and Recommendation:

4.1 Observations:

During my approximately Five-year tenure in WALTON's supply chain department, I have identified several areas that warrant attention and improvement. Below are the issues I have observed along with my suggestions for enhancement:

1. The manual approval hierarchy within the organization often leads to complications and delays in decision-making. Urgent supply chain operations can be disrupted due to the lengthy approval process.
2. Though WALTON has implemented ERP system, sometimes real time updates on inventory, GRN section, costing and other relevant information are often unavailable.
3. Service level agreements (SLA) with suppliers are not consistently upheld, often due to shifting priorities of suppliers
4. WALTON heavily relies on REFRIGERATOR for a significant portion of its revenue. This less variation in its product range poses a risk to achieve revenue targets and potentially missing opportunities in new product categories
5. WALTON is facing challenges to create diversification of supplier selection and procurement. They need to Use BATNA and ZOPA during negotiation
6. Walton Purchase a big volume of Leverage items, routine items, Bottleneck Items and critical items in every month. They might follow Kraljic Matrix properly based on their impact on profitability and the complexity of the supply market.

Recommendation:

Here in the below I've given some recommendations for the mentioned issues:

1. To reduce the risk of supplier exploitation for critical strategic items, WALTON should actively seek alternative sources (Single suppliers). Exploring alternate sourcing options through physical visits, offering specification flexibility while upholding quality standards with alternate vendors, and conducting comprehensive research on industry competitors can help mitigate such risks.
2. While WALTON is trying to pursue in the product diversification with initiatives like introducing WALTON CHEMICAL Industries, cosmetics products and the company should consider expanding its presence in the FMCG sector by introducing a broader range of innovative products category. In this dynamic market, adaptability is imperative for long-term survival.
3. At present the challenges in conducting imports through the banking channel due to the ongoing dollar crisis and global economic instability, WALTON should closely monitor the supply chain strategies of its international competitors to learn how they are managing to sustain an uninterrupted supply chain.
4. WALTON should draft contracts with greater precision and impose penalties on partners in the event of supply disruptions as forecasted or for any lapses in quality.
5. WALTON should focus on Shipping and logistics business with precision and maintaining accuracy in the crisis moment. As Bangladesh depends on Importing on different types of RAW Materials from various countries, here freight charge plays a significant role of Importing products. If Walton has some own container and ship they can support their CASH COW products more precisely like giant MEGHNA GROUP, JAMUNA GROUP, BASHUNDHARA GROUP, KARNAPHULI GROUP etc.

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