

Participant Handbook

Sector
Apparel

Sub-Sector
Apparel

Occupation
Merchandising

Reference ID: **AMH/Q0911, Version 4.0**
NSQF level: 5



Merchandiser
–Apparel,
Made-Ups & Home
Furnishings

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Shri Narendra Modi
Prime Minister of India

“

Skill development of the new generation is a national need and is the foundation of Aatmnirbhar Bharat

”



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for

SKILLING CONTENT: PARTICIPANT HANDBOOK

Complying to National Occupational Standards of

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The preparation of this handbook would not have been possible without the Fashion Industry’s support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the industry.

This participant handbook is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours.

About this book

Welcome to the “Merchandiser–Apparel, Made-Ups & Home Furnishings” training programme. This Participant Handbook (PHB) is created to equip learners with comprehensive knowledge of merchandising concepts, product planning, and sourcing strategies across diverse textile categories. It highlights coordination, quality assurance, and commercial expertise vital for modern supply-chain operations. The programme focuses on developing strong vendor management, understanding buyer requirements, negotiating costs, and executing production follow-ups. Participants will gain practical exposure to documentation, sampling processes, order execution, market analysis, and industry-standard merchandising tools required for efficient operational performance. activities.

This Participant Handbook is designed based on the Qualification Pack (QP) under the National Skill Qualification Framework (NSQF) and it comprises the following National Occupational Standards (NOS)/ topics and additional topics.

1. AMH/N0901: Analyze Product and establish merchandising objectives in accordance with business plans
2. AMH/N0903: Develop and present merchandising plan
3. AMH/N0912: Communicate with client and manage merchandising documents
4. AMH/N0904: Organize and Coordinate for pre-production as per merchandising objectives
5. AMH/N0905: Factory Coordination and managing shipment
6. AMH/N0621: Adhere to industry, regulatory, and organizational standards and embrace environmentally sustainable practices
7. AMH/N0620: Promote and sustain safety, health, and security in workplace, while fostering Gender and Persons with Disabilities (PWD) Sensitization
8. DGT/VSQ/N0102: Employability Skills (60 Hours)

Symbols Used



Key Learning
Outcomes



Unit
Objectives



Exercise



Tips



Notes



Summary



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सत्यमेव जयते
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MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



1. Introduction and Orientation



Unit 1.1 - Introduction to the role of Merchandiser –
Made-ups & Home Furnishing



Bridge Module

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Describe the outline of the Apparel industry in India
2. Recognise various employment opportunities for a 'Merchandiser' in the apparel industry.
3. Identify the apparel production process and the role that the 'Merchandiser' plays in the process.
4. Illustrate the production process.

UNIT 1.1: Introduction to the role of Merchandiser – Made-ups & Home Furnishing

Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe the size and scope of the apparel industry.
2. Explain the roles and responsibilities of a 'Merchandiser – Made-ups & Home Furnishing'.
3. Describe various employment opportunities for a 'Merchandiser – Made-ups & Home Furnishing' in the apparel industry.
4. Describe the apparel production process and the role that the 'Merchandiser – Made-ups & Home Furnishing' plays in the process.

1.1.1 Apparel Manufacturing Sector

The apparel manufacturing sector in India is one of the biggest industries in the country. It includes making clothes like shirts, pants, dresses, uniforms, and traditional wear. It also includes items we use at home, such as bed sheets, towels, curtains, cushion covers, and tablecloths. Many factories and small units across India manufacture these garments for both domestic consumption and export to other countries.

This sector provides employment to millions of people, particularly women and workers in rural areas. It includes many types of work such as stitching, cutting, embroidery, ironing, checking, and packing. India is renowned for its skilled workers and exquisite designs, which is why clothing made in India is in high demand worldwide.

The apparel industry in India is growing every year. With an increasing number of people purchasing clothes in India and other countries, there is a growing need for more workers and enhanced skills. New machines, better training, and government support are helping this sector grow fast. It is a strong part of India's economy and offers good job opportunities for skilled workers.

Market Size and Growth:

- **Current Value:** The Indian apparel market size was valued at USD 115.70 billion in 2024. The broader Indian textile and apparel market was valued at USD 222.08 billion in 2024.
- **Projected Growth:** The Indian apparel market is projected to grow to USD 171.60 billion by 2034, exhibiting a compound annual growth rate (CAGR) of 4% from 2025 to 2034.

Source: textileinsights.in



Fig. 1.1.1: Apparel manufacturing unit

India is known around the world for its beautiful embroidery, traditional designs, and skilled work. Because of this, there is a high demand for Indian-made clothes and home products in many countries.

The work in this sector is done by hand and by machines. It requires workers who are careful, skilled, and hard-working. Jobs like those of embroidery machine operators are crucial in maintaining the quality and design of products.

This sector helps many families earn a living and plays an important role in the country's growth.

Key Strengths and Growth Drivers of India's Apparel Industry

India's garment and textile industry is strong and growing fast. Here are the main reasons why:

1. Plenty of Raw Material

India grows a lot of cotton, the highest in the world and is also the top producer of jute and jute products. India is also the second-largest producer of silk. India also produces and exports various types of blended and synthetic yarns.



Fig. 1.1.2: Cotton tree and pre-processed jute plant

2. Large Domestic Market

India has a big population that buys clothes. People in India now have more money to spend and like to wear new styles. This means there is always high demand for new garments in the local market.

3. Government Support

The government is giving help through special schemes like PLI and PM MITRA Parks. These programs help build better factories, support workers, and attract more companies to invest in India.

4. Strong Export Business

India exports clothes and textiles to many countries, including the USA and those in Europe, making it the sixth-largest exporter of textiles and garments in the world.

5. Use of New Technology

Modern machines and computers are now used in many factories. This makes the work faster, better, and more accurate.



Fig. 1.1.3: Advanced garment manufacturing technology

6. Focus on Sustainability

Many companies are now using eco-friendly methods. They are making clothes from organic cotton and trying to reduce waste. This is good for the environment and future generations.

Apparel, Made-Ups and Home Furnishing Sector Skill Council (AMHSSC)

The Apparel, Made-Ups, and Home Furnishing Sector Skill Council (AMHSSC) is an organisation that helps people acquire the necessary skills to work in the clothing and home furnishing industry.

AMHSSC (Apparel, Made-Ups and Home Furnishing Sector Skill Council) plays an important role in helping people learn and grow in the garment and home furnishing industry. It creates special training courses for different jobs such as embroidery machine operators, tailors, pressmen, fashion designers, etc. These courses teach workers how to do their jobs in a safe, fast, and correct way.



Fig. 1.1.4: AMHSSC logo

AMHSSC also works with factories and companies to understand what kind of workers are needed. This helps ensure that the training aligns with what the industry is looking for. Trained workers can get jobs in factories, export houses, or even start their own small businesses. By learning the right skills, workers can make better-quality products, feel more confident, and earn more money. In this way, AMHSSC connects skilled workers with good job opportunities and supports their future growth.

1.1.2 Merchandiser

What is Merchandising?

Merchandising, in general, refers to the process of planning, buying, displaying, and promoting goods to attract customers and increase sales.

In the Apparel, Made-Ups, and Home Furnishing sector, merchandising refers to all the activities involved in planning, developing, sourcing, and presenting various products to meet buyer requirements and market demand. It includes selecting the right fabric and design, ensuring timely production, coordinating with buyers and suppliers, and making sure that the finished products are delivered on time and of proper quality.



Fig. 1.1.5: Merchandiser in the apparel, made-ups, and home furnishing sector

Who is a Merchandiser?

A Merchandiser in the Apparel, Made-Ups, and Home Furnishing sector acts as a link between the manufacturer (exporter or production unit) and the buyer (retail brand or customer). Their job is to understand the buyer's needs, coordinate production activities, and ensure the timely delivery of high-quality finished products.

1.1.3 Roles and Responsibilities of a Merchandiser

A merchandiser plays a crucial role, acting as the link between buyers and the sales floor. Their primary goal is to maximise sales and profitability by ensuring that the right products are available in the right place, at the right time, and in the right quantities. This involves a blend of analytical, strategic, and creative tasks.

The specific duties of a merchandiser can vary depending on the organisation, but generally include the following:

1. Analyse Product and Establish Merchandising Objectives:

- Study buyer requirements, product categories, market trends, and past sales.
- Identify target price points, quality standards, and delivery timelines.
- Set merchandising goals aligned with the company's business plan and production capabilities.

2. Develop and Present Merchandising Plan:

- Prepare a detailed merchandising strategy covering product development, sampling, sourcing, costing, and timelines.
- Present the merchandising plan to management and buyers for review and approval.
- Suggest value additions (like embroidery, printing, packaging) based on buyer preferences.

3. Communicate with Client and Manage Merchandising Documents:

- Act as the main point of contact between the buyer and the factory.
- Share product specifications, approvals, and changes clearly with all stakeholders.
- Maintain accurate records such as tech packs, cost sheets, purchase orders (POs), approvals, and shipping documents.

4. Organise and Coordinate for Pre-Production:

- Plan and monitor pre-production activities such as fabric sourcing, trims procurement, and sample approvals.
- Schedule production as per delivery deadlines.
- Conduct pre-production meetings with production, quality, and sourcing teams.

5. Factory Coordination and Managing Shipment:

- Coordinate with the factory on production status, capacity planning, and quality checks.
- Resolve production-related issues to prevent delays.
- Ensure inspection and quality control are done before shipment.
- Liaise with logistics partners and prepare necessary shipping and export documents.
- Monitor dispatch to ensure timely and accurate delivery to the buyer.

6. Sampling and Product Development:

- Develop and send samples as per buyer specifications for approval (Proto, Fit, Size Set, Pre-Production).
- Incorporate buyer feedback in product development.

7. Costing and Negotiation:

- Prepare costing sheets considering raw material, labour, overheads, and margins.
- Negotiate prices with vendors and suppliers to meet profitability targets.

8. Quality Assurance Support:

- Work with QA teams to ensure all product quality parameters meet buyer standards.
- Help set up the inline and final inspection processes.

9. Production Monitoring and Tracking:

- Track production progress to ensure that deadlines are met.
- Raise alerts for potential delays and take corrective actions promptly.

10. Post-Shipment Follow-Up and Buyer Feedback:

- Share dispatch details and tracking with the buyer.
- Collect post-shipment feedback and address any quality or service concerns.
- Maintain strong relationships for repeat business.

1.1.4 Employment Opportunities in the Apparel, Made-Ups & Home Furnishing Industry

A Merchandiser specialising in apparel, made-ups, and home furnishing has a wide range of employment opportunities. These roles typically involve co-ordinating various stages of the product lifecycle, from design and production to distribution and sales, while focusing on maximising profitability.

Here are some specific job titles and areas of employment:

- 1. Export Houses and Buying Houses:** Merchandisers can work in export or buying houses, managing orders from international clients. They coordinate sampling, production, quality checks, and shipping to ensure on-time delivery and buyer satisfaction.
- 2. Apparel Manufacturing Units:** In manufacturing units, merchandisers act as a bridge between production and the buyer. They monitor production schedules, material availability, and ensure the final product meets the required specifications.

3. **Buying Agencies and Liaison Offices:** These offices act on behalf of international buyers. Merchandisers working here ensure proper communication with suppliers, monitor production status, and manage quality inspections before shipment.
4. **Home Furnishing Companies:** Merchandisers in this segment work with items like bed linens, curtains, towels, and cushion covers. They coordinate the development, sourcing, and timely delivery of home textile products.
5. **Design Studios and Fashion Houses:** In fashion studios, merchandisers assist designers with sourcing materials, developing samples, and communicating with production teams to bring new designs to life efficiently.
6. **Apparel Export Clusters (SEZs/EPZs):** Merchandisers can find opportunities in Special Economic Zones where large-scale garment and textile production takes place. They manage bulk order coordination and client communication.
7. **Freelance Merchandising or Consultancy:** Experienced merchandisers may work independently or on a freelance basis. They offer consulting services to small brands or start-ups, helping with costing, sourcing, and buyer communication.
8. **Skill Development and Training Roles:** There are opportunities in government and private training programs, especially through Sector Skill Councils like AMHSSC. Merchandisers can work as Trainers and Master Trainers, sharing their knowledge with aspiring professionals.

1.1.5 Role of the Merchandiser in the Apparel Production Process

The apparel production process involves a series of well-defined stages, starting from product development to the final dispatch of garments. It includes design development, sample creation, material sourcing, fabric cutting, stitching, finishing, quality checking, and packaging. Each stage is crucial for ensuring that the final product meets the buyer's expectations in terms of quality, fit, and timely delivery.

The Merchandiser – Apparel, Made-Ups & Home Furnishings plays a central role throughout the production process. They act as a link between the buyer and the factory. At the initial stage, the

Merchandiser understands the buyer's requirements and coordinates with the design and sampling teams to develop product samples. Once the sample is approved, they are responsible for sourcing fabrics, trims, and accessories as per the technical specifications.

During the production phase, the merchandiser plans and monitors the pre-production activities, organises pre-production meetings, and ensures that all raw materials are available on time. They closely coordinate with the production team to ensure that manufacturing runs smoothly and any issues are resolved quickly.

In the final stages, the Merchandiser ensures that quality checks are performed as per buyer standards. They manage shipment planning and documentation to ensure on-time delivery. Throughout the process, they maintain clear communication with the buyer and internal teams, tracking order status and providing updates.



Fig. 1.1.6: Merchandiser at work

Summary

- The apparel industry is large and offers significant employment opportunities.
- A Merchandiser – Made-ups & Home Furnishing has defined roles and responsibilities within this sector.
- This role involves coordinating between production teams, buyers, and suppliers.
- Merchandisers ensure product quality, timely delivery, and adherence to buyer requirements.
- They have opportunities to work in export houses, retail chains, and manufacturing units.
- Understanding the apparel production process helps merchandisers manage workflow efficiently.
- Merchandisers play a key role in linking customer demands with production capabilities.

Exercise

Multiple-choice Question:

1. What does the apparel industry primarily deal with?
 - a. Automobiles
 - b. Clothing and textiles
 - c. Food products
 - d. Electronics

2. Which is a key responsibility of a Merchandiser – Made-ups & Home Furnishing?
 - a. Driving delivery vehicles
 - b. Ensuring timely product delivery to buyers
 - c. Operating heavy machinery
 - d. Performing stitching work only

3. Where can a Merchandiser – Made-ups & Home Furnishing find employment?
 - a. Grocery shops
 - b. Export houses and retail chains
 - c. Hospitals
 - d. IT service centres

4. What does understanding the apparel production process help a merchandiser do?
 - a. Design new machinery
 - b. Manage workflow efficiently
 - c. Cook food for workers
 - d. Reduce marketing costs

5. What role does a merchandiser play between buyers and production teams?
 - a. Keeps records of visitors only
 - b. Acts as a link to ensure buyer requirements are met
 - c. Handles staff salaries
 - d. Repairs production machines

Descriptive Questions:

1. Describe the size and scope of the apparel industry.
2. Explain the main roles and responsibilities of a Merchandiser – Made-ups & Home Furnishing.
3. Describe different employment opportunities available for this role in the apparel sector.
4. Explain the apparel production process briefly and how the merchandiser contributes to it.
5. Discuss why the merchandiser is considered an important link between buyers and production teams.





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2. Analyse the Product

Unit 2.1 - Business Understanding and Client Orientation

Unit 2.2 - Product and Market Research Skills



AMH/N0901

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Demonstrate understanding of organisational business processes and buyer/client requirements.
2. Conduct product-related research and analysis to support merchandising decisions.
3. Apply workplace communication and cultural sensitivity to product analysis.

UNIT 2.1: Business Understanding and Client Orientation

Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe the key merchandising-related business processes and explain the role of a merchandiser in supporting organisational functions.
2. Interpret the organisation's policies, procedures, and guidelines for dealing with buyers and clients.
3. Assess client profiles, previous order history, and brand positioning to better understand buyer expectations and design direction.
4. Identify client goals related to cost, time, quality, and design, and develop a merchandising strategy that aligns organisational capabilities with buyer requirements.
5. Apply best practices for effective cross-cultural collaboration with clients, suppliers, and internal teams by recognising cultural differences in workplace behaviour and communication styles.

2.1.1 Merchandising-Related Business Processes

Merchandising in the Apparel, Made-Ups, and Home Furnishing sector involves a series of interconnected business processes that ensure the smooth flow of orders from product development to final shipment.



Fig. 2.1.1: Merchandising in the Indian apparel sector

Key merchandising-related business processes include:

1. **Product Development:** This process starts with understanding buyer needs and preparing design samples, technical specifications, and costing. The Merchandiser coordinates with the design, sampling, and production teams to ensure the product meets buyer expectations.
2. **Sourcing and Procurement:** Merchandisers help identify suitable suppliers for fabrics, trims, and accessories. They ensure the timely procurement of materials based on quality, price, and lead times.
3. **Production Planning and Coordination:** Merchandisers work closely with the production team to plan timelines, manage raw material flow, and ensure that production is completed according to schedule.

4. **Communication and Buyer Interaction:** Continuous communication with buyers is essential throughout the order cycle. Merchandisers share updates, get approvals, resolve queries, and build client relationships.
5. **Quality Assurance and Compliance:** Merchandisers coordinate quality checks at various stages and ensure that the final product meets buyer specifications and compliance standards.
6. **Logistics and Shipment:** After production, merchandisers arrange inspections, handle documentation, and coordinate with logistics teams to ensure timely and accurate shipment to the buyer.

The Merchandiser plays a central role in linking different departments like design, sourcing, production, quality, and shipping—while also maintaining strong communication with buyers.

2.1.2 Organisational Policies and Procedures for Dealing with Buyers and Clients

In the Apparel, Made-Ups, and Home Furnishing sector, every organisation follows a defined set of policies, procedures, and guidelines when interacting with buyers and clients. These are important to ensure consistency, professionalism, and clarity in all communications and business dealings.

1. Policies for Client Interaction

Organisational policies define the general rules and expectations for how employees should conduct themselves while dealing with buyers. These policies promote professionalism, confidentiality, ethical conduct, and respectful communication. Merchandisers are expected to maintain a positive relationship with clients while protecting the company's commercial interests.

For example:

- Always respond to buyer queries within a specified time frame.
- Do not share confidential product or pricing information without authorisation.
- Avoid making commitments (on price, delivery, quality) unless approved by the management.

2. Standard Operating Procedures (SOPs)

Standard procedures outline step-by-step methods for handling various stages of the merchandising cycle—starting from order receipt, sample development, buyer approvals, production tracking, and final delivery. These ensure that all client orders are processed in a systematic and traceable manner.

Key procedures include:

- Sample approval and documentation
- Costing approval process
- Purchase order (PO) handling
- Pre-production meeting and follow-up
- Quality inspection coordination
- Shipment booking and documentation

3. Communication Protocols

Clear and professional communication is critical when dealing with buyers. Organisations generally define:

- Approved channels of communication – Email is the primary mode for formal exchanges, while calls or virtual meetings are used for discussions.
- Tone and language – Merchandisers must use clear, polite, and professional language at all times.
- Responsiveness – Replies to buyer emails must be timely, ideally within 24 hours.
- Record keeping – All buyer communications must be properly recorded for reference and future audits.

4. Documentation Guidelines

Proper documentation helps avoid errors, reduce misunderstandings, and ensure accountability. Organisations require merchandisers to maintain and submit:

Tech packs, BOMs (Bill of Materials), and sample request forms

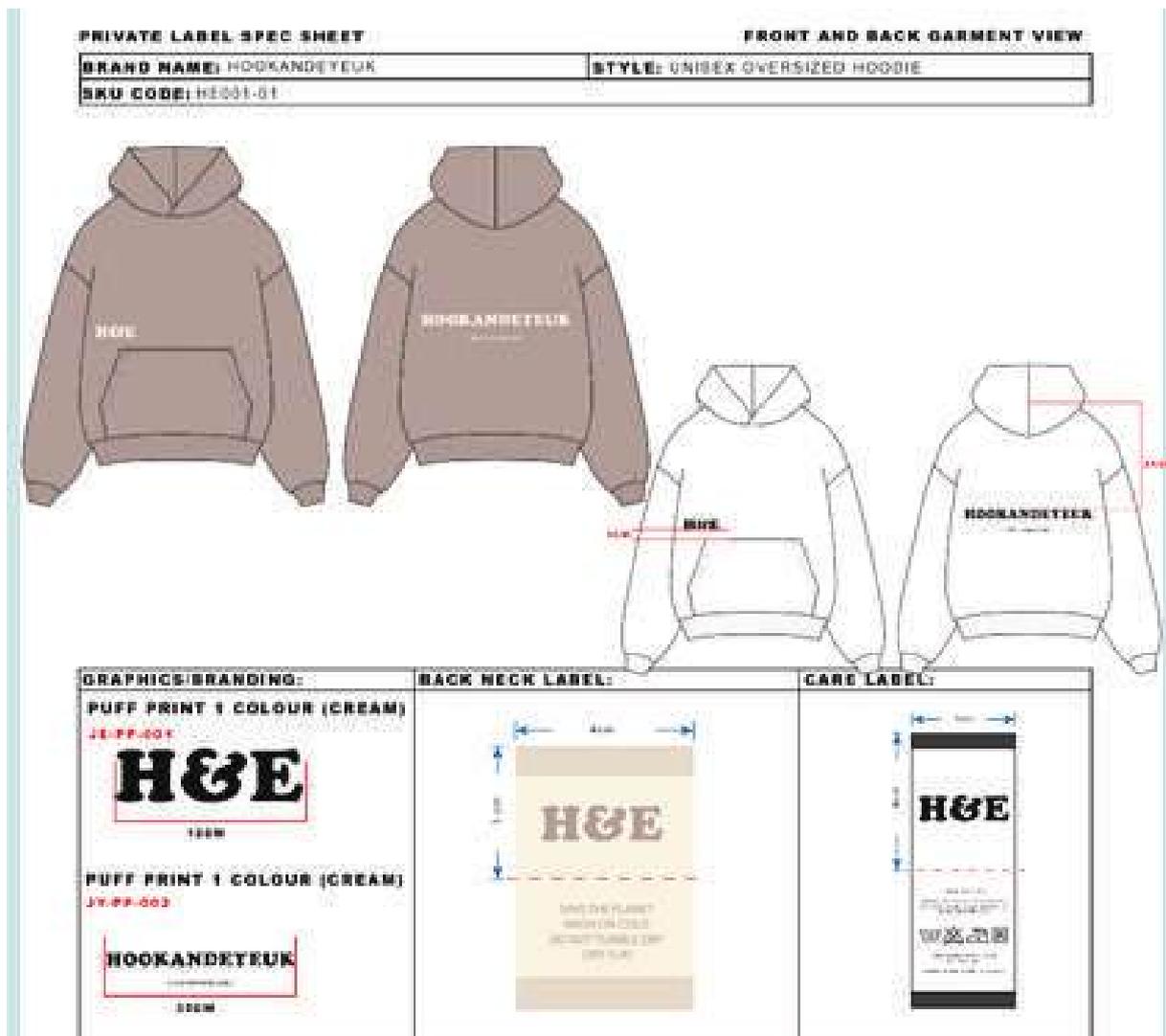


Fig. 2.1.2: Tech pack

- Cost sheets and buyer approvals
- Fabric and trim order details
- Inspection reports and quality checklists
- Shipping documents (invoice, packing list, bill of lading)

Packing List

BUYER :
 SHIP QTY : 8,876 PCS
 CTN QTY : 370
 NET WEIGHT : KGS
 GROSS WEIGHT : KGS
 CTN MEAS :
 DESCRIPTION : MEN'S LONG SLEEVE SHIRT 100% COTTON.
 MADE FOR : USA

COLOUR	PCS CTN	SIZE											TOTAL PCS
		14.5	15	15.5	16	16.5	17	17.5	18	18.5	19	20	
Navy	24	24	24	120	120	192	192	168	168	168	144	120	1440
L.T Blue	24	24	24	120	120	192	192	168	168	168	144	120	1440
Pink	24	24	24	120	120	192	192	168	168	168	144	120	1440
Yellow	24	24	24	120	120	192	192	168	168	168	144	120	1440
Sage	24	24	24	120	120	192	192	168	168	168	144	120	1440
White	24	24	24	120	120	192	192	168	168	168	144	120	1440
Total =		144	144	720	720	1152	1152	1008	1008	1008	864	720	8640

UNASSORTED ALL COLOUR AND SIZE:

+ 236

Total Pcs = 8876

Fig. 2.1.3: Packing list

All documents must be properly labelled, dated, and stored either physically or digitally according to company policy.

5. Escalation and Issue Resolution

Most organisations have defined escalation matrices. Suppose a buyer raises a concern or complaint. In that case, the Merchandiser must report it to the designated authority (like a Senior Merchandiser or Manager) and follow the correct procedure to resolve it efficiently and professionally.

2.1.3 Understand Buyer Expectations and Design Direction

In the Apparel, Made-Ups, and Home Furnishing sector, understanding the buyer is key to successful merchandising. A merchandiser must study and analyse the client's background, past interactions, and market position to ensure the products developed match the buyer's expectations. This understanding helps in making the right decisions related to product design, materials, pricing, and delivery timelines.



Fig. 2.1.4: Merchandising

1. Assessing the Client Profile

The client profile includes complete background information about the buyer or brand. This helps the Merchandiser understand who the client is, what kind of products they prefer, and how they position themselves in the market.

To assess the client profile, the Merchandiser should:

- Study the buyer's official website to understand the product categories they focus on—e.g., men's wear, women's wear, home linens, kids' furnishings, etc.
- Analyse product aesthetics such as fabric types, colour palettes, trims, patterns, surface ornamentation (like embroidery, printing), and finishing details.
- Check online stores or e-commerce platforms (like Amazon, Myntra, Wayfair, or brand-specific sites) to understand price ranges and customer reviews.
- Understand the buyer's geographical market—whether they sell in Europe, the USA, the Middle East, or domestic markets. This will influence their sizing standards, material choices, seasonality, and design preferences.
- Note the type of consumer they cater to—e.g., fashion-conscious youth, working professionals, homemakers, luxury buyers, or mass-market customers.

Example: A client who focuses on Scandinavian home furnishing styles will prefer minimalist designs, neutral colour tones, and sustainable fabrics. This understanding helps the Merchandiser present appropriate options.

2. Reviewing Previous Order History

Studying the buyer's past orders gives direct insight into their product preferences and business patterns. A merchandiser should:

- Review previously approved samples and tech packs to identify design preferences, measurements, fabric choices, and fit.
- Refer to previous purchase orders (POs) for details such as order quantities, price points, delivery timelines, and shipment destinations.
- Analyse repeat orders to identify best-performing products.
- Identify discontinued or rejected styles and understand the reasons behind buyer dissatisfaction (e.g., incorrect fit, quality issues, or pricing problems).
- Check buyer feedback reports or quality audit comments to track expectations on finishing, labelling, packaging, and documentation.

Maintaining an internal buyer dossier or tracking sheet with historical data helps merchandisers quickly reference previous work and avoid repeating mistakes.



Fig. 2.1.5: Garment manufacturing in India

Practical Tip: Create a summary sheet with columns like: Product Description, Style Code, Season, Quantity Ordered, FOB Price, Buyer Feedback, and Remarks. This helps in comparing old and new requirements efficiently.

3. Understanding Brand Positioning

Brand positioning refers to the image and identity a brand holds in the eyes of its target customers. A merchandiser must align their proposals with the brand's market position, pricing strategy, and brand values.

Steps to understand brand positioning:

- Identify the brand tier: Is the brand positioned as luxury, premium, mid-segment, or budget?
- Study their social media presence and advertising campaigns to observe tone, message, and aesthetics.
- Visit retail outlets or explore online platforms to check their product display style, pricing strategy, and packaging.
- Compare the brand with competitors to see what differentiates it—this could be design innovation, sustainable practices, affordability, or cultural influence.

Example: A premium brand known for handmade embroidery and eco-friendly materials will expect suppliers to offer artisanal detailing and sustainable fabric options, even if the price is slightly higher.

4. Using This Analysis for Better Merchandising Decisions

Once the client profile, order history, and brand positioning are clearly understood, the Merchandiser can:

- Select or develop samples that closely match the buyer's preferred design aesthetics and price expectations.
- Prepare mood boards and fabric swatches aligned with the brand's seasonal themes or colour directions.
- Propose value additions that fit the buyer's brand identity, such as contrast piping, recycled packaging, or hand finishing.
- Plan production and costing based on earlier feedback and product category performance.
- Avoid offering irrelevant or rejected styles, which saves time and builds trust with the buyer.

Practical Action: During buyer meetings or sample presentations, the Merchandiser should refer to past styles, explain improvements made, and show how new designs meet the current season's trends while aligning with the brand's identity.



Fig. 2.1.6: A garment manufacturing unit

A detailed and practical assessment of the client's profile, previous orders, and brand position allows the Merchandiser to anticipate buyer needs accurately. This results in stronger client relationships, higher sample approval rates, and better business outcomes. It also positions the Merchandiser as a reliable, informed, and proactive link between the buyer and the production team.

2.1.4 Identifying Buyer Requirements

In the Apparel, Made-Ups, and Home Furnishing sector, every buyer or client has specific goals related to product cost, delivery timelines, quality standards, and design aesthetics. A merchandiser must be able to identify and understand these goals clearly to ensure the right decisions are made at every stage of product development and production. Proper alignment with client goals leads to higher satisfaction, fewer order changes, and long-term business relationships.

- **Cost Goal**
 - Refers to the buyer's target or acceptable price range for the product.
 - Merchandisers review costing guidelines from the client and analyse price points of similar products through catalogues, e-commerce listings, or past purchase orders.
 - For price-sensitive buyers, suggest economical fabrics, trims, or production techniques.
 - For premium brands, higher costs may be acceptable to achieve better quality or exclusive designs.
- **Time Goal**
 - Every client follows seasonal calendars and launch schedules.
 - Merchandisers determine expected lead times for sampling, approvals, production, and shipping from buyer manuals or discussions.
 - Internal teams must be coordinated to create a production plan that meets deadlines.
 - Delays at any stage can affect the buyer's launch plans, leading to penalties or loss of future orders.

- **Quality Goal**

- Defines buyer expectations for durability, finishing, size accuracy, stitching standards, and packaging.
- May include sustainability or compliance requirements (e.g., GOTS, OEKO-TEX certifications).
- Merchandisers study technical specifications in tech packs or order sheets and communicate them to sourcing and production teams.
- Reviewing buyer feedback on past orders helps identify quality issues or areas needing improvement.



Fig. 2.1.7: Quality checking

- **Design Goal**

- Tied to brand style identity, customer preferences, and fashion trends.
- Buyers may provide mood boards, design references, or theme guidelines.
- Merchandisers interpret these inputs to guide design and sampling teams.
- Understanding silhouettes, prints, embroidery styles, or colour schemes preferred by buyers improves sample approval rates.



Fig. 2.1.8: Designing

2.1.5 Developing a Merchandising Strategy Aligning Organisational Capabilities with Buyer Requirements

A well-planned merchandising strategy is essential for meeting buyer expectations while utilising the strengths and resources of the organisation efficiently.

To begin with, the Merchandiser must gather clear information on buyer requirements through tech packs, sample requests, costing targets, and delivery timelines. At the same time, it is important to evaluate the organisation's internal capabilities—such as fabric sourcing options, production capacity, lead times, availability of skilled manpower, and quality control systems. The strategy should be developed by aligning these two aspects: what the buyer wants and what the organisation can deliver.

For cost alignment, the Merchandiser should first analyse the buyer's target price and then prepare a realistic costing sheet by coordinating with the sourcing and production teams. If there is a mismatch, adjustments may be made by offering alternative materials, simplifying the design, or suggesting changes in packaging. The aim is to meet the buyer's price expectations without compromising on basic quality or profitability.

Time management is another key element. The Merchandiser must create a detailed production timeline covering sampling, raw material procurement, manufacturing, finishing, and shipping. This timeline should consider actual factory capacity and vendor lead times. By building in buffer periods and closely monitoring each stage, the Merchandiser ensures that delivery schedules are met as per buyer expectations.



Fig. 2.1.9: Merchandiser working in the Indian apparel sector

For quality assurance, the merchandising strategy should include clear quality checkpoints during sampling and production. The Merchandiser must define acceptable standards in coordination with the quality control team, based on buyer specifications. Any past quality issues must be addressed in the new plan by identifying their root causes and implementing preventive actions.

When it comes to design, the Merchandiser should ensure that the sampling team clearly interprets the buyer's design goals. The organisation's technical strengths—like fabric development, embroidery, printing, or tailoring—should be showcased effectively. If the buyer's designs are not feasible within existing capabilities, the Merchandiser must proactively suggest workable alternatives that still align with the brand's aesthetic.

Finally, the merchandising strategy must include regular communication and follow-up mechanisms with both the buyer and internal teams. Status updates, approval tracking, and issue resolution should be part of the plan to ensure transparency and avoid delays or confusion.

2.1.6 Best Practices for Effective Cross-Cultural Collaboration at the Workplace

In the apparel, made-ups, and home furnishing sector, merchandisers often work with clients, suppliers, and internal teams from diverse cultural backgrounds. Understanding and respecting these cultural differences improves communication and builds stronger professional relationships.

1. **Build Cultural Awareness:** Learn about different work cultures, communication styles, and etiquette. This helps in adapting behaviour during meetings, negotiations, and emails.
2. **Use Clear, Simple Language:** Avoid slang and complex terms. Speak slowly and confirm understanding through written follow-ups to avoid miscommunication.
3. **Respect Time Zones and Schedules:** Plan meetings at convenient times for all parties. Be mindful of international holidays and different workweek structures.
4. **Adapt to Communication Preferences:** Some clients prefer detailed reports; others prefer visuals or short summaries. Adjust style based on the recipient's preference.
5. **Practice Active Listening and Patience:** Give people time to express themselves and listen carefully. Clarify politely if something is unclear.
6. **Follow Cultural Etiquette:** Use appropriate greetings and titles. Respect local customs in dress, behaviour, and meeting conduct.
7. **Avoid Assumptions:** Do not stereotype. Treat everyone professionally and focus on individual behaviour and preferences.
8. **Promote Inclusive Teamwork:** Encourage collaboration and value different perspectives within multicultural teams.



Fig. 2.1.10: Merchandising in India

UNIT 2.2: Product and Market Research Skills

Unit Objectives

By the end of this unit, the participants will be able to:

1. Conduct primary research through surveys, interviews, and buyer feedback to gather insights on consumer behaviour and market needs.
2. Analyse secondary research sources such as market reports, fashion forecasts, and online databases to identify emerging trends, consumer preferences, and seasonality.
3. Identify and define the characteristics of a target market, including age, geography, lifestyle, and preferences, to align merchandising strategies accordingly.
4. Review past designs and product samples developed by the organisation and evaluate their relevance to current market trends, buyer demand, and pricing strategies.
5. Explain the concept and importance of Intellectual Property Rights (IPR) in the apparel and home furnishing industry, including types (Copyright, Trademark, Design Registration) and the risks of IPR violations.
6. Research and evaluate new or alternative sources and suppliers for raw materials, trims, and accessories based on quality, cost, and delivery timelines.
7. Assess the organisation's production capacity and coordinate with production teams to determine feasibility, lead times, and workload balancing.

2.2.1 Conducting Primary Research to Gather Insights on Consumer Behaviour and Market Needs

A merchandiser must conduct primary research using direct methods such as surveys, interviews, and buyer feedback to understand consumer behaviour and market needs. These tools help gather first-hand information from the target audience and are essential for making informed merchandising decisions.

1. Surveys

Surveys are structured sets of questions designed to collect information from a large group of respondents. They help gather quantitative data about consumer preferences, buying habits, satisfaction levels, and emerging trends.

How a merchandiser can conduct surveys:

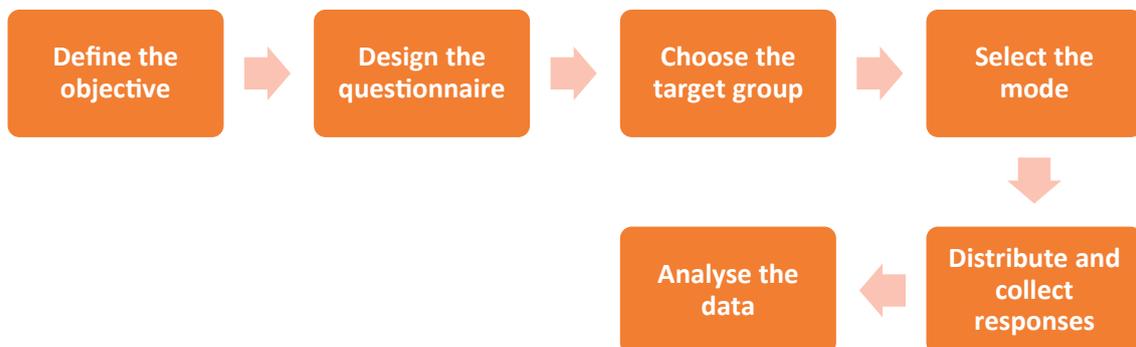


Fig. 2.2.1: Steps for conducting surveys by a merchandiser

Step 1. Clearly decide what information is needed—e.g., preferred fabrics, price range, design preferences.

Step 2. Include a mix of closed-ended (Yes/No, multiple-choice) and open-ended questions.

Step 3. Identify the right audience, such as end-consumers, retail buyers, or wholesalers.

Step 4. Use printed forms, online platforms (like Google Forms, SurveyMonkey), or in-store kiosks.

Step 5. Share through email, social media, retail counters, or during trade shows.

Step 6. Look for patterns and trends in customer preferences, such as most-liked products, common complaints, or pricing feedback.

Example: A merchandiser may send an online survey to frequent buyers asking which cushion designs and colours they would prefer for the next season.

2. Interviews

Interviews involve direct, face-to-face or virtual conversations with individuals to gather in-depth qualitative data. They allow for better understanding of consumer motivations, product experience, and unmet needs.

How a merchandiser can conduct interviews:



Fig. 2.2.2: Steps for conducting interviews by a merchandiser

Step 1. Select clients, buyers, shop-floor staff, or repeat customers.

Step 2. Focus on understanding product experience, design appeal, and areas for improvement.

Step 3. Conduct in-person, telephonic, or video interviews depending on convenience.

Step 4. Start with simple questions and make the interviewee feel comfortable.

Step 5. Take notes or record (with permission) to analyse later.

Step 6. Focus on key observations that relate to design direction, material choices, and product functionality.

Example: A merchandiser may interview a wholesale buyer to understand why a certain table linen design sold out quickly while another did not.

3. Buyer Feedback

Buyer feedback refers to formal or informal responses received from clients or retail buyers about products delivered in past orders. It provides direct insights into product performance, quality standards, delivery reliability, and design suitability.

Process of collecting buyer feedback by a merchandiser:



Fig. 2.2.3: Steps for collecting buyer feedback by a merchandiser

Example: If a buyer mentions consistent issues with seam quality in sofa covers, the Merchandiser can discuss the issue with the quality team and update sewing guidelines for future batches.

2.2.2 Analysing Secondary Research Sources

To stay competitive in the apparel, made-ups, and home furnishing industry, a merchandiser must regularly analyse secondary research sources. These include market reports, fashion forecasts, online databases, trend portals, and trade publications. Such sources provide valuable insights into emerging trends, consumer preferences, and seasonality, helping merchandisers make informed decisions.

1. Studying Market Reports

Market reports from research agencies like McKinsey, WGSN, Technopak, or Statista provide detailed data on sales trends, consumer behaviour, and market size. A merchandiser can use these to understand which product categories are growing, what price segments are most in demand, and how customer spending habits are changing.

How to analyse:

Step 1. Focus on key sections such as market outlook, consumer insights, and sales projections.

Step 2. Identify growth areas and declining segments.

Step 3. Look for patterns over the last 2–3 years to predict future direction.

Example: If market reports show increasing demand for sustainable home textiles, the Merchandiser may explore organic cotton or recycled materials for upcoming collections.

2. Using Fashion Forecasts

Fashion forecasting services (e.g., WGSN, Pantone, Trend Council) provide forward-looking analysis of colours, prints, silhouettes, and textures expected to be in trend for upcoming seasons. These insights help align designs with consumer expectations and seasonal moods.

How to analyse:

Step 1. Identify recurring colours, motifs, and materials forecasted for the season.

Step 2. Note lifestyle trends and mood boards that influence consumer choices.

Step 3. Compare forecasted trends with the brand's past products to identify gaps or opportunities.

Example: If a forecast highlights bold geometric patterns for Spring/Summer, the Merchandiser can recommend new cushion covers or bedsheet designs in those prints.

3. Exploring Online Databases and Portals

Web platforms such as Euromonitor, Mintel, Fibre2Fashion, and industry blogs offer regularly updated insights on regional trends, retail data, customer reviews, and innovation in textile products. Social media and e-commerce platforms also act as informal yet powerful trend indicators.

How to analyse:

Step 1. Track trending products, styles, or colours in real-time using hashtags and online reviews.

Step 2. Observe best-selling items on platforms like Amazon, Flipkart, or niche decor sites.

Step 3. Use keyword search tools (e.g., Google Trends) to measure rising interest in certain product types.

Example: Analysing user reviews on an e-commerce platform may reveal that customers are currently preferring wrinkle-resistant bedsheets in pastel shades.

4. Identifying Consumer Preferences and Seasonality

By combining insights from these sources, merchandisers can map out which products are suitable for specific customer segments and seasons. They can observe how tastes vary by region, climate, festivals, or global events.

Steps for application:

Step 1. Match forecasted trends with consumer demographics (age, location, lifestyle).

Step 2. Align products with seasonal needs—e.g., warm tones and heavy fabrics for winter, breathable materials for summer.

Step 3. Plan collections or sourcing calendars accordingly.

Example: If the secondary research shows increased demand for festive-themed cushion covers around Durga Puja in West Bengal, the Merchandiser can plan a special festive range for that season.

2.2.3 Characteristics of a Target Market

A target market refers to a specific group of consumers who are most likely to purchase the products. In the Apparel, Made-Ups, and Home Furnishings sector, identifying and defining the characteristics of a target market is a critical step for any merchandiser to align product planning, sourcing, pricing, and marketing strategies effectively.

A well-defined target market helps ensure that the right products are offered to the right audience, ultimately improving sales, brand relevance, and customer satisfaction.

1. **Age Group:** Age influences style, colour choice, product functionality, and price sensitivity. For example, younger customers may prefer bold patterns and contemporary styles, while older consumers may value comfort, quality fabrics, and traditional designs.
2. **Gender:** Gender-based preferences are significant in both apparel and home furnishings. Men and women often differ in fabric choices, colour schemes, and styling preferences. For example, in home furnishings, men may prefer neutral and minimalistic decor, while women may favour more decorative or themed items.
3. **Income Level:** A customer's income impacts their purchasing power and product expectations. High-income consumers may seek premium fabrics, exclusive designs, and customisation, while middle or lower-income groups may prioritise affordability, functionality, and durability.
4. **Geographic Location and Climate:** Consumers in different regions have unique needs based on local weather and cultural practices. For instance, light cotton curtains are more popular in hot, humid regions, whereas velvet or thermal curtains are preferred in colder climates.
5. **Occupation and Lifestyle:** Lifestyle and profession significantly affect product choices. Urban working professionals may prefer modern, low-maintenance products, while rural households may opt for traditional styles with robust functionality. Busy individuals may value easy-care products, while homemakers may focus more on aesthetic and decor aspects.
6. **Cultural and Religious Background:** Cultural influences affect colour preferences, motifs, and purchasing patterns, especially during festivals or marriage seasons. For example, customers in India may prefer ethnic motifs and vibrant colours during festive periods like Diwali or Eid.
7. **Buying Behaviour and Frequency:** Understanding whether the customer is a regular buyer, seasonal shopper, or occasion-specific purchaser helps in planning stock levels and promotional offers. Some customers may respond better to discount campaigns, while others may value exclusivity and limited editions.
8. **Shopping Preferences (Offline vs Online):** Today, it's important to know whether the target market prefers shopping from physical stores or online platforms. Tech-savvy consumers may expect a digital catalogue, virtual try-ons, or quick delivery options, influencing merchandising and logistics strategies.
9. **Trend Sensitivity:** Some markets are more trend-driven, requiring fast fashion cycles, while others may value timeless, classic designs. A trend-sensitive audience follows social media, influencers, and fashion forecasts closely.
10. **Sustainability Awareness:** Environmentally conscious consumers are increasing in number. They prefer products made from organic, recycled, or ethically sourced materials. A merchandiser must take note of such expectations to offer eco-friendly options.



Fig. 2.2.4: Apparel Merchandiser

2.2.4 Process of Evaluating Past Designs and Samples

A merchandiser plays a critical role in a company's success by ensuring that the products developed are both appealing to customers and commercially viable. To achieve this, it is essential for a merchandiser to regularly review past designs and product samples and evaluate their relevance in the current market. This systematic evaluation helps identify successful elements, learn from past failures, and make informed decisions for future product development. The process involves a multi-faceted analysis of market trends, buyer demand, and pricing strategies.

A key aspect of this review is analysing the sales performance of past designs. A merchandiser should meticulously examine sales data, including sell-through rates, inventory turnover, and profitability for each product. Designs that performed well in the past can be re-evaluated to determine if their success was due to a timeless appeal or if they simply aligned with a past trend that has since faded. By identifying the key design features and material choices of successful products, a merchandiser can glean valuable insights for new collections. Conversely, understanding why certain products underperformed is equally important. This could be due to factors like poor fabric choice, an uncompetitive price point, or a design that failed to resonate with the target audience.



Fig. 2.2.5: Designs and samples used in the apparel sector

Another crucial step is to assess the designs against current market trends and buyer demand. A merchandiser must stay informed about the latest fashion cycles, colour palettes, and textile innovations. This can be achieved by reading industry reports, attending trade shows, and closely monitoring competitor offerings. By comparing past samples with current trends, a merchandiser can determine if a design is outdated or if it can be refreshed with minor modifications, such as a new colourway, a different embellishment, or a more sustainable fabric. Furthermore, analysing buyer feedback and purchase patterns can provide a clear picture of the current needs of the target customer. For instance, if there is a growing demand for sustainable and ethically sourced products, a merchandiser can re-evaluate past designs to see if they can be adapted using eco-friendly materials and production methods.

Finally, the review process must include a comprehensive analysis of pricing strategies. A merchandiser should assess the original cost of production and the retail price of past products. The goal is to determine if the pricing was competitive and if it allowed for a healthy profit margin. With fluctuations in raw material costs, labour expenses, and logistics, a design that was profitable in the past may no longer be viable. Therefore, a merchandiser must conduct a fresh cost analysis for any design that is being considered for a revival. This involves negotiating with suppliers, exploring new sourcing options, and potentially optimising the production process to ensure the product can be offered at a price that is both attractive to buyers and profitable for the organisation.

2.2.5 Understanding Intellectual Property Rights

Intellectual Property Rights (IPR) refer to the legal rights granted to individuals or organisations over their original creations or inventions. These rights protect the ownership of creative and intellectual work, such as designs, logos, brand names, inventions, literary and artistic works, and product ideas.

In the Apparel, Made-Ups, and Home Furnishings sector, IPR plays a vital role in safeguarding unique product designs, fabric prints, embroidery patterns, brand identity, and innovative techniques from being copied or misused by others.

For a merchandiser, having a strong understanding of IPR is crucial because it directly impacts product development, sourcing decisions, and brand value. It ensures that the time, effort, and money invested in creating original designs are legally protected, thereby preventing unauthorised reproductions that could harm the company's reputation and profitability.

The main types of IPR relevant to this sector include:

Copyright

- Protects original creative works like artistic designs, photographs, and literary works.
- In apparel and home furnishings, it applies to unique patterns, prints, and textile designs.
- Examples:
 - A new floral print for a bedsheet.
 - A complex geometric pattern on a dress.
- Protection begins automatically once a design is created and documented.
- Official registration provides stronger legal protection.
- Merchandisers must ensure designs are original and do not infringe on existing copyrights.
- Extra caution is needed when sourcing from third-party suppliers to avoid legal issues.



Fig. 2.2.6: Copyright logo

Trademark

- A sign, symbol, or logo used to distinguish the goods or services of one company from another.
- Critical for building brand identity and customer loyalty.
- Examples:
 - Clothing line brand name.
 - Unique logo on a handbag.
 - Name of a specific furniture collection.
- Helps consumers identify product source and quality.
- Merchandisers should:
 - Ensure their own company's trademarks are not misused.
 - Verify that sourced products do not illegally use competitors' trademarks.
- Protects brand reputation and prevents consumer confusion.



Fig. 2.2.7: Trademark logo

Design Registration (Industrial Design Right)

- Protects the aesthetic or visual appearance of a product (shape, configuration, pattern, ornamentation).
- Unlike copyright (2D), design registration can protect 3D product forms.
- Examples:
 - Unique shape of a piece of furniture.
 - Distinctive cut of a garment.
 - Novel contour of a home accessory.
- Important for products where design adds major value.
- Merchandisers must understand design registration to:
 - Safeguard unique aesthetic features.
 - Prevent competitors from copying designs.

Patents

- Protect inventions, new technologies, or innovative processes.
- Less common for basic apparel designs, more relevant for technical innovations.
- Examples:
 - Wrinkle-resistant textile.
 - Unique zipper mechanism.
 - Fabric texture manufacturing process.
- Patent holders have exclusive rights to make, use, and sell for a limited period.
- Merchandisers working with patented products gain a competitive advantage by preventing imitation.



Fig. 2.2.8: Patent logo

IPR Violations

- **Legal risks:**
 - Rights holders may file lawsuits or issue cease-and-desist notices.
 - May result in court penalties, compensation payments, or sales bans.
- **Financial risks:**
 - Cancelled buyer orders, returned shipments, destroyed stock.
 - Heavy fines, damages to original creators, and costly legal defences.
- **Reputational damage:**
 - Loss of buyer trust and credibility.
 - Clients, especially international ones, may end contracts due to compliance concerns.
- **Innovation risks:**
 - Over-reliance on copying stifles originality and weakens competitiveness.
- **Merchandiser responsibilities:**
 - Ensure all designs are original or properly licensed.
 - Verify no copyrighted or trademarked materials are used without permission.
 - Maintain training on identifying and preventing IPR violations.

2.2.6 Evaluating New or Alternative Sources for Raw Materials

A merchandiser in the Apparel, Made-Ups, and Home Furnishings sector must constantly search for reliable and cost-effective sources of raw materials, trims, and accessories to meet the changing demands of buyers. This involves conducting systematic research and careful evaluation of potential suppliers based on key parameters like quality, cost, and delivery performance.

The process begins by identifying the specific material or component requirements based on the design and product specifications. This includes understanding the technical needs such as fabric type, GSM, durability, shrinkage, fastness, or any special finishes required. Trims like zippers, buttons, labels, laces, or embellishments must also meet functional and aesthetic standards.



Fig. 2.2.9: Raw materials required in the apparel sector

Next, the Merchandiser conducts market research to locate new or alternative suppliers. This can be done through online supplier directories, trade fairs, industry exhibitions, buyer recommendations, or B2B platforms. Once potential sources are shortlisted, the Merchandiser collects samples and quotations for initial evaluation.

Each supplier is then assessed based on the quality of materials, which includes visual inspection, lab testing, and comparison with required standards. The Merchandiser also checks the cost per unit, along with any bulk pricing benefits, credit terms, and hidden charges such as taxes, transport, or handling fees.

Delivery timelines are equally important. The Merchandiser must confirm the supplier's lead times, production capacity, shipping reliability, and ability to meet urgent or large-volume orders. Past performance and client references help in judging consistency and professionalism.

Other evaluation criteria include the supplier's compliance with sustainability practices, ethical labour standards, packaging methods, and responsiveness to communication. Building long-term partnerships with trustworthy suppliers helps reduce production risks and improve overall supply chain efficiency.

2.2.7 Assessing Production Capacity and Co-ordinating with Production Teams

A merchandiser in the Apparel, Made-Ups, and Home Furnishings sector plays a key role in aligning buyer requirements with the organisation's production capabilities. To ensure timely and quality order execution, the Merchandiser must assess the production capacity and work closely with the production team to understand feasibility, estimate lead times, and manage workload distribution.

The assessment begins by gathering detailed information about the production infrastructure—such as the number of machines, shifts, manpower availability, and types of operations handled in-house versus outsourced. Understanding these factors helps the Merchandiser estimate the maximum output that can be achieved within a given timeframe.



Fig. 2.2.10: Production segment

Next, the Merchandiser reviews the existing production schedule. This includes checking the status of ongoing orders, pending deliveries, and the availability of machines and labour in upcoming weeks. Any seasonal or priority production requirements should also be considered while evaluating the workload.

The Merchandiser then shares the buyer's order requirements, including quantity, style complexity, size sets, and expected delivery dates, with the production manager. Together, they assess whether the order can be accommodated within the existing capacity or if any adjustments—like overtime, shift planning, or outsourcing—are necessary.

Lead time calculation is a critical step. It includes estimating the time required for fabric and trims procurement, sampling, approvals, cutting, stitching, finishing, and packing. The merchandiser and production team must also account for buffer time to handle unexpected delays like machine breakdowns or quality rejections.



Fig. 2.2.11: Sewing segment

Regular coordination between the merchandiser and production team ensures that any changes in buyer specifications or order quantity are quickly communicated and acted upon. This helps in maintaining workload balance across departments, preventing production bottlenecks, and ensuring that all tasks are completed within deadlines without compromising on quality.

Summary

- Merchandisers support organisational functions by managing business processes and aligning them with buyer requirements.
- Understanding company policies, procedures, and client profiles helps meet buyer expectations effectively.
- Merchandising strategies must focus on the cost, time, quality, and design goals of clients.
- Cross-cultural collaboration enhances communication with clients, suppliers, and internal teams.
- Market research through surveys, reports, and forecasts identifies consumer behaviour, target markets, and trends.
- Intellectual Property Rights (IPR) protect designs and products from misuse and support ethical practices in merchandising.
- Evaluating suppliers, production capacity, and lead times ensures timely, high-quality delivery of merchandise.

Exercise

Multiple-choice Question:

1. What is the main role of a merchandiser in an organisation?
 - a. Only packaging garments
 - b. Supporting organisational functions and managing business processes
 - c. Repairing production machinery
 - d. Handling employee salaries
2. Which research method is considered primary research?
 - a. Market reports
 - b. Online databases
 - c. Surveys and interviews
 - d. Fashion forecasts
3. What does Intellectual Property Rights (IPR) help protect in the apparel industry?
 - a. Packing boxes
 - b. Product designs and brand identity
 - c. Factory electricity bills
 - d. Office furniture
4. Which factor is assessed while choosing new or alternative suppliers?
 - a. The colour of the supplier's office
 - b. Quality, cost, and delivery timelines
 - c. Distance from the city centre
 - d. Type of factory logo
5. Why is it important to assess an organisation's production capacity?
 - a. To decorate the production floor
 - b. To balance workload and determine feasibility
 - c. To hire more supervisors
 - d. To increase machine noise

Descriptive Questions:

1. Describe the role of a merchandiser in supporting organisational functions and key business processes.
2. Explain how understanding client profiles and previous orders helps in meeting buyer expectations.
3. Discuss how market research (primary and secondary) helps identify trends and target markets.
4. Explain the concept of Intellectual Property Rights (IPR) and its importance in merchandising.
5. Describe how evaluating suppliers and production capacity ensures timely and quality delivery.

3. Analyse Product and Establish Merchandising Objectives in Accordance with Business Plans



Unit 3.1 - Pre-Production Planning and Compliance in Garment Manufacturing

Unit 3.2 - Garment Construction Techniques, Costing, and Sample Development



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Demonstrate systematic working methods in apparel merchandising with attention to detail and compliance.
2. Apply knowledge of garment construction techniques, fabric and trim characteristics to evaluate and support the product development process.
3. Coordinate with design and product development teams to align techpacks, samples, and production timelines with buyer requirements.
4. Evaluate costing and sourcing requirements to ensure timely, cost-effective procurement and production planning.

UNIT 3.1: Pre-Production Planning and Compliance in Garment Manufacturing

Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe how to complete work systematically with attention to detail without damage to goods and equipment.
2. List various compliance standards relevant to apparel manufacturing (e.g., safety, labour, quality).
3. Coordinate with the design/product development department regarding market trends, target market, fabrics, trims, and accessories, and new/better sources or suppliers for procurement.
4. Identify and describe characteristics of a range of fabrics and trims, including suitability for different designs and functions.
5. Ensure that the techpack received is accurate and in line with the design brief or designer specifications.
6. Consult appropriate personnel (designers, sampling teams, production leads) to confirm the feasibility and appropriateness of the techpack.
7. Identify various vendors for raw materials, trims, and manufacturing support.

3.1.1 Importance of Systematic Work and Attention to Detail in Merchandising

Completing work in a systematic and organised manner is essential to maintain consistency, efficiency, and product quality. Merchandisers play a central role in coordinating between various departments such as design, production, sourcing, and quality control. Any oversight, miscommunication, or carelessness can result in delays, increased costs, or damage to goods and equipment.

Attention to detail is particularly important when handling tech packs, reviewing samples, preparing bills of material (BOM), and coordinating production schedules. Each of these tasks requires careful checking of specifications, quantities, timelines, and compliance standards. Small errors in measurement, labelling, or documentation can lead to large-scale issues such as incorrect manufacturing, rework, or customer dissatisfaction.

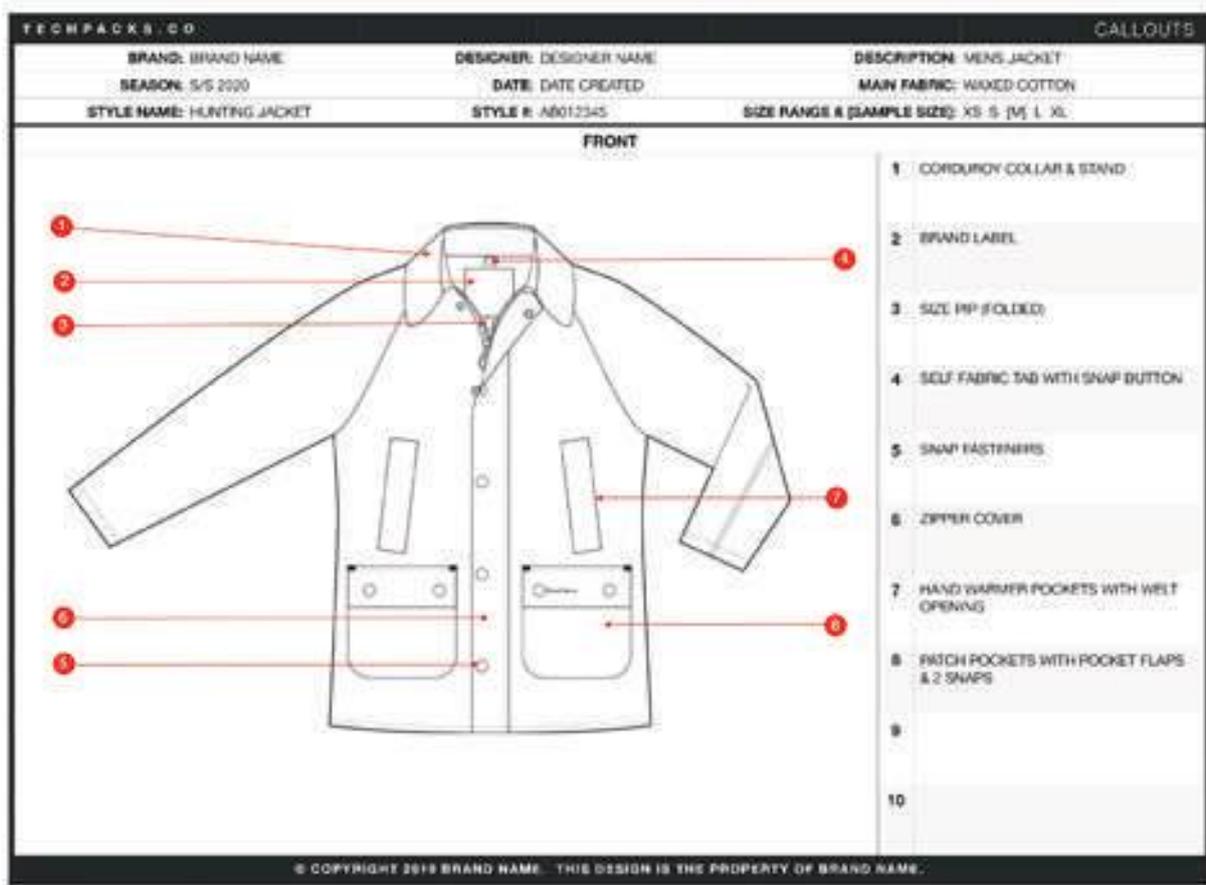


Fig. 3.1.1: Tech pack of a men's jacket

Preventing damage to goods and equipment is equally important. Mishandling fabric rolls, trims, or machines can lead to wastage, added expenses, and safety risks. A systematic approach ensures that items are stored, moved, and used properly. It also helps in identifying defects early, avoiding last-minute issues during production or shipping.



Fig. 3.1.2: Fabric rolls stored in a storage rack

3.1.2 Compliance Standards in Apparel Manufacturing

Compliance standards are a set of rules and regulations that apparel manufacturers must adhere to in order to produce goods ethically, safely, and of a high quality. These standards are often dictated by government laws, international agreements, and the specific requirements of the brands and retailers they supply.

A merchandiser, as a key link in the supply chain, is responsible for ensuring that all partners, from raw material suppliers to manufacturers, meet these standards. This helps in mitigating legal risks, building a positive brand reputation, and ensuring customer satisfaction.

1. Labour and Social Compliance

In India, labour compliance is governed by a multitude of national and state-level laws, making it a critical area of focus. These standards are not just about a code of conduct but are backed by legal statutes.

- **Minimum Wage and Wages:** The minimum wage in India varies from state to state, and a merchandiser must ensure their manufacturing partners are paying workers at least the legal minimum. The Factories Act of 1948 and the Payment of Wages Act of 1936 are key pieces of legislation.
- **Working Hours and Overtime:** Indian law sets clear limits on the number of working hours per week and mandates that any overtime work must be compensated at a higher rate. A merchandiser must verify that factories are maintaining accurate timekeeping records and that workers are not being forced to work excessive hours.
- **Health and Safety:** The Factories Act mandates that employers provide a safe and healthy working environment. This includes fire safety protocols, proper machine guards to prevent accidents, and the provision of Personal Protective Equipment (PPE) like masks and gloves, especially in dyeing and printing units where chemical exposure is a concern.
- **Child and Forced Labour:** This is a zero-tolerance issue for both domestic and international buyers. The Child Labour (Prohibition and Regulation) Act of 1986 is the primary law, and merchandisers must ensure that strict age verification processes are in place at all manufacturing facilities. Many international buyers conduct third-party audits (like SA8000 or WRAP) to ensure compliance.

2. Product Quality and Safety

As India's apparel market grows, so does the focus on product quality and safety, both for export and local consumption.

- **Bureau of Indian Standards (BIS):** BIS is the national standards body of India. For certain textile products, especially protective textiles and some home furnishings like curtains and bed mattresses, BIS has specified standards (Indian Standards or IS) that manufacturers must comply with. A merchandiser dealing in these products must ensure the manufacturer has the necessary BIS certification, as indicated by the ISI mark.



Fig. 3.1.3: BIS Logo and ISI mark

- **International Standards for Export:** For the export market, compliance with international standards is paramount. The European Union's REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) regulations, for example, have a strict list of restricted chemical substances. Similarly, for products sold in the US, compliance with the Consumer Product Safety Improvement Act (CPSIA) is mandatory, especially for children's wear. A merchandiser must work with accredited labs in India to conduct tests for restricted substances like Azo dyes, phthalates, and heavy metals.
- **Quality Control and Testing:** Beyond legal requirements, a merchandiser is responsible for ensuring product quality. This includes checking for colourfastness, shrinkage, seam strength, and the durability of embellishments and accessories. Many manufacturers in India have in-house testing facilities, and a merchandiser should be familiar with common tests like the button pull test and metal detection to ensure product safety.

3. Environmental Compliance

The Indian textile industry is a significant consumer of water and a source of pollution, particularly from dyeing and finishing processes. Consequently, environmental compliance is gaining more attention.

- **Pollution Control Boards:** In India, environmental compliance is monitored by the Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs). Factories are required to have Effluent Treatment Plants (ETPs) to treat wastewater before it is discharged. A merchandiser should verify that their manufacturing partners have operational ETPs and comply with discharge norms.



Fig. 3.1.4: Central Pollution Control Board (CPCB)

- **Sustainable Certifications:** Many international buyers demand products from environmentally responsible supply chains. As a result, many Indian manufacturers are seeking certifications like the Global Organic Textile Standard (GOTS), which ensures that a product is made from organic fibres and produced using environmentally and socially responsible methods. Similarly, the Bluesign system provides a holistic approach to sustainable textile production by eliminating harmful substances from the very beginning of the manufacturing process.



Fig. 3.1.5: Global Organic Textile Standard (GOTS) logo

4. Customs and Documentation: The Gateway to Global Markets

For a merchandiser in the export market, exporting the product from India is as important as producing it.

- **Import Export Code (IEC):** Any business in India involved in international trade must have an IEC issued by the Directorate General of Foreign Trade (DGFT).
- **Export Promotion Councils:** Registering with a relevant council, like the Apparel Export Promotion Council (AEPC), provides a merchandiser with support, information, and a platform for networking.



Fig. 3.1.6: Apparel Export Promotion Council (AEPC) logo

- **Country of Origin and Labelling:** Products must have clear and accurate labels indicating the country of origin ("Made in India"), fibre composition, and care instructions, which are often different for various countries. Incorrect labelling can lead to the seizure of goods at the port of destination.



Fig. 3.1.7: Label on apparel

3.1.3 Co-ordinating with the Design and Product Development Department

A merchandiser acts as a crucial bridge between the customer and the product development process. To ensure that designs are not only creative but also commercially successful, a merchandiser must maintain strong and continuous coordination with the design department.

This collaboration is vital for aligning design concepts with market realities, cost parameters, and production capabilities. By providing timely and relevant information, a merchandiser can guide the creative process to produce a product that will appeal to the target audience and be profitable for the company.

1. Communicating Market Trends and Target Market Insights:

A merchandiser's first and most important responsibility in this collaboration is to provide the design team with accurate and up-to-date market intelligence. This is more than just sharing a few images from a fashion blog. It involves sharing detailed information on market trends, competitor analysis, and feedback from buyers.

For example, suppose a merchandiser observes a growing demand for sustainable materials in the home furnishing market. In that case, they should communicate this to the design team so they can explore eco-friendly fabric options. This communication should be systematic, perhaps through a weekly or bi-weekly meeting where a merchandiser can present sales data, a "mood board" showing popular styles and colours, and any specific requests or insights from key buyers.



Fig. 3.1.8: Mood board

2. Guiding Fabric, Trims, and Accessories Selection:

While the design team focuses on the aesthetic appeal, a merchandiser provides a reality check on the feasibility and cost of materials. During the product development phase, a merchandiser should actively participate in the selection of fabrics, trims, and accessories. This involves:

- **Costing and Sourcing:** Providing the design team with the cost of various materials. For instance, if a designer has chosen an expensive imported fabric, a merchandiser should be able to suggest a similar, more cost-effective fabric from a local supplier in India. This negotiation and sourcing ability is key to maintaining a healthy profit margin.
- **Availability and Lead Time:** Informing the design team about the availability of materials and their lead times. A beautiful lace trim may be unavailable during a crucial time, so the Merchandiser can suggest an alternative that can be sourced quickly without compromising the design's integrity.
- **Technical Feasibility:** Advising on the technical aspects, such as whether a certain fabric is suitable for a particular garment silhouette or if a specific print is technically possible on a chosen textile.

3. Sourcing New and Better Suppliers:

A merchandiser's network of suppliers is a valuable asset. The product development process is an excellent opportunity to explore new partnerships. A merchandiser should continuously research and identify new or better suppliers for a range of materials.

- **Quality and Cost-Effectiveness:** A new supplier might offer better quality fabric at a more competitive price, which can directly improve the product's value proposition.
- **Variety and Innovation:** New suppliers may have access to innovative materials or techniques that can inspire new designs. For example, a supplier might be specialising in a unique type of embroidery or a sustainable fabric made from recycled plastic bottles, which could open up new design possibilities.
- **Reliability and Compliance:** It is also the Merchandiser's responsibility to vet new suppliers to ensure they meet the company's quality, social, and environmental compliance standards. This due diligence is critical for a smooth production process and for maintaining the brand's ethical reputation.

3.1.4 Understanding Fabric and Trim Characteristics for Design Suitability

A merchandiser's expertise in fabric and trims is fundamental to successful product development. The choice of fabric dictates a product's look, feel, drape, and function, while trims and accessories enhance its aesthetic appeal and practicality. A deep understanding of these characteristics allows a merchandiser to make informed decisions that align with a brand's design vision, target market, and pricing strategy.

Fabrics

The vast world of fabrics can be broadly categorised into natural and man-made fibres, each with distinct characteristics and applications.

1. Natural Fabrics:

- **Cotton:** Known for its softness, breathability, and durability, cotton is one of the most versatile fabrics. It is suitable for a wide range of products, from casual apparel like t-shirts and jeans to home furnishings like bedsheets and towels. Its ability to absorb moisture makes it comfortable for daily wear, and it is also easy to print on. However, it can be prone to shrinking and wrinkling, which may require specific finishes or blends.



Fig. 3.1.9: Cotton threads

- **Linen:** Derived from the flax plant, linen is prized for its strength and coolness. It is highly breathable, making it perfect for summer apparel, curtains, and upholstery. Its natural texture and crisp feel give it a rustic, elegant look. The fabric does wrinkle easily, which is often considered part of its charm, but for a formal product, this may be a drawback.



Fig. 3.1.10: Linen

- **Silk:** A luxurious natural fibre, silk is known for its smooth texture, lustrous sheen, and excellent drape. It is a premium choice for high-end apparel like sarees, blouses, and evening wear, as well as for delicate home furnishings like cushion covers and drapes. While beautiful, silk is delicate, requires special care, and is a more expensive option.



Fig. 3.1.11: Silk fabric

- **Wool:** Renowned for its warmth, elasticity, and wrinkle resistance, wool is ideal for winter apparel such as sweaters, suits, and coats. It is also used in durable home furnishings like carpets and upholstery. Its natural crimp traps air, providing insulation. Wool can sometimes feel coarse, but merino wool and cashmere are known for their softness.



Fig. 3.1.12: Woollen mesh fabric

2. Man-Made Fabrics:

- **Polyester:** As a synthetic fibre, polyester is highly durable, resistant to wrinkles, and colourfast. It is a cost-effective option for a wide variety of products, from athletic wear to curtains and bedspreads. It blends well with natural fibres to add strength and reduce cost. However, it is not as breathable as natural fibres.



Fig. 3.1.13: Polyester fabric

- **Rayon/Viscose:** Rayon is a semi-synthetic fabric with a silky feel and excellent drape. It is a more affordable alternative to silk and is often used for blouses, dresses, and home furnishing items that require a soft, fluid look. It is breathable but can be prone to shrinking and weakening when wet.



Fig. 3.1.14: Rayon/Viscous fabric

- **Nylon:** Known for its exceptional strength and elasticity, nylon is primarily used in sportswear, swimwear, and durable home furnishings like carpets and ropes. It is lightweight, quick-drying, and resistant to abrasion.



Fig. 3.1.15: Nylon fabric

- **Acrylic:** Acrylic is a lightweight, soft fibre that resembles wool. It is often used as a wool substitute in sweaters, blankets, and winter accessories. It is resistant to moths and mildew but may pill over time with wear.



Fig. 3.1.16: Acrylic fibre

3. Blended Fabrics

Blending natural and synthetic fibres is common in apparel and home furnishings. Examples include poly-cotton (polyester-cotton), cotton-lycra, Terrycloth and wool-acrylic blends. These combinations offer improved performance, such as stretch, reduced cost, easy care, and durability, while maintaining desirable natural fibre characteristics.



Fig. 3.1.17: Poly-cotton fabric



Fig. 3.1.18: Cotton-Lycra



Fig. 3.1.19: Wool-acrylic blend fabric

4. Jute:

A coarse, strong fibre widely available in India, jute is a highly sustainable and eco-friendly option. It is primarily used for home furnishings like rugs, curtains, and upholstery, especially those with a rustic or natural theme. Its rough texture makes it less suitable for apparel that comes into direct contact with skin.



Fig. 3.1.20: Jute fabric

Trims and Accessories

Trims and accessories are the finishing details that can elevate a product's design and functionality. A merchandiser must consider the cost, durability, and aesthetic fit.

1. **Buttons and Fasteners:** The choice of buttons (plastic, wood, metal, shell) or fasteners (zippers, hooks and eyes, Velcro) is crucial for a product's functionality and aesthetic. For example, a sturdy metal zipper is suitable for jeans, while a delicate pearl button is better for a formal shirt or cushion cover.



Fig. 3.1.21: Buttons and fasteners

2. **Lace and Embroidery:** These trims add a touch of elegance and craftsmanship. A merchandiser must consider the cost of labour for embroidery and the quality of the lace. A delicate lace trim might be suitable for a high-end blouse, while a more durable, machine-made lace can be used for bedspreads or curtains.



Fig. 3.1.22: Lace

3. **Zari, sequins, and beads:** These are integral to Indian apparel and home furnishings, especially for festive and ceremonial wear. A merchandiser should be aware of the different types and qualities of zari (e.g., real silver, imitation) and sequins, as their choice can significantly impact the product's price and durability.



Fig. 3.1.23: Sequins and beads

4. **Fringes, Tassels, and Cords:** These decorative trims are widely used in home furnishings to add a finished look to curtains, cushion covers, and throws. They come in various materials and styles, and a merchandiser should select them based on the product's design, theme, and price point.



Fig. 3.1.24: Tassels

5. **Appliques and Patches:** These are pieces of fabric, often in a different texture or colour, that are sewn onto a product to create a design. They can be used to add a playful touch to children's wear or a detailed, artistic element to home furnishings.
6. **Piping and Braids:** Piping is a trim that defines the edges of a product, while braids are flat, woven trims. They are commonly used in both apparel and home furnishings to add a contrasting colour or texture, providing a clean and professional finish.



Fig. 3.1.25: Piping

- 7. Labels and Tags:** These are essential for communicating product information, including the brand name, fibre content, and care instructions. A merchandiser must ensure that these are compliant with all legal requirements and are well-designed to reflect the brand's identity.



Fig. 3.1.26: Tags and labels

Suitability Based on Design and Function

A merchandiser must carefully assess the suitability of each fabric and trim by considering several interrelated factors. First, design aesthetics such as texture, colour, and pattern must align with the intended style and theme of the collection. The visual appeal plays a critical role in capturing the attention of the target market and conveying the brand's identity. Equally important is the functionality of the material—qualities like breathability, stretchability, moisture absorbency, and insulation must meet the demands of the end use. For example, activewear requires high stretch and quick-drying fabrics, while winter wear demands warmth and insulation.

Understanding the usage context is also vital, as products designed for daily wear require comfort, easy care, and durability, whereas ceremonial or occasional wear can afford to prioritise embellishment and luxury over practicality. The target market must be considered in terms of age group, regional preferences, and lifestyle needs, which influence fabric choices and design elements. Seasonality further impacts fabric selection; breathable, lightweight materials suit summer collections, while heavier, insulating fabrics are more appropriate for winter.

Another key aspect is the pricing strategy. The selected materials must align with the brand's price positioning—whether it targets budget-conscious consumers, the mid-range market, or premium buyers. Finally, production capability must be evaluated, including the ease of sewing, compatibility with machinery, availability in required quantities, and acceptable lead times. By analysing all these factors together, a merchandiser ensures that the chosen fabrics and trims not only look appealing but also function well, meet customer expectations, and support smooth and cost-effective production.

3.1.5 Tech Packs and Their Role in Product Development

A tech pack, short for "technical package," is a comprehensive document that contains all the essential information needed to turn a design idea into a finished product. It acts as a blueprint shared between the design and production teams and includes detailed specifications such as flat sketches, garment measurements, construction details, fabric and trim specifications, colourways, labels, packaging instructions, and sometimes even cost breakdowns.

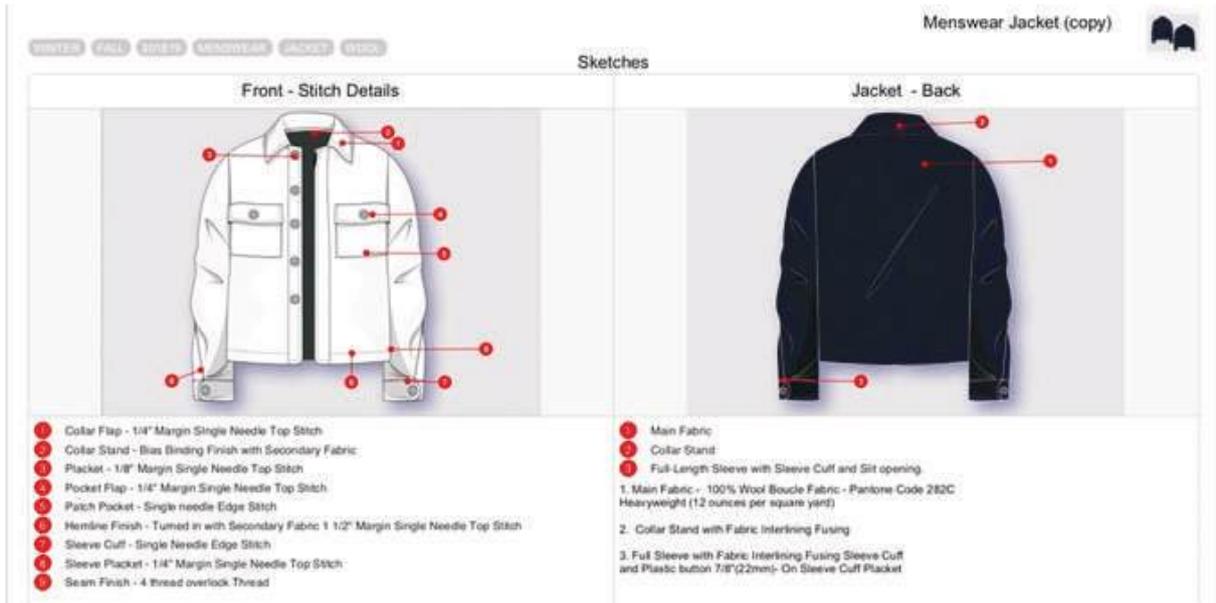


Fig. 3.1.27: Tech pack

A merchandiser must act as a quality control checkpoint for the tech pack itself, verifying that all details are consistent with the original design brief and specifications given by the designer. This involves a systematic check of several key components:

1. Verifying Design Sketches and Flat Drawings:

A merchandiser must cross-reference the flat sketches and technical drawings in the tech pack with the designer's original visual brief. The drawings should accurately represent the design from all angles (front, back, and side), with clear callouts for all design elements such as seams, pockets, collars, and hems.

The Merchandiser should check for consistency in details like the placement of a pocket or the style of a cuff. Any discrepancies, no matter how small, should be flagged for correction.

2. Scrutinising the Bill of Materials (BOM):

The BOM is a comprehensive list of all components needed to create the product. The Merchandiser must ensure that the fabrics, trims, and accessories listed in the tech pack match the ones specified in the design brief. For example, if the designer specified a specific type of cotton fabric, the tech pack should not list a polyester blend.

Similarly, the colour codes for the main fabric and threads must be checked against the approved colour palettes, such as Pantone shades. The Merchandiser should also look for any missing components, such as a specific type of button or a unique label, which could affect the final product's look and cost.

3. Examining the Measurement Sheet and Grading:

The measurement sheet is a table that lists all the points of measurement (POM) for a product in a base size, along with an acceptable tolerance. The Merchandiser must carefully review these measurements to ensure they align with the brand's fit standards and the designer's vision. The tech pack also includes grading rules, which specify how measurements should increase or decrease for different sizes.

The Merchandiser should verify that these grading rules are logical and will result in a consistent fit across the entire size range. This is particularly important for brands that have a specific target market with unique sizing requirements.

4. Reviewing Construction Details and Special Instructions:

The tech pack provides detailed instructions on how the garment or product should be constructed. This includes information on seam types, stitch density (stitches per inch), and the placement of labels and tags. A merchandiser must review these details to ensure they are feasible for the factory's capabilities and are consistent with the intended quality of the product.

For example, if a designer has specified a complex type of stitching, the Merchandiser must confirm that the manufacturing partner has the machinery and expertise to execute it. Any special instructions, such as for a unique wash or a hand-embroidery technique, must be clearly documented and understood.

Clear communication with the designer or product development team is essential throughout this process. Any missing, unclear, or conflicting information should be resolved promptly. Keeping a checklist or using a standard review template can help ensure that all required components of the tech pack are verified before passing it to the manufacturer or vendor.

3.1.6 Key Considerations While Confirming the Feasibility and Appropriateness of the Tech Pack

Before a tech pack moves into sampling or production, a merchandiser must consult with key personnel such as designers, sampling teams, and production leads to ensure that the design can be executed efficiently and aligns with organisational capabilities. This step is vital to avoid issues related to cost, production delays, material shortages, or quality problems. Several important points must be considered during this consultation process:

1. Fabric and Trim Availability:

The Merchandiser must check whether the specified fabrics and trims are readily available or need to be specially sourced. For example, if the tech pack mentions a rare handloom fabric or custom-embroidered lace, the sampling team must confirm lead times and availability. If delays are likely, the Merchandiser should coordinate with the designer to consider alternatives that maintain design integrity.

2. Suitability of Construction Techniques:

Certain design features may look appealing on paper but can be difficult or expensive to produce. The production lead should assess whether the stitching type, seam placements, or finishing details are achievable using existing machinery and workforce skills. For instance, a bias-cut garment may require special handling and time, which may not be feasible for a tight production schedule.

3. Cost Feasibility:

The costing team must verify whether the materials, embellishments, and construction methods fall within the target cost. If the tech pack includes metallic zippers, imported buttons, or multi-layered designs, they might push the price beyond what the buyer is willing to pay. The Merchandiser must analyse if cost-effective substitutes can be used without compromising quality.

4. Production Capacity and Timeline:

The production team should confirm whether the style can be produced within the required timeline and current workload. For example, if the tech pack involves heavy embroidery or multiple colourways, it could slow down the line and affect delivery. The Merchandiser should ensure the timeline in the TNA calendar is realistic.

5. Accuracy of Measurement Specifications:

The sampling team should review whether the measurement specs are consistent with standard size charts and customer expectations. Unusual proportions or tight tolerances may create fitting issues or high rejection rates during production.

6. Design Practicality and Wearability:

Designers and merchandisers must together evaluate whether the product will perform well in actual use. For example, a children's garment with long hanging tassels may look stylish but could pose a safety risk. Similarly, placing a zipper at the back of a cushion might be uncomfortable for the end user.

7. Compatibility with Existing Vendor Capabilities:

The Merchandiser must also ensure that the assigned vendors have the technical capability to execute the design. If the vendor lacks experience in producing garments with digital prints or intricate handwork, they may need additional training or equipment, which affects feasibility.

Involving the right personnel and reviewing these critical points ensures the tech pack is not only complete but also practical and aligned with business objectives.

3.1.7 Identifying and Selecting Vendors

A merchandiser plays a vital role in building and managing a robust vendor network. The process of identifying and selecting vendors for raw materials, trims, and manufacturing support is critical to ensuring product quality, maintaining cost-effectiveness, and meeting production timelines. A merchandiser must not only find vendors that can meet the product's technical specifications but also those that align with the company's ethical, financial, and quality standards.

The vendor selection journey begins with a clear understanding of the sourcing needs for each product category. The Merchandiser must assess the type of raw materials (e.g., cotton, polyester, silk), trims (zippers, buttons, lace, embroidery threads), and manufacturing services (like embroidery, stitching, or finishing) needed for a particular collection or order. Requirements such as quality standards, order quantity, price range, certifications and lead time expectations should be defined in detail.

For example, for a premium line of bed linens, the Merchandiser may require 100% organic cotton with soft finish, matching lace trims, and AZO-free dyes certified by OEKO-TEX. These details help in identifying appropriate suppliers.

The next step in vendor identification is market research. A merchandiser should be aware of the key manufacturing hubs for specific products in India. For example, for cotton fabrics and apparel, cities like Ahmedabad and Tiruppur are well-known, while for home furnishings, Panipat is a major hub. Similarly, for embroidery and handloom products, places like Varanasi and Jaipur are prominent. A merchandiser can find potential vendors by attending industry trade fairs like the India International Garment Fair, the Heimtextil India show, and other regional events. These events provide an excellent platform for networking and discovering new suppliers with innovative materials and techniques. Online directories, industry publications, and recommendations from a professional network are also valuable sources of information.

Once identified, potential vendors are shortlisted based on their product specialisation, manufacturing capacity, market reputation, infrastructure, and alignment with the brand's vision.

After shortlisting, the Merchandiser prepares a Request for Quotation (RFQ) and a sample request. The RFQ includes details like technical specifications, order quantity, delivery schedule, quality standards, and packaging requirements. Vendors are expected to provide cost quotations and product samples.

The Merchandiser and quality team evaluate these samples for factors such as colour fastness, fabric GSM, hand feel, stitching strength, durability of trims, and overall finish. For example, in the case of a designer blouse, a lace trim sample may be checked for softness, dye match, and delicate detailing.

Vendors are evaluated based on multiple criteria:

- Product quality as per the sample and compliance standards
- Pricing and commercial terms
- Delivery capacity and lead time commitment
- Production infrastructure and technology
- Experience with similar products or clients
- Location advantage for ease of logistics
- Certifications such as ISO, SA8000, GOTS, etc.

Post evaluation, the Merchandiser negotiates the terms of business, including cost, payment schedules, delivery timelines, quality parameters, and penalties for delays. A small trial order may be placed to assess consistency before finalising the vendor for full-scale production.

Once the vendor is selected, a formal agreement or purchase order is issued, clearly mentioning all technical and commercial terms. Even after vendor finalisation, regular performance monitoring is essential. This includes tracking:

- Quality consistency across batches
- Adherence to timelines
- Communication responsiveness
- Flexibility in managing changes or urgent requirements

The Merchandiser maintains vendor performance records and provides feedback to ensure long-term improvement and alignment with business needs.

UNIT 3.2: Garment Construction Techniques, Costing, and Sample Development

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain key garment construction techniques and processes used in apparel production (e.g., stitching, finishing, assembling).
2. Identify quality standards for garment designs and ensure products meet specified benchmarks.
3. Explain the cost process involved in making an apparel product, including direct and indirect costs.
4. Identify budget constraints, target cost points, and timing limitations in product development.
5. Prepare a detailed Bill of Materials (BOM) for each style in the collection, specifying parts, raw materials, and quantities.
6. Meet time constraints for making samples and develop a Time and Action (TNA) calendar outlining key milestones, estimated timelines and delivery date after sample confirmation.
7. Identify and suggest possible improvements in products based on fit, construction, or material feedback.

3.2.1 Key Garment Construction Techniques and Processes in Apparel Production

Garment construction involves a series of technical steps that transform fabric into a finished product. A merchandiser in the apparel, made-ups, and home furnishings sector must have a thorough understanding of these techniques to coordinate efficiently with production teams, ensure product quality, and meet design intent. The construction process varies depending on the type of garment, fabric, and complexity of the design, but generally includes the following core techniques and processes:

1. Pattern Making and Cutting

Before construction begins, patterns are created based on the designer's specifications. Patterns are templates for each part of the garment (e.g., sleeves, bodice, collar). Accurate pattern making ensures proper fit and shape.

Once patterns are finalised, fabric is laid out and cut according to the pattern shapes. Cutting can be done manually or using automated cutting machines. Precise cutting is essential to avoid fabric wastage and maintain consistency across garments.



Fig. 3.2.1: Pattern making and cutting

2. Stitching and Sewing

Stitching is the most critical construction process, where different fabric parts are joined using various types of stitches. The choice of stitch depends on fabric type, garment function, and design details.

Common stitches include:

- Lockstitch (strong and clean, used in general seams)
- Overlock/serging (used to finish raw edges)
- Topstitch (adds decorative and functional reinforcement)
- Flatlock stitch (used in sportswear for comfort and flat seams)

Different machines, such as single needle, overlock, flatlock, and coverstitch machines, are used depending on the seam type.



Fig. 3.2.2: Sewing Machine

3. Assembling the Garment

Once individual components are stitched, they are assembled to create the complete garment. Assembly sequence varies by garment type. Generally, smaller parts like collars, cuffs, pockets, and plackets are prepared first and then attached to larger parts like the bodice or sleeves.

Careful alignment and joining of parts are important for maintaining balance, symmetry, and fit.



Fig. 3.2.3: Assembling the garment

4. Finishing Processes

Finishing enhances the garment's appearance, durability, and feel. It includes:

- Trimming of threads
- Ironing or pressing to smooth out seams
- Adding closures like zippers, hooks, and buttons
- Applying decorative trims or labels
- Final inspection for quality assurance

Some garments also undergo chemical or mechanical finishes, such as softening, wrinkle resistance, or bio-polishing to improve fabric feel and performance.



Fig. 3.2.4: Finishing process in garment manufacturing

5. Quality Control and Packing

After finishing, garments go through a quality check to ensure stitching consistency, measurement accuracy, and defect-free construction. Approved pieces are then folded, tagged, and packed as per client or brand specifications.



Fig. 3.2.5: Quality control



Fig. 3.2.6: Packing

Understanding garment construction techniques is essential for merchandisers. It enables them to communicate effectively with production teams, manage timelines, ensure product quality, and troubleshoot issues that arise during manufacturing. Their role in aligning design intent with technical execution directly impacts the final product's success in the market.

3.2.2 Quality Standards in Garment Design and Production

Quality standards are the benchmarks that define a product's level of excellence and consistency. A merchandiser plays a vital role in ensuring that every product developed meets predefined benchmarks related to design accuracy, construction, durability, and aesthetics. These standards serve as measurable criteria for evaluating product consistency and suitability for the target market.

Establishing quality standards during the design and development phase is the foundation of any successful garment production process. It is the merchandiser's responsibility to collaborate with the design and technical teams to define clear, practical, and achievable benchmarks for quality. This involves choosing the right fabric with the correct specifications, such as thread count, GSM (grams per square meter), and finish requirements like wrinkle resistance or anti-pilling. The garment's construction techniques are also defined at this stage, including the type of stitches (lock stitch for strength, overlock for finishing), seam allowances, and stitch density, which directly influence both appearance and durability.



Fig. 3.2.7: Quality inspection

Trims and accessories must be specified in detail, covering their quality, material, and performance. For example, children's garments require buttons to undergo a pull test to ensure safety. Merchandisers also ensure that fit and measurement charts are correctly detailed in the tech pack, including acceptable tolerance levels. Consistency in sizing across styles and production lots is a critical quality parameter that impacts customer satisfaction and brand reliability.



Fig. 3.2.8: Accessories required in manufacturing garments

Once the design is finalised and quality standards are defined, it becomes essential to implement strict quality control procedures throughout the production process. The first step is fabric inspection, where the material is checked for weaving defects, colour inconsistencies, or printing errors. This usually occurs at the vendor's site before production begins. During the stitching and assembly phases, in-line quality checks are carried out to catch defects early, such as misaligned seams, incorrect trims, or poor workmanship. This proactive approach helps prevent mass errors and reduces wastage.



Fig. 3.2.9: Quality inspection in garment production

A final quality audit is performed after garments are finished and ready for packing. This audit involves checking for visible defects like stains, loose threads, or poor stitching, as well as verifying that the product measurements align with approved tolerances. The merchandiser also ensures that labels, hangtags, and packaging comply with brand guidelines and any export or retail requirements, including legal and safety regulations for different countries. To maintain consistency in quality, merchandisers utilise recognised quality control tools and benchmarks. A widely accepted method is AQL (Acceptable Quality Level), which determines the allowable number of defective items in a production batch. This statistical method balances quality with production realities. Merchandisers also oversee the sample approval process, including proto, fit, and pre-production samples, ensuring each stage aligns with the original design brief before mass production begins.

Many organisations and brands maintain a quality handbook or manual, which outlines all quality expectations, from fabric testing standards to packaging requirements. This document includes detailed descriptions of defect types—minor, major, or critical—and serves as a reference guide for both the merchandiser and the production team.

3.2.3 Costing Process in Apparel Production

The costing process for an apparel product is a fundamental responsibility of a merchandiser. It involves a detailed breakdown of all expenses incurred from the conceptualisation of a garment to its final delivery. A precise cost analysis is crucial for determining a product's selling price, negotiating with buyers, and ensuring profitability for the organisation.

The costs associated with a garment can be categorised into two main types: direct costs and indirect costs, both of which a merchandiser must meticulously track and manage.

1. Direct Costs:

Direct costs are expenses that are directly traceable to a specific product. These are the most significant components of a garment's final price.

- **Fabric Cost:** This is typically the largest component of a garment's direct cost. It includes the price of the main fabric, as well as any lining, interlining, or other supportive fabrics. A merchandiser calculates this by multiplying the fabric consumption (the amount of fabric needed for one garment) by the fabric's per-unit cost.

Converting Fabric Price per Yard from Price per Kg					
Fabric Variations	Fabric GSM	Length in Meters/Kg	Length in Yards/Kg	Fabric Price per Kg	Price per Yard
INT-190 GSM	190	5.26	5.76	350.00	₹ 60.81
INT-200 GSM	200	5.00	5.47	350.00	₹ 64.01
INT-210 GSM	210	4.76	5.21	350.00	₹ 67.21
INT-220 GSM	220	4.55	4.97	350.00	₹ 70.41

Fig. 3.2.10: Fabric cost

- **Trims and Accessories:** This category includes all the small but essential items that complete a garment. These costs are often calculated per piece. Examples include buttons, zippers, thread, labels, tags, rivets, and any decorative embellishments like embroidery or sequins. A merchandiser must keep a detailed list of all these items to ensure an accurate cost estimate.



Fig. 3.2.11: Trimming accessories

- **Cut, Make, and Trim (CMT) Charges:** The CMT charge is the cost of converting the raw materials into a finished garment. This is a per-piece cost that covers the manufacturing factory's expenses for cutting the fabric, sewing the garment, and attaching the trims and accessories. This is often the primary cost for a merchandiser when the brand provides the fabric.
- **Printing and Embroidery:** If a garment includes surface embellishments, the cost of processes such as screen printing, digital printing, appliqué work, or embroidery is added separately. This varies depending on the technique, design complexity, and number of colours used.



Fig. 3.2.12: Embroidery

- Finishing and Packaging:** If a garment requires special finishing processes, these costs are also considered direct. This includes expenses for garment washing (e.g., stonewash for denim), dyeing, printing, and any special finishes like a wrinkle-free or stain-resistant treatment. This also includes costs for ironing, folding, tagging, inserting into polybags, and final packing into cartons. These activities are necessary for a garment to be ready for dispatch.



Fig. 3.2.13: Packing

2. Indirect Costs (Overhead Costs):

Indirect costs, or overheads, are expenses that are not directly tied to a single product but are necessary for running the business. A merchandiser must understand how these costs are allocated to each product to determine the true profitability.

- Factory Overheads:** These are the manufacturing factory's general expenses. They include the cost of electricity, factory rent, maintenance of machinery, and the salaries of support staff like supervisors and quality control inspectors. The factory calculates these costs and often includes them in the CMT charges. A merchandiser should understand this component of the CMT cost.
- Administrative Overheads:** These are the expenses of buying the house or the brand's office. They include the salaries of the merchandiser, the designer, and other administrative staff, as well as office rent, utilities, and marketing expenses. These costs are usually a percentage of the total product cost, which the company's financial department determines.

- **Logistics and Shipping Costs:** These are the costs associated with moving the finished goods from the factory to the buyer. This includes transportation costs, customs duties, insurance, and freight forwarding agent fees. For export orders, a merchandiser must also account for port charges and other import/export documentation fees.
- **Profit Margin:** This is not a cost but a crucial component of the final price. The profit margin is the percentage of the selling price that the company aims to earn on each product after all costs have been accounted for. A merchandiser must negotiate a price with the buyer that includes a healthy profit margin for the company.

3.2.4 Managing Budget, Target Cost, and Timelines in Product Development

In the product development process for apparel, made-ups, and home furnishings, merchandisers must skilfully manage financial and time-related constraints. Success depends on aligning the design vision with the buyer's cost expectations and ensuring timely delivery without compromising on quality or functionality. Three key considerations in this process are budget constraints, target cost points, and timing limitations.

1. Budget Constraints:

A budget constraint refers to the total amount of money allocated for the development of an entire collection or product line. This is a top-level financial guideline set by management. For a merchandiser, this budget dictates the overall spending limit for an entire season or a specific category of products. It influences decisions such as how many new styles can be developed, the number of samples that can be produced, and the resources that can be spent on sourcing new materials or vendors.

A merchandiser must work within this budget, constantly balancing creative ambitions with financial realities. For instance, if a merchandiser is tasked with developing a new line of bedsheets and the budget is limited, they may need to opt for a polycotton blend instead of 100% long-staple cotton to stay within the allocated funds.

2. Target Cost Points:

Target cost points are more specific and granular than a budget. They are the predetermined maximum cost for a single product. This cost is calculated backward from the product's intended retail price, considering the brand's desired profit margin. A merchandiser is given a specific target cost point for each garment or home furnishing item (e.g., a cushion cover must not cost more than INR 250 to produce). This target cost point serves as a non-negotiable benchmark throughout the costing process. It directly influences the selection of fabrics, trims, and manufacturing partners. For example, suppose a designer has specified an expensive embroidered pattern, but the garment's target cost point is low. In that case, a merchandiser may need to find a more cost-effective alternative, such as a screen-printed design that mimics the look of embroidery. A merchandiser's skill lies in finding creative solutions to meet these cost points without compromising the product's quality or aesthetic appeal.

3. Timing Limitations (Production Timeline):

Timing limitations are the strict deadlines and schedules that govern the entire product development and production cycle. In the fashion industry, this is often referred to as the "Critical Path." It includes deadlines for key stages, such as:

- **Sample Development:** The time allocated for creating the initial proto, fit, and pre-production samples. Delays at this stage can push back the entire production schedule.

- **Sourcing and Procurement:** The time required to find and order all the necessary raw materials, fabrics, and trims.
- **Production and Manufacturing:** The time the factory needs to cut, sew, finish, and package the final products.
- **Shipping and Delivery:** The time it takes for the goods to be shipped from the factory to the warehouse or the retail stores.

A merchandiser is responsible for managing this timeline to ensure the products are ready for the market on time, especially for seasonal collections. Missing a deadline can result in a loss of sales and an inability to meet a buyer's demands. For example, if a winter collection is delivered late, the brand may have to sell the items at a heavy discount, thereby losing out on potential profits.

A merchandiser's job is to proactively manage the timeline by working closely with vendors, anticipating potential delays, and taking corrective actions to keep the project on track.

3.2.5 Preparing a Detailed Bill of Materials (BOM)

A Bill of Materials (BOM) is a comprehensive list of all the components and materials required to produce a single unit of a product. In the apparel and home furnishing industry, the BOM is a foundational document that provides a complete breakdown of all parts, raw materials, and quantities.

BOMs facilitate efficient and accurate manufacturing. By identifying and pricing all the materials and components needed to make a product—before production begins—an organisation can determine whether it has everything it needs to move forward with minimal risk of delays. This reduces the likelihood of both shortages and overages of materials or components, helping manufacturers remain within budget and on schedule.

BOMs may be structured in one of the following two ways:

1. **Single-Level BOM:** A single-level BOM is the most basic and straightforward type of BOM. It lists all the components required to build a product in a simple, flat list. It is similar to a shopping list, where each item is listed once, along with the quantity needed. This type of BOM is best suited for products with a simple structure that do not have any sub-assemblies.

Here is a clear example of a single-level BOM for a basic men's short-sleeved t-shirt. This type of BOM would be used by a merchandiser to quickly check that all the necessary raw materials and trims are accounted for.

Product Name: Men's Basic Short-Sleeved T-Shirt

Style No.: T-Shirt-101 Sample

Size: L (Large)

Date: 04/08/2025

Sl. No.	Component Name	Description	Material/ Fibre Content	Colour Code	Unit of Measure (UOM)	Quantity per Piece	Supplier
1	Main Body Fabric	180 GSM Single Jersey	100% Cotton	PANTONE 18-0909 TCX	Meters	1.1	Sharda Fabrics

Sl. No.	Component Name	Description	Material/ Fibre Content	Colour Code	Unit of Measure (UOM)	Quantity per Piece	Supplier
2	Neck Rib	2x1 Rib Knit	100% Cotton	PANTONE 18-0909 TCX	Meters	0.08	Sharda Fabrics
3	Sewing Thread	Spun Polyester Thread	100% Polyester	Colour Matched to Fabric	Meters	100	Madura Coats
4	Brand Label	Woven Label	100% Polyester	Black on White	Pieces	1	Labels India
5	Size Label	Woven Label	100% Polyester	Black on White	Pieces	1	Labels India
6	Care Label	Printed Label	100% Polyester	Black on White	Pieces	1	Labels India
7	Hang Tag	Cardboard Tag	Cardboard	Multicolour Print	Pieces	1	EcoPrint Solutions
8	Hang Tag String	Plastic String with Seal	Plastic	Clear	Pieces	1	EcoPrint Solutions
9	Poly Bag	Transparent Bag	Polypropylene	N/A	Pieces	1	Plastic Packaging Co.

Table 3.2.1: Single-level BOM

In this example, the BOM clearly lists every single component, from the main fabric and neck rib to the smallest item, like the hang tag string. The details for each component, such as the material, colour, and quantity, are all specified in a single, flat table.

- Multi-Level BOM:** A multi-level BOM, also known as an indented BOM, provides a more detailed and hierarchical view of a product. It shows the relationship between a parent product and its components, and also breaks down any sub-assemblies into their own components. This type of BOM is essential for complex products that are made up of multiple parts that are assembled separately before being joined together.

Here is an example of a multi-level BOM for a decorative cushion with a detachable embroidered cover. This structure helps a merchandiser track the components of both the cushion filler and the cover, which might be produced in different units or sourced from different suppliers.

Product Name: Men's Basic Short-Sleeved T-Shirt

Style No.: T-Shirt-101

Sample Size: L (Large)

Date: 04/08/2025

Sl. No.	Component Name	Description	Material/ Fibre Content	Colour Code	Unit of Measure (UOM)	Quantity per Piece	Supplier
1	Main Body Fabric	180 GSM Single Jersey	100% Cotton	PANTONE 18-0909 TCX	Meters	1.1	Sharda Fabrics

Sl. No.	Component Name	Description	Material/ Fibre Content	Colour Code	Unit of Measure (UOM)	Quantity per Piece	Supplier
2	Neck Rib	2x1 Rib Knit	100% Cotton	PANTONE 18-0909 TCX	Meters	0.08	Sharda Fabrics
3	Sewing Thread	Spun Polyester Thread	100% Polyester	Colour Matched to Fabric	Meters	100	Madura Coats
4	Brand Label	Woven Label	100% Polyester	Black on White	Pieces	1	Labels India
5	Size Label	Woven Label	100% Polyester	Black on White	Pieces	1	Labels India
6	Care Label	Printed Label	100% Polyester	Black on White	Pieces	1	Labels India
7	Hang Tag	Cardboard Tag	Cardboard	Multicolour Print	Pieces	1	EcoPrint Solutions
8	Hang Tag String	Plastic String with Seal	Plastic	Clear	Pieces	1	EcoPrint Solutions
9	Poly Bag	Transparent Bag	Polypropylene	N/A	Pieces	1	Plastic Packaging Co.

Table 3.2.1: Multi-level BOM

The process of creating a BOM involves a methodical approach to gathering and organising information. It is often prepared in a spreadsheet format and becomes a part of the tech pack for each style in a collection.

1. Deconstructing the Product:

The first step is to break down the product into all its individual components. A merchandiser must analyse the design to identify every single part that goes into making the finished product.

- **Main Fabric:** The primary material used for the garment or home furnishing item. This should be specified with details like fabric type (e.g., 100% cotton poplin), colour, weight (GSM), and finish.
- **Lining and Interlining:** Any supportive fabrics used inside the product for structure or comfort.
- **Trims:** These are the functional and decorative elements. The list should include buttons, zippers, thread, labels, tags, snaps, and any other fastenings.
- **Accessories and Embellishments:** This category includes decorative details like embroidery, sequins, lace, appliques, beads, and any special finishes.
- **Packaging Materials:** Even the items needed for packaging, such as poly bags, hang tags, and price stickers, should be included in the BOM.

GENERIC - BILL OF MATERIALS			
QUANTITIES BASED ON DESIGN AND ARE PRESENTED FOR BASELINE PURPOSES. CONTRACTOR TO DETERMINE ACTUALS			
QUANTITY	MATERIAL	MANUFACTURER	PART #
4334	FIBER SPLICES		
1564	DC TERMINATIONS		
29	MIDDLE ATLANTIC 2U HINGED HORIZONTAL CABLE MANAGER	MIDDLE ATLANTIC	HHCM-2
29	2X2 HINGED DUCT VERTICAL CABLE MANAGER KIT	PANDUIT	FRHD2KTYL
3	7R VERTICAL CABLE MANAGEMENT PANEL	PANDUIT	WMPV45E
2400	3/4" EMT CONDUIT		
5000	1" EMT CONDUIT		
2400	1 1/4" EMT CONDUIT		
2750	2" EMT CONDUIT		
5	2" EXPANSION FITTINGS		
220	4" EMT CONDUIT		
300	12" X 12" X 4" SCREW COVER JUNCTION BOX		
1	6" X 24" X 24" TROUGH WITH END CAPS AND SCREW COVER		
80	18" X 18" X 4" J&A Plenum rated junction box	J&A	
16	24" X 24" X 4" J&A Plenum rated junction box	J&A	
2	24" X 24" X 6" J&A Plenum rated junction box	J&A	
1	24" X 24" X 8" J&A Plenum rated junction box	J&A	
6700'	LOW PROFILE, SINGLE CHANNEL STEEL RACEWAY BASE AND COVER (IVORY)	LEGRAND	V2400C
478	ENTRANCE END FITTING	LEGRAND	V2410C
174	24" X 24" TEMPORARY ACCESS HOLES/PANELS		
4	18" X 18" TEMPORARY ACCESS HOLES/PANELS		
290	18" X 18" RECESSED ACCESS DOOR WITH DRYWALL FLANGE	CENDREX	AHA-GYP
208	SOFFIT TO BE BUILT ON GUEST FLOORS IN HOTEL TOWERS		
54	20A DEDICATED CIRCUITS TO BE PROVIDED IN VARIOUS LOCATIONS		
2	2P-30A TWIST LOCK RECEPTACLE IN HEAD END		L6-30
332	OMNI ANTENNA'S TO BE MOUNTED	LAIRD	CMD69273P-30D43F
1	DIRECTIONAL ANTENNA TO BE MOUNTED	GALTRONICS	PEAR M5277I 4.3-10 DIN
387	10' OMA MALE 90 DEGREE TO 4.3-10 MINI-DIN MALE COAXIAL JUMPER	R&D	CBL-10FT-43MCMRA-402J
10	10' 4.3-10 MALE MINI-DIN TO 4.3-10 MALE MINI-DIN COAXIAL JUMPER	R&D	CBL-10FT-43M43M-402J
15	ANTENNA MOUNTING BRACKETS	R&D	JM1 AND/OR JM2
4	LDF4-50A 4.3-10 MINI-DIN FEMALE CONNECTOR	JMA	UXP-4F-12
130'	HELIAX LOW DENSITY FOAM COAXIAL CABLE, CORRUGATED CU, 1/2" BLK PE JACKET	COMMSCOPE	LDF4-50A
1	3:1 SPLITTER	R&D	D3-A05D43
64	5RU 23" to 19" RACK PANEL ADAPTERS (PAIR)	CHATSWORTH	31450-200
2	SMART-UPS SRT 3000VA RM 120V	APC	SRT300RMXLA
6	SMART-UPS SRT 96V 3kVA RM BATTERY PACK	APC	SRT96RMBP
6	6 OUTLET RACKMOUNT NETWORK GRADE PDU POWER STRIP, REAR FACING 1U, 15A	TRIPP LITE	RS-0615-R
15	RELAY RACK 1 3/4" X 23" MTG PLATES TELEPHONE GRAY 1 3/4" HOLE SPACING	AMPHENOL TELECT	12300KW201
279	1W TERMINATION (4.3/10-M) (FOR SISO ANTENNAS)	CLEARCOMM	CCTM-010-XDM
3	GF-SERIES GEN2 GLOBAL FRAME CABINET (800MM) D X 45 RMU H; 12/24 TAPPED...	CHATSWORTH	TS1034368

Fig. 3.2.14: Bill of materials (BOM)

2. Specifying Raw Material Details:

For each component listed, a merchandiser must provide specific details to ensure the right materials are sourced. This is where precision is key.

- **Part Name/Description:** A clear name for each component (e.g., Main Body Fabric, Zipper for Trousers).
- **Material/Fibre Content:** The exact composition of the material (e.g., 100% Cotton, Metal Zipper).
- **Colour Code:** The precise colour code, often using an industry standard like Pantone or a company-specific colour reference, to avoid any colour variations.
- **Size/Length:** The size of the component, for example, the length of the zipper or the diameter of the button.
- **Supplier Details:** The name of the approved supplier for that specific component.

List of all Trimmings in Garments		List of Accessories Used in Garments	
1. Sewing Thread -Monofilament Thread -Multifilament Thread -Textured Thread -Core spun Thread	11. Zipper -Nylon Zipper -Metal Zipper -Plastic Zipper	1. Hanger	14. Scotch tape
2. Button	12. Motif	2. Hangtag	15. P.P Band
3. Rivet	13. Shoulder pad	3. Tissue paper	16. Inner Carton
4. Lining	14. Hook & Loop	4. Backboard	17. Outer carton
5. Interlining	15. Twill tape	5. Neck board	18. Iron seal
6. Stopper	16. Velcro tape	6. Paper Band	19. Tarpaulin paper
7. Lace	17. Pon pom	7. Pin/Clip	20. Carton Sticker
8. Braid	18. Wadding	8. Tag pin	21. Safety sticker
9. Elastic	19. Ribbon	9. Poly bag	22. Arrow sticker
10. Label -Main label -Size label -Care label		10. Elastic bag	23. Butterfly
		11. Mini poly bag	24. Both side tape
		12. Collar stand	25. Plastic staple
		13. Gum tape	26. Barcode, UPC

Fig. 3.2.15: Details of raw materials

3. Calculating Quantities and Units of Measure:

This is the most critical part of the BOM for costing and procurement. The merchandiser must accurately estimate the quantity of each item needed for one unit of the finished product.

- **Units of Measure (UOM):** The UOM must be clearly defined for each item. For fabric, it is typically in meters or yards. For trims like thread or zippers, it is in meters. For items like buttons, labels, or tags, it is in pieces.

Misses, Petites Sizes									
	PS/S		PM/M/TM		PL/L/TL		PXL/XL/TXL		
	6	8	10	12	14	16	18	20	22
Bust	34	35½	36½	37½	39	41	43	45	47
Waist	28	29½	30½	31½	33	35	37	40	42
Low Hip	36	38	39	40	41½	43½	45½	47½	49½

Women's Sizes										
	PX/XL/TXL		P2XL/2XL		P3XL/3XL		4XL		5XL	
	16W	18W	20W	22W	24W	26W	28W	30W	32W	34W
Bust	45	47	49	51	53	55	57	59	61	63
Waist	40	42	44	46	48	50	52 1/4	54½	56 3/4	59
Low Hip	47½	49½	51½	53½	55½	57½	59½	61½	63½	65½

Fig. 3.2.16: Units of measure

- **Consumption:** This is the quantity of the raw material needed to produce one garment. For fabric, a merchandiser uses a marker to calculate the exact fabric consumption. For trims and other items, they must count the number of pieces required per garment. It is important to add a small percentage for wastage to these calculations.

3.2.6 Managing Time Constraints for Sample Making and Developing a Time and Action (TNA) Calendar

A TNA calendar not only serves as a timeline tracker but also acts as a coordination guide across departments and vendors. It ensures transparency, accountability, and a proactive approach to handling pre-production activities.

Preparing the TNA Calendar and Defining Key Milestones

The preparation of a TNA calendar begins by identifying the final delivery date and planning all tasks in reverse order. Each step in the sample development and production process is mapped with clear deadlines, responsible parties, and dependencies.

Typical milestones in the TNA calendar include:

1. **Design Confirmation:** Date when the final product design is approved.
2. **Tech Pack and BOM Completion:** Deadline for finalizing the technical specifications and Bill of Materials.
3. **Fabric and Trim Sourcing:** Time allocated to identify and procure all required materials.
4. **Proto Sample Submission:** Date for presenting the first physical sample to the buyer for feedback.
5. **Fit Sample Approva:** Deadline for buyer's approval of the garment's fit.
6. **Pre-Production Sample Approval:** Final confirmation that the sample matches the approved specifications and is ready for bulk production.
7. **Fabric In-House Date:** Date by which all materials should arrive at the factory.
8. **Production Start Date:** Scheduled start for cutting, stitching, and assembling garments.
9. **Final Quality Check:** Inspection date to verify product compliance and quality before packaging.
10. **Packing and Dispatch:** Date for shipment handover and documentation completion.

Managing Sample Timelines Effectively

Effective sample management is essential for staying on track with production and delivery schedules. Sample development typically involves several rounds of approvals, design refinements, and coordination among departments. A merchandiser uses the Time and Action (TNA) calendar to manage this complexity and ensure that each stage is executed within the expected timeframe. Without such a structured approach, delays in one stage can lead to disruptions across the entire production cycle.

Proactive communication plays a vital role in keeping the sampling process on schedule. Merchandisers must stay in regular contact with sampling teams, sourcing departments, and external vendors. This helps address common challenges, such as late trim deliveries, fabric mismatches, or quality concerns, before they affect timelines. When everyone involved is informed and aligned, decisions can be made quickly to keep the project moving forward.

Another effective strategy is parallel processing. Certain tasks—such as sourcing labels, accessories, or packaging materials—can be done simultaneously while samples are being developed. This approach minimises idle time and makes better use of available resources. Including an in-built buffer time in the TNA calendar also helps absorb any unexpected delays, such as sample rejection or rework, without jeopardising the overall timeline.

After the Pre-Production Sample is approved, the TNA calendar becomes a tool for ensuring production readiness and delivery. The merchandiser places confirmed orders for all materials and books the production slot with the factory. Each stage—cutting, stitching, finishing, and packing—is tracked against the TNA schedule. If delays arise, the calendar enables the merchandiser to identify the issue early and take corrective actions, such as adjusting workloads or prioritising key activities, to maintain the delivery commitment.

3.2.7 Proposing Product Improvements Based on Feedback

A merchandiser plays a central role in enhancing product quality by translating feedback into practical improvements. As the link between production teams, designers, vendors, and buyers, the merchandiser ensures that insights from real-world product use are carefully analysed and implemented. This continuous loop of evaluation and refinement—focused on fit, construction, and material—is essential for maintaining customer satisfaction, meeting quality expectations, and strengthening the brand’s reputation in the market.

Analysing and Refining Fit Based on Feedback

- **Importance of Fit**
 - Critical for both apparel and made-ups (e.g., cushion covers, bed linens).
- **Process for Addressing Fit Feedback**
 - Review tech pack, measurement charts, and grading rules.
 - Compare documents against actual sample measurements and user feedback to identify discrepancies.
 - Collaborate with pattern makers and the technical team to propose changes:
 - Add ease where necessary.
 - Adjust lengths or proportions.
 - Refine shape while preserving intended style.
 - In home furnishings, even small changes in seam allowance or dimensions can correct fitting issues and improve usability.

Addressing Construction-Related Issues

- **Identifying Problems**
 - Review quality audit reports and defective product samples.
 - Detect common failure points such as seam splitting, poor stitching, or zipper failure.
- **Proposed Technical Corrections**
 - Increase stitch density or use stronger seam types.
 - Add bar-tacks at stress points.
 - Specify higher-quality zippers, buttons, or fasteners.
- **If production errors are the cause:**
 - Work with the manufacturing unit to reinforce quality control processes.
 - Ensure more consistent execution during bulk production.

Improving Material Choices for Better Performance

- **Typical Material Issues**
 - Fabric pilling, fading, rough texture, or insufficient durability.
- **Evaluation and Alternatives**
 - Assess if the current material matches the product’s usage and care requirements.
 - Recommend alternative fabrics if complaints are frequent or consistent:
 - Use brushed cotton for a softer texture.
 - Consider blended fabrics for improved strength and feel.

- **Validation**

- Conduct wear and wash tests on new materials.
- Ensure proposed alternatives meet the target cost and maintain visual appeal.
- Confirm changes through sample trials before approval.

Balancing Improvements with Commercial Viability

- **Key Considerations**

- Ensure changes are functional, cost-effective, and scalable in production.
- Evaluate financial impact to confirm alignment with brand positioning and price range.
- Maintain original design intent and meet buyer expectations.

- **Outcome**

- Deliver high-quality, appealing, and commercially successful products by balancing performance, aesthetics, and cost.

Summary

- Systematic work with attention to detail ensures no damage to goods or equipment in garment manufacturing.
- Compliance with safety, labour, and quality standards is critical to maintain production integrity.
- Coordination with design teams helps select appropriate fabrics, trims, and suppliers aligned with market trends.
- An accurate techpack must match designer specifications and be confirmed with sampling or production teams for feasibility.
- Garment construction involves stitching, assembling, and finishing while meeting strict quality standards and cost targets.
- A detailed Bill of Materials (BOM) and Time and Action (TNA) calendar ensures timely sample development and delivery.
- Continuous improvements based on feedback enhance garment fit, material choice, and construction quality.

Exercise

Multiple-choice Question:

1. What is the purpose of working systematically in garment production?
 - a. To complete work quickly without focus
 - b. To avoid damage to goods and equipment
 - c. To change garment colours
 - d. To reduce teamwork

2. Which compliance standards are important in apparel manufacturing?
 - a. Safety, labour, and quality
 - b. Gardening and cooking
 - c. Sports and recreation
 - d. Painting and decoration

3. What is a techpack used for in garment production?
 - a. To display garments in shops
 - b. To record market prices
 - c. To provide detailed design and specification information
 - d. To package finished products

4. What does a Bill of Materials (BOM) specify?
 - a. Job roles of workers
 - b. Parts, raw materials, and quantities for each style
 - c. Sales targets for garments
 - d. Colour preferences of customers

5. What is the purpose of a Time and Action (TNA) calendar?
 - a. To organise fashion shows
 - b. To outline milestones and timelines for sample development
 - c. To record garment defects
 - d. To track the attendance of workers

Descriptive Questions:

1. Describe how to complete garment production work systematically without damaging goods or equipment.
2. List and explain important compliance standards followed in apparel manufacturing.
3. Explain the role of coordinating with designers and product development teams in pre-production planning.
4. Discuss how garment costing is determined, including both direct and indirect costs.
5. Describe how the Bill of Materials (BOM) and Time and Action (TNA) calendar help in meeting sample timelines.

4. Develop and Present Merchandising Plan



Unit 4.1 - Sample Development, Approvals, and Documentation

Unit 4.2 - Coordinating Production Planning and Costing



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Interpret and confirm product specifications and technical documents.
2. Coordinate and manage pre-production documentation.
3. Facilitate and manage order placements and cost approvals.
4. Conduct prototype development and testing as per standards.
5. Ensure approvals and quality compliance for production readiness.
6. Maintain records and communicate effectively across functions.

UNIT 4.1: Sample Development, Approvals, and Documentation

Unit Objectives

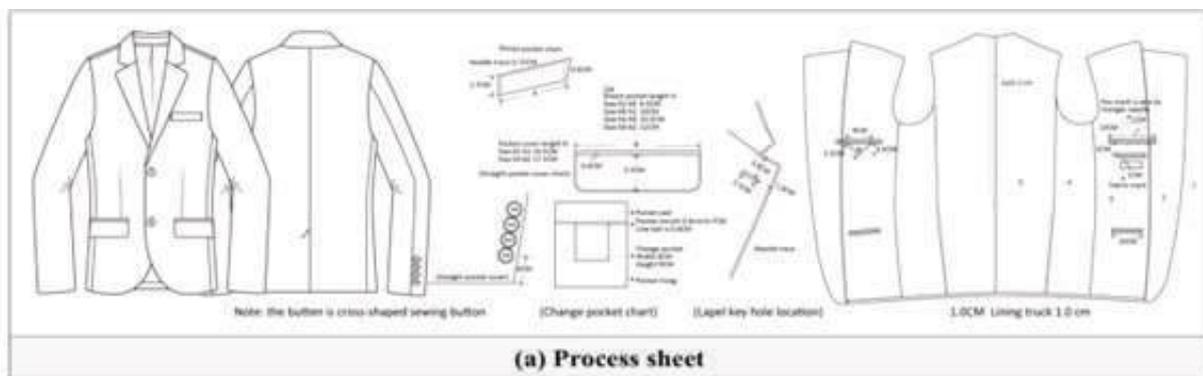
By the end of this unit, the participants will be able to:

1. Seek confirmation on the patterns and drawings from the concerned authority.
2. Interpret the specification sheet/job card prepared in accordance with the standard format.
3. Show how to prepare detailed drawings, mini markers and cut patterns as per the job card.
4. Test the prototype for shrinkage either according to company norms or as per the buyer's standards, if requested.
5. Ensure that the patterns developed are as per the shrinkage report.
6. Discuss how to seek approval of the prototype from the design team.
7. State the importance of seeking the buyer's approval and incorporate changes accordingly, if any.
8. Discuss how to seek approval for size sets from the relevant authority in the organisation.
9. Ensure assembled garments are as per the specification sheet and accepted garment assembly techniques.
10. Discuss how to maintain a complete set of documents with all information, including communications, prototype samples, test reports and compliances.
11. Discuss how to maintain records of past orders received and fulfilled.

4.1.1 Seeking Confirmation on Patterns and Drawings

A merchandiser plays a critical role in ensuring that a product's patterns and drawings are accurate and officially approved before they are sent to the manufacturing floor. This process of seeking confirmation from the concerned authority is a crucial checkpoint that prevents errors, reduces the need for revisions, and ensures that the final product aligns perfectly with the brand's vision.

The "concerned authority" can be a range of people, from the Head Designer to the Technical Head or the buyer's representative, depending on the company's structure and the client.



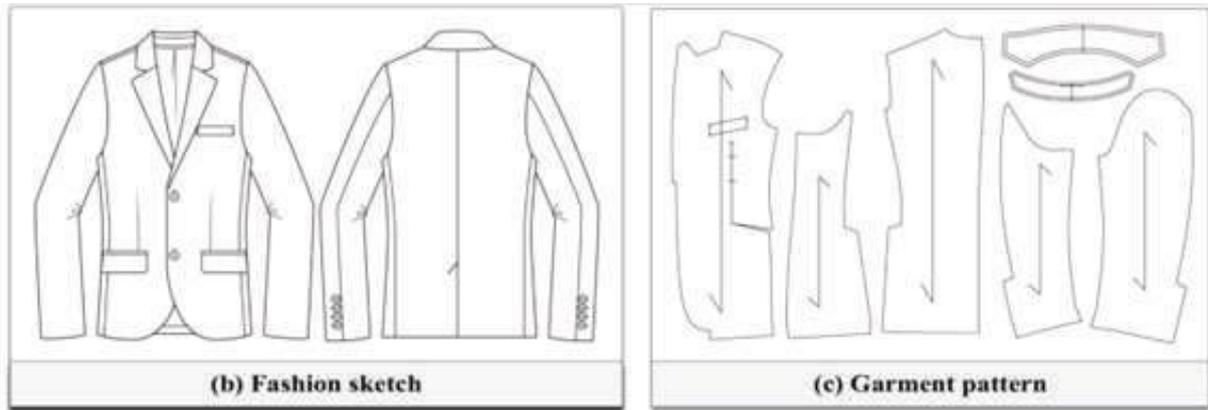


Fig. 4.1.1: patterns and drawings

The process begins with the merchandiser preparing and reviewing all necessary documents. This includes the finalised tech pack containing flat sketches, garment specifications, construction details, and a Bill of Materials (BOM). The master pattern, whether physical or digital, must reflect the intended silhouette, measurements, and design elements accurately. A proto or fit sample, created using these patterns, is essential for physically evaluating the product's fit, construction, and overall appearance. The merchandiser ensures all documents are consistent with the design brief and that measurements fall within acceptable tolerance limits.

Once the materials are reviewed internally, the merchandiser formally submits them for approval. This submission is usually made through an internal approval form or email, with all necessary files attached and relevant notes highlighted. During the approval meeting or review session, the merchandiser must clearly present the product features, explain any complex construction details, and point out areas that require problem-solving. It's equally important to record all feedback and suggested changes made by the authority. If a measurement needs adjustment or a construction method needs modification, this feedback is shared with the pattern maker for prompt corrections.

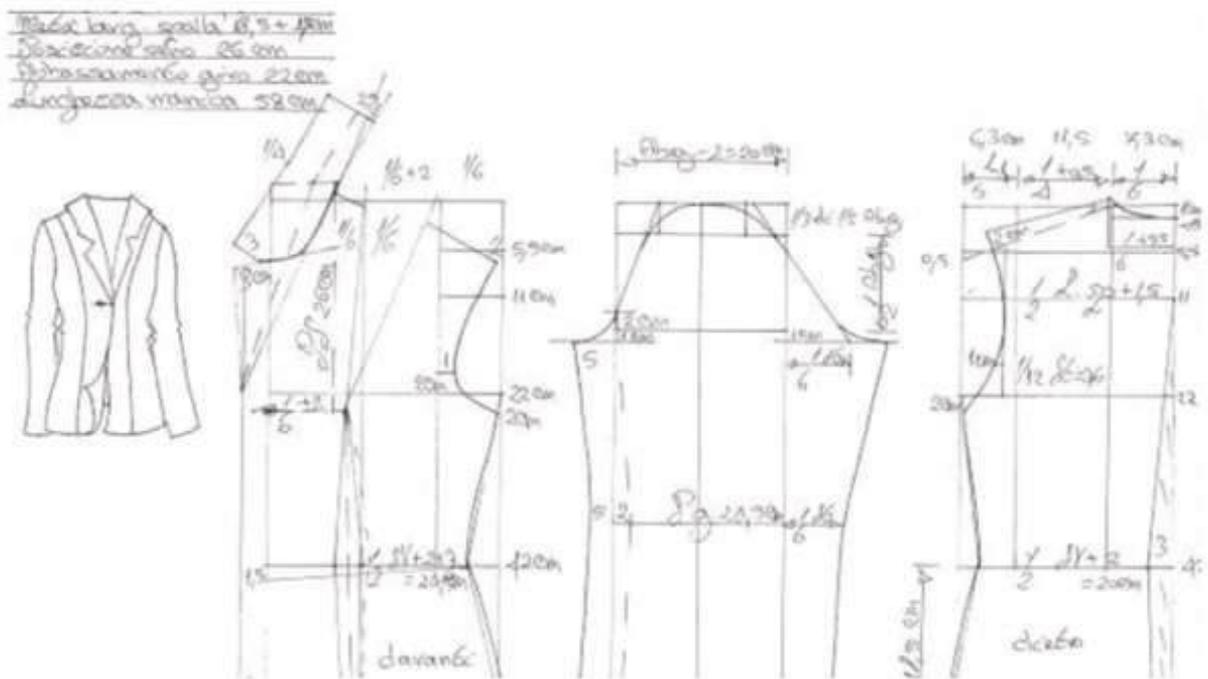


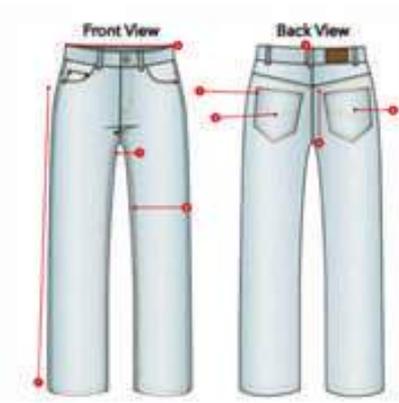
Fig. 4.1.2: Another sample of patterns and drawings

Following approval, the merchandiser obtains formal sign-off—either through a signature or official email confirmation—on the tech pack, pattern, and sample. This signed version becomes the final reference for production. The merchandiser must then communicate the approved details, including any final changes, to the manufacturing team to ensure accurate and consistent production.

Finally, all approved documents, including patterns, tech packs, samples, and related communications, are organised and stored both physically and digitally. This comprehensive record supports traceability, compliance, and repeatability for future production orders.

4.1.2 Interpreting a Specification Sheet or Job Card

A specification sheet, also known as a job card, is a crucial document in the apparel and home furnishing industry. It serves as a comprehensive instruction manual for manufacturing, detailing every technical aspect of a product. For a merchandiser, the ability to accurately interpret this document is fundamental. A specification sheet is prepared in a standard format to ensure that all departments, from design to production, can easily understand and execute the requirements.



	Measurement	TOL(+)	TOL(-)	32	FIT	DIFF	
1	3-point-seat	1/2	-1/2	47	47	0	
2	Inseam-pantsinseam-	1/2	-1/2	34	34	0	
3	1-below-crotch-flat	1	-1	6 1/2	6 1/2	0	
4	Back-pocket-position-	1/2	-1/2	1	1	0	
5	Belt-loop-length	1/2	-1/2	69	71	2	
6	Back-pocket-position-	1/2	-1/2	1	1	0	
7	Fly-Width	1/2	-1/2	3	3	0	
8	Back-pocket-position-	1/2	-1/2	1	1	0	
9	Belt-loop-placement-	1/4	-1/4	4 1/2	4 1/2	0	
10	Zipper-length	0	0	8 1/2	8 1/2	0	
11	Front-rise-straight-to-	1/2	-1/2	11	13	2	
12	Knee opening	1/2	-1/2	8 1/4	8 1/4	0	
13	Waistband-Height	0	0	1	1	0	
14	Belt-loop-placement-	0	0	1 1/2	1 1/2	0	
15	Belt-loop-width	0	0	1/4	1/4	0	
16	Fly-J-style-length-gar	1/8	-1/8	7	7	0	

Fig. 4.1.3: Specification Sheet

The key to interpreting a specification sheet is to break it down into its core sections and understand the information each section provides.

1. Header Information:

The top section of the specification sheet contains essential administrative details. A merchandiser must first look at this information to confirm they are working on the correct product.

- **Style Number:** A unique alphanumeric code that identifies the product.
- **Product Name:** A descriptive name for the item (e.g., "Men's Slim Fit Denim Jeans").
- **Season/Collection:** The season or collection to which the product belongs.
- **Size Range:** The range of sizes in which the product will be produced.
- **Date:** The date the document was created or last revised. This is important for ensuring the latest version is being used.

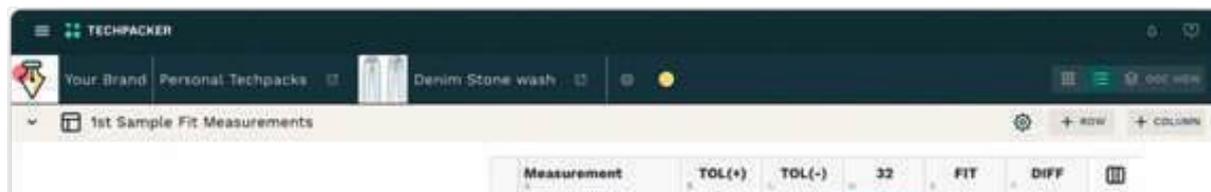


Fig. 4.1.4: Header information of a specification sheet

2. Design and Technical Sketches:

This section contains visual representations of the product.

- **Flat Sketches:** A merchandiser will analyse the flat, two-dimensional drawings of the garment or product from the front, back, and side. These sketches are crucial for understanding the product's silhouette, style lines, and proportions.
- **Close-up Technical Drawings:** These drawings highlight specific construction details. A merchandiser must pay close attention to these to understand how complex elements like a collar, a pocket, or a zipper placket are constructed. This helps in communicating with the factory and ensuring the correct techniques are used.

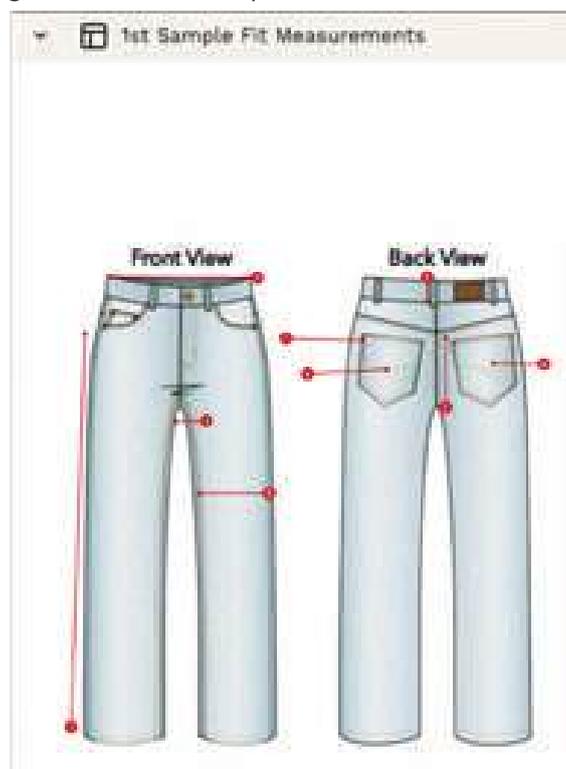


Fig. 4.1.5: Design and technical sketches

3. Bill of Materials (BOM):

This is a comprehensive list of all raw materials and trims. A merchandiser must cross-reference this with the tech pack to ensure accuracy.

- **Fabric:** The merchandiser will check the fabric's details, including its type (e.g., 100% cotton canvas), weight (GSM), and colour.
- **Trims:** They must verify the type, quantity, and placement of every trim, such as buttons, zippers, thread, and labels. For example, if a garment requires a specific type of metal button, the specification sheet will list its part number, size, and colour.

- **Yarn/Thread:** The thread count and colour for stitching are also specified. This is crucial for matching the thread to the fabric and ensuring a clean finish.

BOM			
SEASON	Autum Winter 2012	DATE	9/11/2011
CLIENT NAME	Ereen	STYLE #	#ELD001
SIZE CLASSIFICATION/RANGE	S, M, L, XL	TECHNICAL DESIGNER	Paramita Das
FABRIC NAME	100% Cotton Knitted 220 GSM	PRODUCT CATEGORY	Ladies Dress
FABRIC CONTENT	Cotton	BRAND LABEL	Ereen
STYLE DESCRIPTION	Ladies Dress		
FABRICS	QUANTITY	UNIT PRICE	AMOUNT
100% Cotton S/ 220 GSM SC		\$ -	\$ -
100% Cotton S/ 220 GSM SC		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
TOTAL FABRIC COST		\$ -	\$ -
TRIMS	QUANTITY	UNIT PRICE	AMOUNT
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
TOTAL TRIM COST		\$ -	\$ -
CMT	QUANTITY	UNIT PRICE	AMOUNT
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
TOTAL CMT COST		\$ -	\$ -
PACKAGING MATERIAL	QUANTITY	UNIT PRICE	AMOUNT
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -
TOTAL PACKAGING MATERIAL COST		\$ -	\$ -
TOTAL COST OF GARMENT / PC		\$ -	\$ -
COST OF GARMENT			\$ -
MANUFACTURER PROFT COSTING FOR BUYER			\$ -
CONVERSION RATE :			60
PROFIT IN INR			0



Fig. 4.1.6: Bills of Material (BOM)

4. Measurement Chart (Spec Chart):

This is a tabular section that lists all the points of measurement (POMs) for a garment in a base size, along with an acceptable tolerance.

- **POMs:** A merchandiser must read and understand each measurement (e.g., chest width, sleeve length, hem sweep). These measurements are the benchmark for quality control.
- **Tolerance:** The merchandiser will note the acceptable tolerance (e.g., ±0.5 cm). This means the final product's measurement must fall within this range to be considered acceptable.
- **Grading Rules:** This part of the chart shows how the measurements will increase or decrease for different sizes. A merchandiser must review these rules to ensure a consistent fit across the entire size run.

DATE	20/10/2019	SEASON	SS18	STYLE	NC SS 1807	TRIMS	CONCEALED ZIPPER
TYPE	WOMEN'S MAXI DRESS			DESCRIPTION	MAXI DRESS WITH FRENCH DART AND SIDE PANEL FROM WAIST		
FABRICATION	100% POLYESTER						

MEASUREMENTS	FRONT	BACK
HSP TO BOTTOM HEM	43"	44"
CENTER FRONT AND CENTER BACK	39"	42"
ACROSS CHEST	18"	18 1/2"
ACROSS SHOULDER	14"	8"
SHOULDER WIDTH	2 1/2"	2 1/2"
BOTTOM HEM	25 1/2"	27"
DART LENGTH	8"	10"
LENGTH BETWEEN DART & SIDE SEAM	5"	4"
DART ON SIDE SEAM FROM ARMHOLE	10"	12"
NECK DROP	4 1/2"	1 1/2"
NECK WIDTH	7 1/2"	7 1/2"
NECK LENGTH	12"	9"
ARMHOLE LENGTH	8 1/2"	8 1/2"
ZIPPER LENGTH		18 1/2"
SUIT OPENING		8"
BACK PANEL WIDTH AT BOTTOM HEM		13 1/2"
BACK PANEL WIDTH AT ACROSS SHOULDER		8"
BOTTOM HEM WIDTH	7"	7 1/2"

Fig. 4.1.7: Measurement chart

5. Construction Details and Special Instructions:

This section provides step-by-step instructions on how the product should be assembled.

- **Stitching and Seams:** The specification sheet will detail the type of seams (e.g., French seam, flat-felled seam) and the stitch density (stitches per inch).
- **Finishing:** It will outline any finishing processes, such as the type of hem, the pressing instructions, or a specific wash.
- **Special Notes:** This section may contain crucial information like a specific pattern placement, a detail about a unique print, or a special quality check that needs to be performed. A merchandiser must read these notes carefully, as they often contain critical instructions that can make or break a product's quality.



Fig. 4.1.8: Construction details and special instructions

The merchandiser serves as a vital link between the design, sampling, and production teams by accurately interpreting the specification sheet and job card. This ensures that prototypes are developed correctly, production teams clearly understand the product requirements, and the final output aligns with buyer expectations. If any part of the specification is unclear, the merchandiser must promptly consult the design or technical team to resolve doubts, thereby avoiding errors, delays, and quality issues during production.

4.1.3 Preparing Detailed Drawings, Mini Markers, and Cut Patterns

The job card serves as the guiding document and contains all necessary specifications such as style code, fabric type, size range, buyer requirements, and production notes. A merchandiser must collaborate with the pattern maker, CAD team, and sampling unit to ensure that all outputs align with these specifications.

Preparing Detailed Drawings as per the Job Card

The preparation of detailed drawings is a crucial step that translates a product's design concept into a precise, visual guide for the entire production team. For a merchandiser, this is a collaborative task that requires close coordination with the design team and a meticulous understanding of the job card. The drawings must be an accurate and complete representation of the product, serving as a non-verbal instruction manual for pattern makers, sample coordinators, and production supervisors.

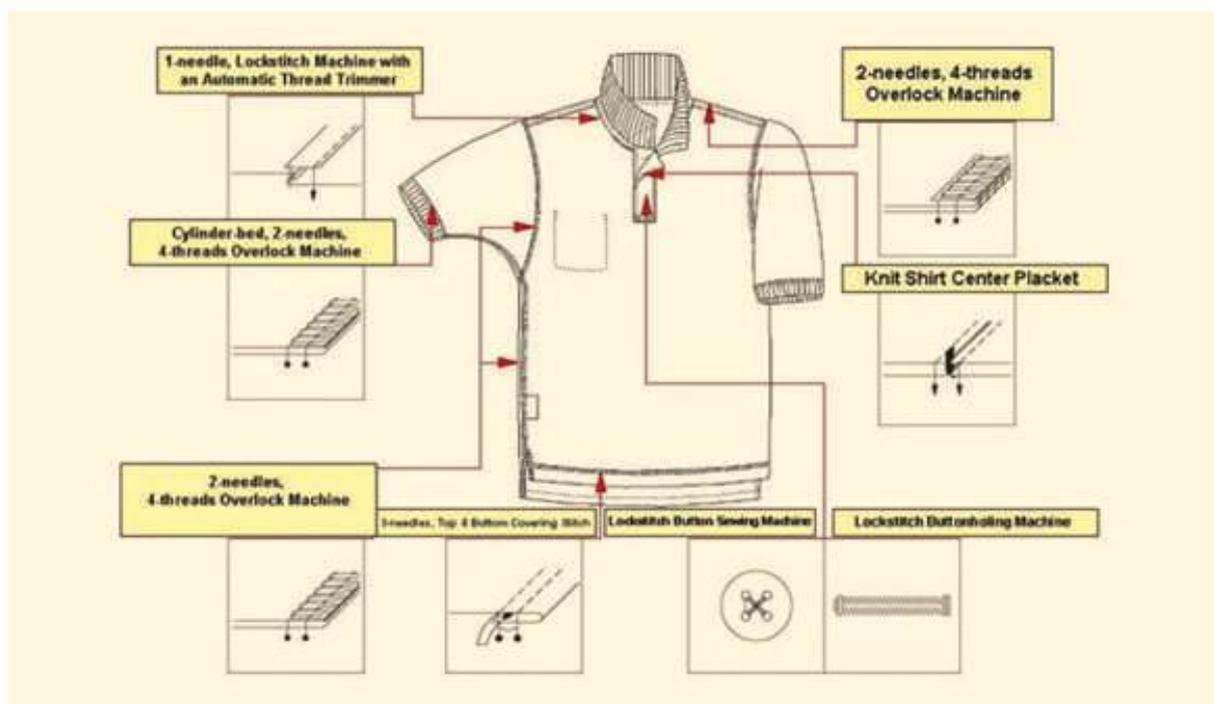


Fig. 4.1.9: Drawing according to the job card

The process involves several structured steps:

Step 1: Deconstructing the Job Card

A merchandiser's first step is to thoroughly deconstruct the job card. This document contains all the written and conceptual information about the product. The merchandiser will analyse:

- **Design Brief:** This provides the overall creative direction, including the product's function, target market, and a general aesthetic.
- **Initial Sketches:** These are the preliminary drawings from the designer. They provide the initial visual concept but often lack the technical details required for production.
- **Material Specifications:** The job card will list all the approved fabrics, trims, and accessories. The merchandiser must understand how these materials will look and behave to represent them accurately in the drawings.

Step 2: Creating the Technical Flat Drawings

The detailed drawings, also known as technical flat drawings, are created by a pattern maker or a technical designer under the guidance of the merchandiser. These drawings are precise, two-dimensional representations of the product from multiple angles.

- **Front, Back, and Side Views:** The drawings must show the garment or product from the front, back, and side. For products with a unique side profile, such as a cushion with a specific shape, a side view is also essential.
- **Accuracy and Proportion:** The drawings must be drawn to scale and maintain the correct proportions. The merchandiser must ensure that the width of a collar, the length of a sleeve, or the depth of a pocket is accurately represented.
- **Clear Lines and Contours:** All seams, topstitching, and style lines must be drawn with clear, crisp lines. This prevents confusion on the production floor. The drawings should not have any unnecessary shadows or artistic flair, as they are a technical document, not an artistic one.

- **Technical Callouts and Notes:** Once the flat drawings are created, they must be annotated with technical callouts and notes. These annotations indicate the exact construction method and material placement. For example, a callout on a sleeve hem may specify "double-needle stitch – 1 cm width" or identify fabric direction and seam types.

Step 3: Adding Technical Callouts and Notes:

The drawings are not complete without detailed annotations. This is where a merchandiser adds the specific instructions from the job card.

- **Callouts for Construction:** A merchandiser will use arrows or lines to "call out" specific areas of the drawing. These callouts will be linked to notes that specify the construction details. For example, a callout on a shoulder seam might have a note that says "Flat-felled seam with contrast thread."
- **Details for Trims and Accessories:** The drawings must clearly show the placement and type of all trims and accessories. A callout pointing to a button might specify its size (e.g., "15 mm button") and colour. The placement of labels and tags is also noted in these drawings.
- **Measurements:** The drawings may also include key measurements, such as the total length of a garment or the width of a hem, to provide a quick reference for the cutting and sewing team.

Step 4: Review and Approval

Before the drawings are finalised and shared with the production team, a merchandiser must conduct a final review. The merchandiser must cross-verify every detail in the drawings against the job card and the approved prototype. Once the merchandiser is satisfied, they must seek a formal sign-off from the concerned authority, which could be the Head Designer or a buyer's representative. This final approval ensures that everyone agrees with the technical specifications before moving to the next stage of production.

Preparing Mini Markers

A mini marker is a scaled-down version of a production marker, which is a layout plan used to cut fabric. For a merchandiser, preparing a mini marker is a critical task in the pre-production phase. Its primary purpose is to accurately calculate the amount of fabric required for a single garment or home furnishing item. This calculation, known as fabric consumption, is a foundational element of the costing process.

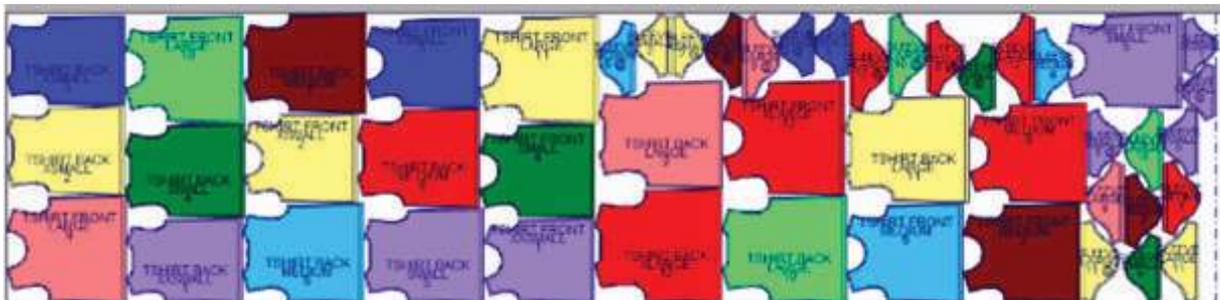


Fig. 4.1.10: Mini marker

The process of preparing a mini marker is a precise, technical exercise that requires careful attention to detail. It is typically created on a computer using specialised software, like CAD.

- 1. Gathering Required Information:** Before creating a mini marker, a merchandiser must collect all necessary details from the job card and tech pack. This includes cut patterns for all parts (e.g., front, back, sleeve), exact fabric width, and fabric properties such as nap or directional prints, which affect how pieces are placed.
- 2. Marker Layout:** The pattern pieces are arranged within the given fabric width to use the smallest possible length. For plain fabrics, pieces may be rotated for a better fit; for directional fabrics, all pieces must face the same way. A small waste allowance (typically 3–5%) is added to account for unavoidable fabric loss.
- 3. Calculating Fabric Consumption:** The length of the completed mini marker determines the amount of fabric needed per piece. This measurement is recorded in the Bill of Materials (BOM) and used for ordering fabric. For instance, if a shirt layout measures 1.2 meters, that's the base consumption per shirt.
- 4. Multi-Size Mini Markers:** Markers may include multiple sizes in one layout to improve efficiency. Smaller-sized pieces can be nested within gaps of larger ones, reducing fabric waste further. This is commonly used in bulk production.

Preparing Cut Patterns

Cut patterns are the final templates used to cut fabric accurately for a garment or home furnishing item. A pattern master, under the merchandiser's guidance, prepares these based on the approved design and technical specifications to ensure proper fit, consistency, and quality.



Fig. 4.1.11: Steps for preparing cut patterns

Step 1: The process starts with creating a base size pattern (e.g., size M for garments). This involves drafting all components using the tech pack measurements and technical drawings. The merchandiser reviews the base pattern against the approved sample and specification sheet for accuracy.

Step 2: Patterns are adjusted to include fabric shrinkage based on test reports. For example, if the fabric shrinks 3% lengthwise, that percentage is added to the relevant pattern pieces to maintain correct post-wash measurements.

Step 3: Once the base pattern is finalised, it is graded to create patterns for all sizes (e.g., S to XL). Grading follows specific rules provided by the merchandiser. Key measurements across sizes are checked to ensure proportional fit.

Step 4: Each pattern piece is clearly marked with the style number, size, component name, grainline, notches, and seam allowance. This helps ensure accuracy during cutting and stitching.

After a final review, the merchandiser seeks approval from the design or technical head. This approved set becomes the official reference for production and future orders.

4.1.4 Testing Prototype for Shrinkage as per Company or Buyer Standards

Shrinkage is a natural characteristic of many fabrics, especially natural fibres like cotton and wool, where the fabric's dimensions change after being subjected to heat, moisture, or chemical processes. Testing a prototype for shrinkage is a crucial quality control measure. This is done to ensure that the final product maintains its intended size and fit after a consumer washes it. Shrinkage testing is a non-negotiable step, as a garment that shrinks more than the acceptable limit can lead to customer dissatisfaction, returns, and a damaged brand reputation.

The process begins by identifying the appropriate test method—commonly based on recognised protocols such as AATCC 135 (home laundering) or ISO 6330—if the buyer has not specified otherwise. The fabric or garment is first measured in both length and width (marking reference points), then laundered under defined conditions (e.g., temperature, cycle, detergent, and drying method) as per the selected standard. After conditioning, the same dimensions are re-measured.

Shrinkage is calculated separately for warp and weft using the formula:

$$\frac{((\text{original dimension} - \text{post-wash dimension})/\text{original dimension}) \times 100}{}$$

For example, a 100 cm length reducing to 97 cm reflects 3% shrinkage.

Results are compared against the acceptable tolerance—either the company's shrinkage allowance or the buyer's specified limit. Suppose the observed shrinkage exceeds the allowable percentage. In that case, the merchandiser coordinates with the technical and pattern teams to adjust the pattern (adding compensation allowance) or recommends pre-shrinking the fabric before cutting. In cases where the shrinkage is within limits, the data is documented and used to finalise the size specifications and grading. All findings, including test conditions, sample IDs, measured values, and corrective actions, are recorded in a shrinkage report. This report is shared with relevant stakeholders, and any deviations or required approvals are communicated promptly to avoid downstream fitting or fit-related quality issues in bulk production.



Fig. 4.1.12: Fabric shrinkage

4.1.5 Ensuring Patterns Align with the Shrinkage Report

The purpose of ensuring patterns align with the shrinkage report is to maintain the intended fit and measurements of the final garment or home furnishing product. Moreover, it also helps to avoid sizing errors after washing or finishing.

Furthermore, the steps that need to be followed for assuring patterns align with the shrinkage report are mentioned as follows:

Step 1: Interpreting the Shrinkage Report

- The shrinkage report typically provides:
 - Lengthwise shrinkage (warp): % shrinkage along fabric length.
 - Widthwise shrinkage (weft): % shrinkage along fabric width.
- Example:
 - 3% lengthwise shrinkage → 100 cm fabric becomes 97 cm.
 - 2% widthwise shrinkage → 100 cm fabric becomes 98 cm.
- This data forms the basis for all pattern adjustments.

Step 2: Calculating Shrinkage Allowance

- Add proportional allowance to all pattern measurements:
 - For 3% lengthwise shrinkage, add 3% to all lengthwise dimensions (e.g., garment length, sleeve length).
 - For 2% widthwise shrinkage, add 2% to all widthwise dimensions (e.g., chest width, hem sweep).
- Example calculation:
 - If the finished garment length should be 75 cm and the fabric shrinks 3% in length,
 - Pattern length = $75 \text{ cm} \div 0.97 \approx 77.25 \text{ cm}$.
 - After washing, the garment's length returns to 75 cm.

Step 3: Coordinating with the Pattern Master

- Merchandiser provides:
 - Final approved measurements from the tech pack.
 - Shrinkage percentages from the lab report.
- Pattern master adjusts the base pattern using these inputs to incorporate the shrinkage allowance.

Step 4: Validation with New Sample

- Request a sample based on the adjusted pattern.
- Wash and re-measure the sample.
- Ensure washed measurements match tech pack specifications.
- This confirms that the shrinkage allowance is correctly applied.

Step 5: Documentation and Record-Keeping

- Update the tech pack measurement sheet with unwashed pattern measurements.
- Clearly mark and file the final approved pattern with the shrinkage allowance.
- Maintain written records explaining changes and rationale.
- These records guide future production of the same style and prevent confusion.

4.1.6 Sample Approval Process and Confirmation for Production

Once the prototype sample is developed, the merchandiser coordinates with the design team to conduct a detailed review. This internal review ensures that the prototype meets the approved tech pack specifications, including design details, measurements, fit, construction quality, and finishing. Any observations or suggestions from the design team are noted and addressed before sending the prototype to the buyer.

The prototype is then shared with the buyer for approval. Along with the physical sample, the merchandiser also sends relevant documentation such as the measurement chart, shrinkage report (if applicable), and any explanation regarding design adaptations. The buyer may approve the sample as is or suggest corrections. In case of feedback or changes, the merchandiser ensures that revisions are made promptly and a corrected version is shared for final approval.



Fig. 4.1.13: Sample approval and confirmation

Once the buyer's approval is received, the merchandiser oversees the development and review of internal size sets. These are multiple garments made in different sizes as per the size range specified. The purpose of size set approval is to ensure grading accuracy and fit consistency across all sizes. After internal review and confirmation from the design or technical team, the size sets are approved, and the product is cleared for bulk production. This structured process helps in maintaining quality and alignment with buyer expectations.

4.1.7 Verifying Assembled Garments Against Specifications

A merchandiser's role extends beyond the pre-production stage to the active monitoring of the manufacturing process. A critical part of this is to ensure that the garments being assembled at the factory are consistent with the approved specification sheet and use accepted industry assembly techniques. This is a crucial quality control function that a merchandiser performs to prevent mass production of faulty or inconsistent products. This vigilant monitoring ensures that the final product will meet the buyer's quality standards and that the brand's reputation for excellence is upheld.

The process involves a series of checks and in-process audits conducted at various stages of production.

1. Understanding the Specification Sheet and Approved Sample:

Before a merchandiser can verify a garment's assembly, they must have a complete and detailed understanding of the specification sheet and the officially approved pre-production sample (PPS). The specification sheet is the blueprint, detailing every measurement, fabric, trim, and construction method. The PPS is the physical embodiment of this blueprint, showing how a correctly made garment should look, feel, and fit. A merchandiser will use these two documents as the ultimate benchmarks for quality.

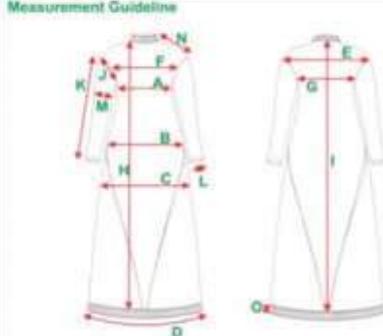
Full Length Knitted Dress	FINISHED GARMENT MEASUREMENTS							FABRIC DESCRIPTION & CONSTRUCTION		
	ALL ACROSS MEASUREMENT ARE TAKEN FLAT							STYLE: Full Length Knitted Dress		
								SEASON: SPRING SUMMER		
	SIZE XS	SIZE S	SIZE M	SIZE L	SIZE XL	SIZE XXL	SIZE XXXL	SAMPLE SIZE: M		
A	Chest 1/2	17	18	19	20	21	22	23	STYLE DESCRIPTION: Full Length Knitted Dress Measurement Guideline 	
B	Waist 1/2	15	16	17	18	19	20	21		
C	Hip	17 1/2	18 1/2	19 1/2	20 1/2	21 1/2	22 1/2	23 1/2		
D	Bottom Hem	40	42	44	46	48	50	52		
E	Shoulder	13 1/2	14	14 1/2	15	15 1/2	16	16 1/2		
F	Across Front	12	12 1/2	13	13 1/2	14	14 1/2	15		
G	Across Back	12 3/4	13 1/4	13 3/4	14 1/4	14 3/4	15 1/4	15 3/4		
H	Length From HPS	58	58	59	59	60	60	61		
I	Center Back Length	57 1/4	57 1/4	58 1/4	58 1/4	59 1/4	59 1/4	60 1/4		
J	Armhole Straight	7	7 3/8	7 3/4	8 1/8	8 1/2	8 7/8	9 1/4		
K	Sleeves Length	17 1/2	17 3/4	18	18 1/4	18 1/2	18 3/4	19		
L	Sleeves Opening	5	5 1/2	6	6 1/2	7	7 1/2	8		
M	Bicep	6	6 1/2	7	7 1/2	8	8 1/2	9		
N	Shoulder Seam	3 1/8	3 1/4	3 3/8	3 1/2	3 5/8	3 3/4	3 7/8		
O	Bottom Hem Rib Height	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2		
P										MAIN LABEL: N/A
Q										CARE LABEL: N/A
R										OTHER LABELS: N/A
S										HANG TAGS: N/A
T										COVERSTITCH: Overlock
U									SEAM ALLOWANCE: 1/2 inch AllOver the Garment	
V									REQUIRED STITCHES PER INCH: 10	
W									THREAD: DTM	
X									TREATMENT: Bio Softner Wash	
Y										
Z										

Fig. 4.1.14: Specification sheet

2. Conducting In-Process Quality Checks:

A merchandiser or a quality control team conducts checks at different stages of the assembly line to catch errors early.

- Initial Stages (Pilot Run):** A merchandiser should be present during the factory's "pilot run" or initial production of a few dozen garments. This is the first opportunity to verify that the factory's setup is correct and that the workers are following the specified assembly techniques. At this stage, a merchandiser can check if the seams are correct, if the stitching is straight, and if the correct thread and needles are being used.



Fig. 4.1.15: Finishing

- Mid-Production Checks:** Throughout the production run, random in-line inspections are performed. A merchandiser will pull out a few garments from the assembly line and check them against the specification sheet and the PPS. They will check key measurements, such as the collar length or sleeve width, and verify that the correct seams (e.g., flat-felled seam for denim) and stitches are being used.
- Finishing and Trimming:** The merchandiser must ensure that the garment finishing is also up to standard. This includes checking for loose threads, proper button and zipper attachment, and the correct placement of labels and tags. For example, a merchandiser will perform a "button pull test" to ensure that buttons on children's wear are securely attached and do not pose a choking hazard.

3. Verifying Garment Assembly Techniques:

A merchandiser must have a working knowledge of standard garment assembly techniques to ensure they are being executed correctly.

- **Seam Quality:** A merchandiser will check the quality of the seams, ensuring they are not puckered or uneven. They will also verify that the seam allowance is consistent and that the seam type (e.g., French seam for delicate fabrics) is being used as specified.



Fig. 4.1.16: Seam quality

- **Stitching and Thread:** The stitch density, which is the number of stitches per inch, is a key quality indicator. A merchandiser will check if the factory is using the specified stitch density and if the thread colour matches the fabric.



Fig. 4.1.17: Stitching

- **Pattern Matching:** For garments with stripes, checks, or a complex print, a merchandiser must ensure that the patterns are matched correctly at the seams, such as at the pocket and the side seams. This shows a high level of craftsmanship and is often a non-negotiable requirement for many brands.

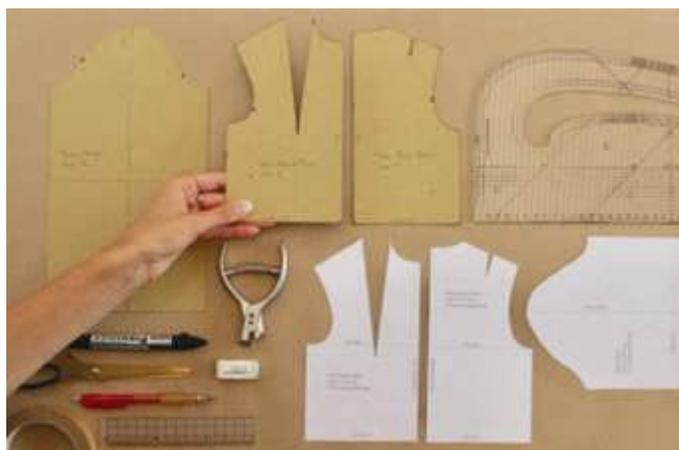


Fig. 4.1.18: Pattern matching

This proactive approach to quality control is far more effective than waiting for a final inspection, as it prevents the production of a large number of defective garments.

4.1.8 Maintaining Comprehensive Documentation

In the dynamic world of apparel and home furnishings, a merchandiser's ability to maintain a complete and organised set of documents is as essential as their creative and analytical skills. This meticulous record-keeping not only supports efficient workflow but also ensures consistency, accountability, and compliance across all stages of product development and production.

For every order, the merchandiser is responsible for creating and maintaining a comprehensive file, both in physical and digital formats. This file acts as the official record of all activities and must include:

- **All Communications:** Every email, meeting note, or official correspondence—especially those involving approvals or changes with the buyer, design, or production team—should be documented. This helps resolve disputes, trace decision-making, and track the evolution of a product.
- **Proto and Approved Samples:** Properly labelled and stored physical samples—including the proto sample, fit sample, and pre-production sample (PPS)—must be preserved. These samples act as a reference for quality assurance and consistency in bulk production.
- **Test Reports:** All laboratory test reports related to colourfastness, shrinkage, fabric content, or safety compliance (e.g., REACH, CPSIA) should be included. These reports demonstrate adherence to buyer standards and legal requirements, especially for international shipments.
- **Compliance and Audit Reports:** Reports on social, environmental, and labour compliance audits of the production unit should be filed. These documents are critical for ensuring ethical sourcing practices and for meeting buyer or regulatory expectations.
- **Financial and Commercial Records:** Key documents such as purchase orders, cost sheets, quotations, and invoices must be maintained to track order performance, calculate profitability, and settle any financial discrepancies.

4.1.9 Importance of Record Keeping for Past Orders

Maintaining a detailed archive of past orders, regardless of how long ago they were fulfilled, provides merchandisers with both operational advantages and strategic insights. These records act as a valuable reference point that supports efficiency, consistency, and quality across future orders and product development activities.

One of the primary benefits of record keeping is the ease of handling re-orders. When a successful style is requested again, the merchandiser can refer to the existing documentation to access the original tech pack, bill of materials (BOM), vendor details, and cost structure. This ensures that the re-produced product matches the original in both quality and appearance. Maintaining this consistency is crucial for building and retaining buyer trust and upholding brand identity.

In addition, past records play a key role in design and product development. By reviewing test reports, sample feedback, and notes from previous production runs, the merchandiser can identify what elements were successful and which ones posed challenges. This analysis can inform decisions related to fabric choices, design modifications, and garment construction techniques, ultimately reducing errors and improving product performance.

These archives are also essential for evaluating vendor performance. By studying the records of completed orders, merchandisers can assess each supplier's reliability in terms of delivery timelines, quality standards, responsiveness, and ability to resolve issues. This helps in making better-informed decisions when selecting vendors for future orders, leading to stronger and more dependable supply chain partnerships.

UNIT 4.2: Coordinating Production Planning and Costing

Unit Objectives

By the end of this unit, the participants will be able to:

1. Seek approval and update all the worksheets, such as the trims sheet, fabric sheet, consumption sheet (fabric and thread), etc.
2. Show how to raise and receive P.O. (Purchase Order) & P.I (Performa Invoice).
3. Explain how to seek approval for the actual updated TNA from the concerned authority.
4. Seek confirmation for mass production from the relevant authority.
5. Discuss the need to seek confirmation about the costing from the buyer and vendor.

4.2.1 Key Worksheets

In the merchandising process of apparel, made-ups, and home furnishings, maintaining accurate and updated documentation is critical to ensure seamless coordination between design, sourcing, production, and quality teams. Some of the most important worksheets involved are:

1. Trims Sheet

TRIMS & ACCESSORY AVL. CONFIRMATION SHEET					
Style	#Y2S2021			Date: 15-08-2022	
Buyer	Buyer name	Order Quantity	10000	Garment Size: L	
Line No.	18	No of Line Plan	1	Calculate By: IE Team	
Garment Image	Description	File Average		Production Average	
	Jelly Thread	140	MTL	140	MTL
	Button Loop	5	CM	6	CM
	Binding Fabric	15	GRAM	15	GRAM
	Armhole Fritl Avg	8	CM	12	CM
Sign. IE	Sign. Supervisor	Sign. Floor Incharge		Factory Manager	

- **Key Components**
 - Trim name and description
 - Size, colour, and type
 - Quantity per piece and total
 - Supplier/vendor name
 - Lead time and delivery status
 - Trim code (if any)
- **Purpose:** To list all required trims for the product and track sourcing and delivery
- **When It Is Used:** During sampling, costing, and bulk production

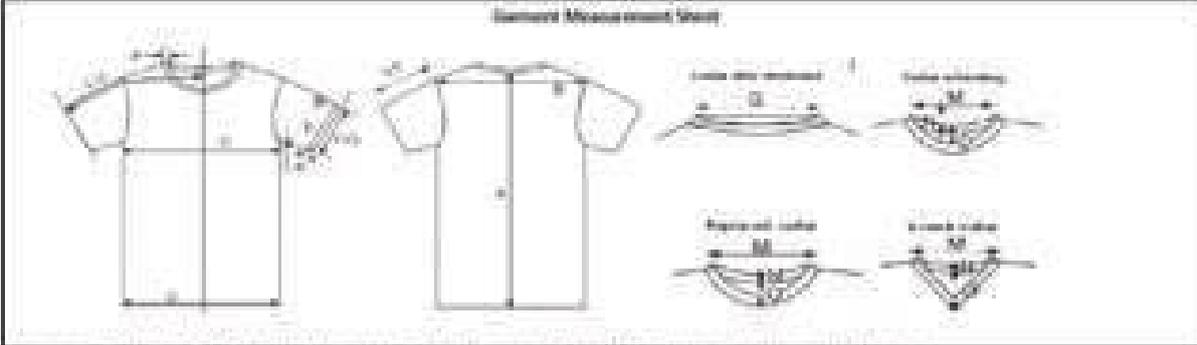
3. Consumption Sheet (Fabric & Thread)

Stitch Class	Description	Total thread usage (cm per cm of seam) / thread ratio	No. of needles	Needle thread %	Looper / under (incl. cover) threads %
301	Lock stitch	2.5	1	50	50
101	Chain stitch	4.0	1	100	0
401	Two thread chain stitch (over lock)	5.5	1	25	75
304	Zigzag lock stitch	7.0	1	50	50
503	Two thread over edge stitch (over lock)	12.0	1	55	45
504	Three thread over edge stitch (over lock)	14.0	1	20	80
512	Four thread mock safety stitch (over lock)	18.0	2	25	75
516	Five thread safety stitch (over lock)	20.0	2	20	80
406	Three thread covering stitch (flat lock)	18.0	2	30	70
602	Four thread covering stitch (flat lock)	25.0	2	20	80
605	Five thread covering stitch (flat lock)	28.0	3	30	70

- **Key Components**
 - Fabric consumption per unit (in meters/yards)
 - Thread consumption per unit (in meters/cones)
 - Stitch type and SPI (Stitches per Inch)
 - Waste allowance (3–5%)
 - Total requirement for the order
 - Material cost per unit and per order
- **Purpose:** To calculate the amount of fabric and thread required, and estimate cost and procurement needs
- **When It Is Used:** During costing, market planning, and procurement

4. Tech Pack (Technical Package)

Technical Measurement Sheet



Measurement set: 1) USM, CM (Note: Measurements are not approved, ensure fit and approval (Measurements for bulk)

Code	NAME	XXS	XS	S	M	L	XL	Alternative Unit
A	LENGTH OF SLEEVE (ON CENTER)	48.00	51.00	54.00	56.00	61.00	66.00	
B	LENGTH OF SLEEVE (ON BATH)	51.00	54.00	56.00	58.00	63.00	68.00	
C	1/2 WIDTH OF CHEST	37.00	39.00	41.00	44.00	47.00	50.00	
D	1/2 WIDTH OF BOTTOM	37.00	39.00	41.00	44.00	47.00	50.00	
E	1/2 WIDTH OF SLEEVE (ON UNDER ARM HOLE)	17.50	18.50	19.50	21.00	22.50	23.00	
F	1/2 WIDTH OF SLEEVE (SLEEVE)	17.50	18.00	18.50	19.00	19.50	20.00	
G	LENGTH OF SLEEVE FROM 1/2 NECK HOLE	28.00	30.00	32.00	34.00	36.00	38.00	
M	WIDTH OF NECK HOLE	15.00	16.20	16.50	17.00	17.50	18.00	
N	DEPTH OF BACK NECK HOLE	2.50	2.50	2.50	2.50	2.50	2.50	
O	DEPTH OF FRONT NECK HOLE	6.00	6.50	6.50	6.80	7.10	7.40	
P	HEIGHT OF COLLAR (2.00 WIDTH)	2.00	2.00	2.00	2.00	2.00	2.00	
Q	1/2 MINIMUM NECK HOLE WIDTH, AFTER STRETCHED	16.50	17.00	17.50	18.20	18.90	19.60	
S	LENGTH OF SLEEVE FROM SHOULDERS	22.50	23.75	25.00	26.00	27.00	28.00	

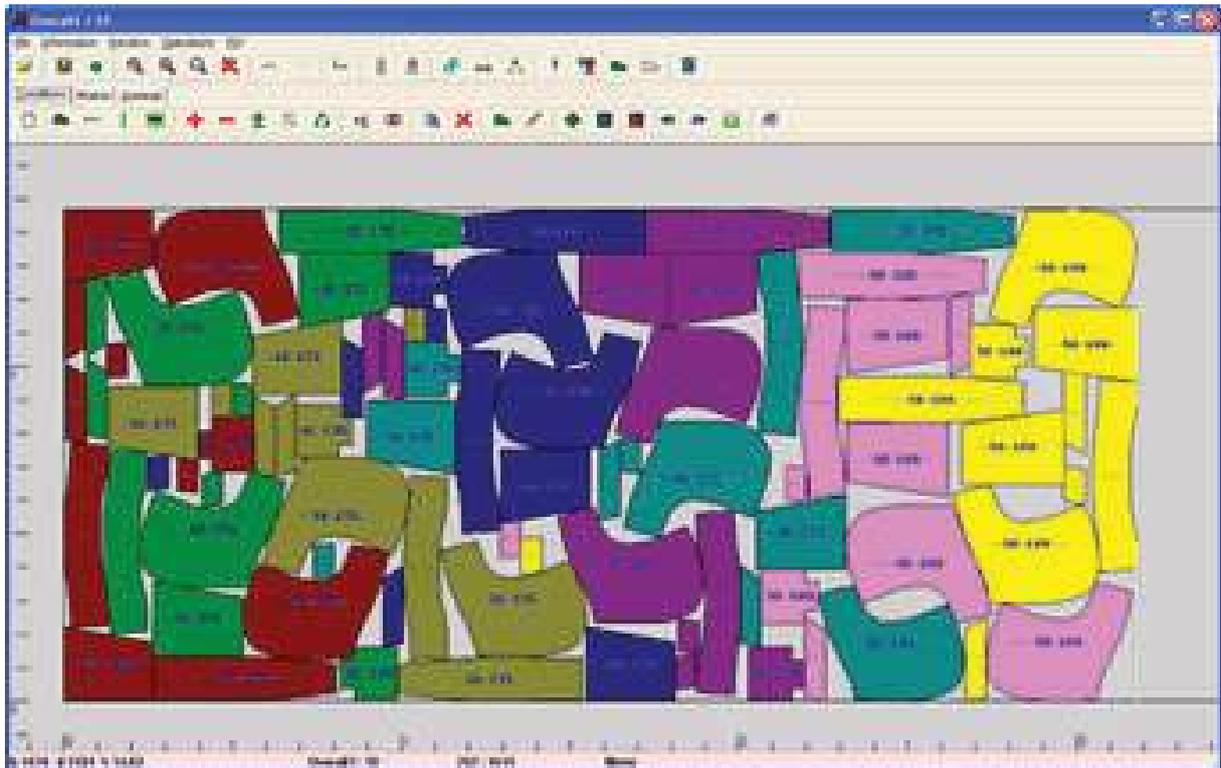
- **Key Components**

- Flat sketches (front/back/side)
- Construction methods
- Fabric and trim details
- Size chart with tolerances
- Print/embroidery placement
- Label and tag info
- Wash care symbols
- Colourways
- Packaging instructions

- **Purpose:** To serve as the master document for design specifications, quality standards, and production guidance

- **When It Is Used:** Throughout development to final production

5. Marker Sheet (Mini Marker)



- **Key Components**
 - Pattern layout for fabric width
 - Pattern piece arrangement
 - Fabric direction and grainline
 - Marker length for consumption calculation
 - Size-wise combinations
- **Purpose:** To visually plan fabric usage for optimal consumption and minimal wastage
- **When It Is Used:** During pre-production and cutting

6. Approval Sheet (Optional)

- **Key Components**
 - Trim approvals- Fabric swatches
 - Lab dips or strike-offs
 - Size set or fit comments
 - Approval dates and sign-offs
- **Purpose:** To track approvals from design or buyer teams for trims, fabrics, or samples
- **When It Is Used:** After sampling, before bulk order

Seeking Approval and Updating Worksheets



Fig. 4.2.1: Steps for seeking approval and updating worksheets

Step 1: The merchandiser prepares each worksheet based on the latest design inputs, job card details, and proto sample reviews. Information is gathered from the design team, sampling team, and sourcing department.

Step 2: Before sharing the worksheets for formal approval, the merchandiser conducts an internal review with relevant team members. Any discrepancies, missing details, or changes from sampling feedback are corrected.

Step 3: Each worksheet is shared with the concerned authority for approval:

- Trims Sheet and Fabric Sheet – sent to the sourcing head or technical manager
- Consumption Sheet – verified and approved by the costing or finance team
- Tech Pack – signed off by the designer or product development manager

Approval may be obtained via email, digital workflow platforms, or physical signature, depending on company policy.

Step 4: Once approvals are received:

- All approved changes are incorporated into the final version of the documents
- Version control is maintained by updating the date and version number
- Any changes during bulk production (e.g., fabric shade variation or trim substitution) are re-approved and documented
- Updated worksheets are shared with the production, quality, and logistics teams

Step 5: All final worksheets are archived in digital folders or ERP systems. This helps in easy retrieval for future re-orders, audits, or analysis.

Maintaining updated and approved worksheets ensures consistency, cost control, and smooth communication across all teams involved in the product lifecycle. For merchandisers, this documentation is an essential tool for managing production efficiency and quality compliance.

4.2.2 Managing Purchase Orders (P.O.) and Proforma Invoices (P.I.)

The Purchase Order (P.O.) and Proforma Invoice (P.I.) are two key commercial documents used during any buying and selling process.

Purchase Order (P.O.)

A Purchase Order is a formal document issued by the buyer (such as a merchandiser or sourcing department) to the supplier. It confirms the intention to purchase specific goods or services at agreed prices and terms.

A P.O. includes essential details such as:



Fig. 4.2.2: details on a PO

Once the supplier accepts a P.O., it becomes a legally binding agreement.

Proforma Invoice (P.I)

A Proforma Invoice is a document issued by the seller (supplier or manufacturer) before the goods are delivered. It is essentially a pro-forma or estimated invoice that outlines the details of the proposed sale. It provides a quotation or a detailed breakdown of the goods or services to be delivered, including pricing, quantities, and terms of delivery.

The P.I. helps the buyer understand the estimated cost and conditions before finalising the order. It is not a legal invoice, but a confirmation of what will be supplied.

Raising a Purchase Order (P.O.)

The process of raising a P.O. is initiated by the merchandiser after a product's samples and costs have been finalised and approved by the buyer.

- 1. Gathering All Information:** The merchandiser first gathers all the final details for the order. This includes the approved tech pack, the final product price, the exact quantities for each size and colour, and the agreed-upon delivery date.
- 2. Generating the P.O.:** The merchandiser then uses the company's internal software or a standard template to generate the P.O. This document will include a unique P.O. number for tracking, the names and addresses of both the buyer and the seller, a list of the products with their style numbers and a detailed breakdown of the order quantity per size and colour, the unit price per piece, and the total value of the order.

Once verified, the P.I. is internally approved by the accounts or finance department. If an advance payment is required, it is released based on the P.I. The P.I. is often a required document for opening a Letter of Credit (LC), which is a common payment method for international trade.

Both documents (P.O. and P.I.) are stored for reference during the order follow-up, delivery tracking, and final invoicing.

4.2.3 Seeking Approval for the Updated Time and Action (TNA) Calendar

Time and Action (TNA) is a detailed project management tool used by merchandisers to track all key activities in the production process, from product development to final shipment. It includes a list of important tasks, deadlines, and responsible departments. The TNA ensures that the production process stays on schedule, helping prevent delays and ensuring on-time delivery.

Once the TNA is prepared or updated, it must be reviewed and approved by the concerned authority - the Production Head, Planning Manager, or Buyer's Representative, depending on the company structure. Seeking approval for the actual updated TNA is a crucial step to align all departments with the new timeline.

Stage	Action/ Activities	Planned Date/ Duration/days	Reduction of time
1	Confirmation of order	1-Sep	-119
2	Received PO	2-Sep	-118
3	Release fabric PO	7-Sep	-113
4	Release Accessories PO	7-Sep	-113
5	Bulk fabric app.(Quality)	7-Sep	-113
6	Lap dip app.	10-Sep	-110
7	Measurement app.	15-Sep	-105
8	level app.	20-Sep	-100
9	Booking of fabric	20-Sep	-100
10	Bulk fabric (FML)	25-Sep	-65
11	Fabric in house	5-Oct	-55
12	Bulk fabric app.(for shade)	6-Oct	-54
13	Send accessories for test	10-Oct	50
14	Accessories in house	12-Oct	-48
15	PP meeting with supplier	15-Oct	-45
16	Cutting	15-Oct	-45
17	Sewing	18-Oct	-42
18	Gold seals app.	5-Nov	-25
19	test result send	15-Nov	-16
20	Pre-shipment inspection	28-Nov	-3
21	Goods Ex-factory	1-Dec	0

Fig. 4.2.4: TNA Calendar

The process of seeking approval for an updated TNA calendar is a crucial step that ensures all stakeholders are aligned with the new production schedule. It is a formal procedure that provides a clear record of any changes and their rationale.

- 1. Update the TNA with Accurate Data:** The merchandiser first updates the TNA with actual dates, revised timelines, and any changes in milestones based on current status. This includes:

- Sampling completion dates
 - Fabric and trim delivery timelines
 - Cut, sew, and finishing start/end dates
 - QC checkpoints
 - Packing and shipment schedules
2. **Highlight Key Changes:** If any original deadlines have been changed due to delays or early completions, the merchandiser must highlight them clearly in the updated TNA. Colour codes or comments may be added for easy reference.
 3. **Attach Supporting Documents:** Supporting documents, such as updated production schedules, fabric arrival reports, sample approvals, and vendor commitments, should be attached to strengthen the updated timeline.
 4. **Share the Draft with Stakeholders:** The merchandiser shares the updated TNA draft with all relevant stakeholders—production, quality, sourcing, logistics, and planning teams—for preliminary feedback before final approval.
 5. **Schedule an Approval Meeting or Discussion:** If required, a short meeting or virtual discussion is scheduled with the approving authority to present the updated TNA, explain the changes, and confirm that all departments are aligned.
 6. **Receive Formal Approval:** Once the authority reviews and agrees to the revised TNA, formal approval is recorded either via email, digital sign-off, or through an ERP system. This approved TNA becomes the official timeline for all teams to follow.
 7. **Circulate the Approved TNA:** After approval, the merchandiser distributes the final TNA to all concerned departments. This version is then monitored regularly, and any further updates are again tracked and revalidated if needed.

4.2.4 Seeking Confirmation for Mass Production from the Relevant Authority

Formal Confirmation Before Mass Production

The purpose of formal confirmation is to ensure all pre-production requirements are met before bulk manufacturing. Moreover, it prevents costly errors, production delays, and unnecessary rework.

Verification of Approvals and Documents

- **Confirm the following are in place before production:**
 - Final sealed sample approval.
 - Fabric and trims approval.
 - Fit and construction approval.
 - Lab test reports (e.g., shrinkage, colourfastness).
- **Ensure essential documents are finalised and signed off:**
 - Techpack.
 - Bill of Materials (BOM).
 - Consumption sheets.

Pre-Production Meeting (PPM)

- **Participants**
 - Merchandiser, production team, QA team, sourcing department, and pattern department.
- **Key Activities**
 - Present the approved sample.
 - Review the production-ready TNA (Time and Action) calendar.
 - Discuss any special construction or quality guidelines.
 - Align all departments to ensure a smooth production start.



Fig. 4.2.5: An example of a PPM

Mass Production Request Submission

- Submitted to the buyer, QA team, or production manager after PPM.
- May be in standard format or email format.
- Must include:
 - Final sample reference.
 - Status of fabric and trims.
 - Fit approvals.
 - Any specific buyer instructions.
- Attach supporting documents:
 - Techpack.
 - Fabric and trim sheets.
 - Consumption sheets.

Receiving Written Confirmation

- **Forms of approval**
 - Email confirmation.
 - Digital sign-off via ERP system.
 - Physical signature on the production file.

Action after approval

- Merchandiser communicates the go-ahead to the production team.

Approved sample and related documents are shared with production and QA teams to maintain consistency in bulk production.

4.2.5 Need for Seeking Confirmation about Costing from Buyer and Vendor

Seeking confirmation about the costing from both the buyer and the vendor is a crucial step in the merchandising process. Costing forms the financial foundation of any order, and any miscommunication can lead to losses, delays, or order cancellations.

From the buyer's side, confirmation ensures that the price quoted is accepted and matches their budget expectations. It allows the buyer to lock the final product cost, including fabric, trims, labour, and overheads, before placing the purchase order. This confirmation also prevents disputes later regarding hidden costs or changes in product specifications.

From the vendor's side, confirming the costing ensures that the supplier or manufacturer is clear about their margin and can deliver the product within the agreed cost. It also helps vendors in planning raw material sourcing, production scheduling, and managing profitability. Any changes in the approved costing must be re-negotiated and documented to maintain transparency.

Overall, obtaining costing confirmation protects the interests of both parties and establishes a mutual agreement before mass production begins.

Summary

- Patterns, drawings, and specification sheets must be confirmed and interpreted accurately for proper sample development.
- Detailed drawings, mini markers, and cut patterns should align with job cards and shrinkage test reports.
- Prototypes and size sets require approval from design teams, buyers, and relevant authorities before mass production.
- All garment assemblies must follow specification sheets and standard assembly techniques.
- Complete documentation, including test reports, communications, and past order records, must be maintained systematically.
- Production planning involves updating worksheets, receiving P.O. and P.I., and confirming TNA schedules.
- Costing must be confirmed with buyers and vendors before proceeding with production.

Exercise

Multiple-choice Question:

1. Why is it important to test a prototype for shrinkage?
 - a. To change the garment colour
 - b. To ensure patterns match after washing
 - c. To reduce stitching time
 - d. To decorate the sample

2. What does a specification sheet or job card provide?
 - a. Worker attendance details
 - b. Information on garment design and assembly requirements
 - c. Price of raw materials
 - d. Fabric dyeing methods

3. Which documents must be maintained during sample development?
 - a. Only emails
 - b. Prototype samples, test reports, and communications
 - c. Only verbal instructions
 - d. Employee salary records

4. What is the purpose of raising a Purchase Order (P.O.) and a Performa Invoice (P.I.)?
 - a. To hire workers
 - b. To track material purchase and payment terms
 - c. To store old documents
 - d. To record attendance

5. Why is costing confirmation required before production?
 - a. To reduce garment size
 - b. To ensure clarity between buyer and vendor on expenses
 - c. To decorate the worksheet
 - d. To test garment strength

Descriptive Questions:

1. Explain how patterns and drawings are confirmed with the concerned authorities before sample development.
2. Describe the steps involved in testing a prototype for shrinkage and ensuring patterns match the report.
3. Discuss the importance of maintaining a complete documentation set, including test reports and past order records.
4. Explain how P.O. (Purchase Order) and P.I. (Performa Invoice) are raised and received during production planning.
5. Describe why costing confirmation with buyers and vendors is important before starting mass production.

5. Communicate with Client and Manage Merchandising Documents



Unit 5.1 - Client Communication and Approvals Management

Unit 5.2 - Merchandising Documentation and Record Management



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Process of communication with the buyer and other departments for the approval of the sample.
2. Describe the design catalogue.
3. Explain the production concept, fabric sheet.
4. Discuss the importance of documentation.
5. Elucidate the importance of communication.

UNIT 5.1: Client Communication and Approvals Management

Unit Objectives

By the end of this unit, the participants will be able to:

1. Communicate with the buyer and obtain approvals for samples at different manufacturing stages (prototype sample, pre-production sample, etc.).
2. Collect order information from the buyer, including style, quantity, trims, labels, tags, packaging methods, and design catalogue references.
3. Follow the organisation's communication protocols, reporting structure, and procedure for obtaining work-related information.
4. Manage sensitive product-related information (design, compliance, production capability) while adhering to confidentiality and Intellectual Property Rights (IPR) guidelines.
5. Seek confirmation from the buyer and vendor regarding costing before moving ahead with production.
6. Receive and process order confirmation or Purchase Order (PO) from the client.

5.1.1 Buyer–Merchandiser Communication

Buyer–merchandiser communication refers to the professional exchange of information between the buyer and the merchandiser throughout the product development and order execution process. This communication ensures that the buyer's requirements are clearly understood, accurately implemented, and delivered within the agreed timelines and quality standards. It involves discussing product specifications, designs, fabrics, trims, sizes, quantities, packaging, delivery schedules, and pricing details.

Effective communication helps in building trust and long-term relationships between the buyer and the merchandiser. It also reduces the chances of errors, misunderstandings, and production delays. The merchandiser plays a key role in interpreting the buyer's needs, converting them into actionable production plans, and regularly updating the buyer on progress. Communication may take place through emails, video calls, shared digital platforms, or in-person meetings, depending on the stage of the order and organisational practices.

A good buyer–merchandiser communication process also includes timely follow-ups, seeking approvals at different stages, and addressing any concerns raised by the buyer. Clear documentation of every communication helps maintain transparency and acts as a reference point in case of disputes or clarifications. Ultimately, strong communication ensures smooth coordination between design, production, quality control, and delivery teams, resulting in customer satisfaction and business growth.

5.1.2 Collecting Buyer Requirements

Collecting buyer requirements is a crucial step in ensuring that the final product meets the client's expectations and aligns with the agreed specifications.

Step 1. Obtain Style and Design Details

The merchandiser first collects all style and design specifications provided by the buyer, which may include sketches, CAD drawings, photographs, or detailed written descriptions. These details should cover fabric types, colour variations, prints, embroidery patterns, and any special finishing requirements. It is essential to clarify unclear points or conflicting information at this stage to avoid mistakes later in production.

Step 2. Confirm Quantity and Size Breakdown

Accurate quantity and size details are critical for production planning. The merchandiser reviews the buyer's order sheet to note quantities for each size, colour, and style variant. They must ensure the total quantities match the purchase order or agreed terms and verify the correct size ratios for smooth material sourcing and manufacturing.

Step 3. Document Trims, Labels, and Tags Specifications

All trims, labels, and tags required for the order must be clearly documented. This includes brand labels, care instructions, hangtags, barcodes, and price tags, along with their material, colour, artwork, and placement specifications. Clear documentation helps avoid delays or errors during production.

Step 4. Gather Packaging Requirements

The merchandiser confirms the packaging standards expected by the buyer, such as box or polybag type, dimensions, materials, and printing details. Buyer preferences for folding methods, packing ratios, and carton markings should be recorded to ensure compliance during shipment preparation.

Step 5. Maintain Organised Records

All collected information—covering design, quantities, trims, and packaging—should be compiled into a standardised worksheet or tech pack. This record must be stored in a central location accessible to production, quality control, and procurement teams, ensuring that every stage of manufacturing aligns with buyer requirements.

5.1.3 Seeking Sample Approvals at Different Stages

Proto Sample Approval

A proto sample represents the first tangible version of a product created according to the buyer's design specifications. It is developed by the sampling team under the merchandiser's coordination, using either the approved fabric and trims or their closest available substitutes. This stage enables the buyer to visually and physically assess the design, fit, construction details, and overall aesthetics before committing to further development.

Any feedback or modification requests from the buyer are carefully documented by the merchandiser and communicated clearly to the sampling team for necessary adjustments. This ensures that subsequent samples align more closely with the buyer's expectations.



Fig. 5.1.1: Sample approval

Pre-Production Sample Approval

The pre-production sample is created using final approved materials, trims, and production processes. It acts as the quality and design benchmark for bulk manufacturing. The merchandiser ensures that this sample fully reflects the buyer-approved prototype sample, including all revisions, measurement corrections, and quality requirements.

The pre-production sample must be identical to the intended production output so that it can serve as the reference standard for the production floor. Approval of the PP sample is a critical milestone, as it signals the readiness to begin bulk production.

Other Required Samples

In addition to the proto and pre-production samples, buyers may require specific additional samples at different stages. These can include:

- Size set samples – to confirm correct size grading across the range.
- Shipment samples – to verify final production quality before dispatch.
- Counter samples – to serve as references for reorders or quality verification.

Each type of sample plays a distinct role in quality assurance and buyer satisfaction. The merchandiser is responsible for ensuring the timely preparation, accurate packaging, and prompt dispatch. Maintaining a detailed record of all sample approvals is equally important for traceability, quality consistency, and resolving any future disputes.

5.1.4 Confirming Costing with Buyer and Vendor

One of the important aspects of confirming costing with the buyer and vendor is to ensure mutual agreement. Costing approval confirms that both the buyer and the vendor are aligned on the final product price. It ensures that the terms of costing are mutually understood and accepted before production begins, avoiding confusion later.

Now, the factors that are considered in costing involve evaluating raw material prices, trims, labour charges, overhead expenses, and profit margins. These elements are carefully reviewed to ensure that the product remains competitive while meeting quality standards and profitability requirements.

On the other hand, the benefits of securing approval focus on securing costing approval, which helps align expectations between both parties, prevents misunderstandings about pricing and terms, and ensures profitability while delivering value to the buyer. It establishes a clear financial framework that supports smooth order execution.



Fig. 5.1.2: A shop with lots of buyers (a part of the Indian apparel sector)

There are also no risks of no approval. If costing approval is not obtained, it can result in last-minute disagreements, disrupt the production schedule, and lead to financial losses. Unapproved costs may also affect delivery timelines and damage the buyer–vendor relationship.

Transparent communication is essential during costing negotiations. Providing a detailed cost breakdown and clarifying conditions such as price validity, exchange rate fluctuations, or additional charges prevents confusion. Proper documentation, including written records of communications, quotations, and approvals, further minimises risks. A signed costing sheet shared with both buyer and vendor before production begins acts as evidence in case of disputes and ensures that all parties operate under the same financial framework. This process reduces the chances of production delays or costly rework.

5.1.5 Receiving Order Confirmation / Purchase Order (PO)

Receiving an order confirmation or Purchase Order (PO) marks the official approval from the buyer to proceed with production. The PO is a formal document issued by the buyer that contains essential details such as style numbers, product descriptions, quantities, sizes, delivery dates, agreed prices, payment terms, and shipping instructions. This document serves as a legally binding agreement between the buyer and the vendor.

Purchase Order Form									
Purchaser : xxxxxxxx					supplier : xxxxxx				
Contact : xxxxxxxx					Contact : xxxxxx				
Telephone number : _____					Telephone number : _____				
Fax : _____					Fax : _____				
Order number	Number	Item name	Specification	unit	Quantity	Price	Preferential amount	Amount	Note
1									
2									
3									
4									
5									
6									
The sum :								\$0.00	
Note:									
Delivery date : _____									
Mode of delivery : _____					Delivery address : _____				
Categories of Invoices : _____					Tax rate : _____				
Method of payment : _____									
Subordinate to the project : _____									
Purchaser : (Seal)					Supplier : (Seal)				
Date : _____					Date : _____				

Fig. 5.1.3: PO Sample

Upon receiving the PO, the merchandiser should first verify all details against prior communications, quotations, and approvals to ensure there are no discrepancies. Any variations in specifications, quantities, or delivery schedules should be clarified immediately with the buyer to avoid production or shipment issues. Once confirmed, the PO details must be shared with relevant departments, such as production, procurement, and logistics, so that necessary arrangements for materials, labour, and timelines can be made.

Maintaining an organised record of all POs is vital for tracking order progress and fulfilling compliance requirements. This not only ensures smooth workflow but also builds trust and accountability between the buyer and vendor.

5.1.6 Following Organisational Protocols for Communication

Organisational protocols for communication are established guidelines that ensure the smooth and professional flow of information within the company. These protocols help maintain clarity, accountability, and efficiency, especially in roles like merchandising, where coordination between multiple departments and stakeholders is critical.

Reporting Structure in the Organisation

A defined hierarchy establishes clear lines of communication within the organisation by outlining who communicates with whom and in what order. This structure ensures that information flows systematically and avoids confusion in roles or responsibilities.

Merchandisers generally report to their immediate supervisor or merchandising manager, who in turn communicates with senior management or external clients. This structured reporting chain helps maintain control over information sharing and decision-making.

Adhering to the reporting hierarchy ensures that instructions, updates, and approvals move through the correct channels. It reduces the risk of miscommunication or unauthorised commitments and maintains a clear record of responsibilities, ensuring accountability at each level.

When additional details about work-related tasks are required, the first reference points should be internal documents such as job cards, tech packs, and past correspondence. If information is not available internally, the immediate reporting authority should be approached with a clear explanation of the specific requirement and its purpose. If further clarification is necessary, requests may be escalated to other departments or directly to the buyer. In all cases, following the organisation's communication chain is essential to maintain efficiency and compliance with company policies.



Fig. 5.1.4: A meeting with merchandisers

5.1.7 Managing Sensitive Product Information

Handling sensitive product information is a critical responsibility for a merchandiser, as it directly impacts the company's reputation, client trust, and legal compliance. Such information may include unique design elements, production techniques, compliance-related documents, and intellectual property. Proper management ensures that valuable data is protected from unauthorised access and misuse.

Design Confidentiality

Design confidentiality is crucial to safeguard a company's creative investments, brand identity, and market positioning. It prevents competitors from gaining an unfair advantage through leaks of sketches, CAD files, swatches, mood boards, or prototypes. Access must be restricted to authorised team members and trusted vendors using secure file-sharing platforms, password-protected folders, and restricted entry to design or sampling areas. Digital safeguards such as encryption, watermarks, and limited download permissions further help prevent unauthorised distribution.

Non-disclosure agreements (NDAs) legally bind suppliers, manufacturers, and collaborators to confidentiality by defining the scope of protected information, restrictions on sharing, and penalties for breach. Sample distribution must be closely controlled by tracking prototypes and pre-production samples, ensuring they reach only trusted partners, retrieving them promptly, and preventing leaks such as photos of unreleased designs that may lead to counterfeiting. Overall, these measures protect brand reputation, profitability, and future innovation pipelines by integrating confidentiality protocols at every stage of design and production.

Compliance Documents

Compliance documents prove that products, materials, and processes meet legal, safety, quality, and ethical standards. Common examples include safety certifications (fire, chemical, child safety), quality test reports (fabric strength, colour fastness, shrinkage control), and ethical sourcing declarations (no child labour, fair wages, safe working conditions). Managing these documents goes beyond record-keeping and requires continuous monitoring, verification, and timely updates throughout the supply chain. Documents must be securely stored in both physical files and encrypted digital formats with restricted access, and they must remain current to align with new product lines, revised regulations, or renewed certifications.

An organised system is essential for quick retrieval during buyer audits, inspections, or customs clearance. Poor document management may lead to shipment delays, penalties, order cancellations, legal disputes, or even permanent loss of business. Integrating compliance management into production timelines and maintaining communication with buyers, suppliers, and quality teams helps avoid these risks.

Intellectual Property Rights (IPR) Considerations

Intellectual property rights (IPR) provide legal protection for creative and innovative assets such as product designs, logos, fabric patterns, packaging styles, and proprietary processes. They safeguard both the organisation's and the buyer's intellectual property, ensuring professional integrity and legal compliance. IPR protection can take several forms: copyright protects original artistic works like sketches, design layouts, and marketing images; trademarks secure brand identifiers such as names, logos, and symbols; design registration safeguards product shapes, surface patterns, or ornamental features; and patents cover unique functional inventions or manufacturing techniques.

Merchandisers are responsible for avoiding unauthorised use, replication, or distribution of protected designs, artwork, or processes. They must verify ownership rights with legal or compliance teams before using any material, design, or technique, obtain written permissions or licensing agreements when required, and bind external partners with NDAs or contractual clauses to prevent misuse. Violations of IPR can lead to lawsuits, financial penalties, reputational damage, and loss of business relationships.

UNIT 5.2: Merchandising Documentation and Record Management

Unit Objectives

By the end of this unit, the participants will be able to:

1. Seek approval for updated worksheets and technical documents as required.
2. Maintain complete records of all communications, samples, test reports, compliance documents, and past fulfilled orders.
3. Explain the concept of product pricing and its lifecycle, and record changes throughout the process.
4. Collect and record statistical data related to orders and production for analysis and future reference.

5.2.1 Significance of Seeking Approval for Updated Worksheets and Technical Documents

Seeking approval for updated worksheets and technical documents is an essential step in the merchandising process to ensure accuracy, alignment, and smooth workflow. Approvals confirm that all stakeholders—buyers, vendors, production teams, and quality control—are working from the same set of validated information. Without this step, discrepancies in specifications, quantities, or materials could lead to costly errors, production delays, or rejections.

Approved documents such as trim sheets, fabric sheets, consumption sheets, and tech packs serve as the official reference during manufacturing. They help maintain product consistency, reduce misunderstandings between departments, and ensure compliance with buyer requirements and quality standards. Regular updates followed by formal approval also provide a clear audit trail, which is valuable for resolving disputes and improving future processes.

5.2.2 Maintaining Complete Records in Merchandising

Maintaining a complete set of records is a fundamental responsibility for a merchandiser. This practice is vital for ensuring accountability, consistency, and compliance throughout the product lifecycle. A well-organized record-keeping system serves as a single source of truth for every product, from its initial design to its final delivery, and is crucial for future re-orders and for resolving any potential disputes. This process is not just about storing documents, but about creating a system that is easily accessible and provides a clear historical record of all decisions.

1. Communications and Approvals

- Maintain a detailed log of all communications related to each order.
- Record emails, meeting minutes, and formal letters exchanged with buyers, suppliers, and internal teams.
- Document all approvals for designs, samples, fabrics, and costs.
- Save these approvals in a designated digital folder for each style.
- Provides written proof in case of discrepancies — e.g., approval records for fabric quality disputes.

2. Samples and Test Reports

- Keep physical records of all approved samples: prototype, fit sample, and pre-production sample (PPS).
- Label samples with style number, size, and date of approval for easy reference.
- Physical samples serve as the benchmark for final product quality, fit, and appearance.
- Maintain digital records of all test reports (shrinkage, colourfastness, fabric composition, etc.).
- Demonstrates that the product meets required quality and performance standards.

3. Compliance Certificates

- Maintain certificates and audit reports for factories and raw materials.
- Include certifications such as SA8000 (social accountability) and GOTS (organic textiles), or any buyer-specific requirements.
- Demonstrates that products are produced under ethical, legal, and environmentally responsible conditions.
- Protects the brand's reputation and ensures fulfilment of ethical commitments.
- Often a mandatory requirement for international trade.

4. Records of Past Orders

- Create a digital and physical archive for every completed order.
- Include: final tech pack, communication logs, final cost sheet, and approved vendor details.
- Enables accurate and consistent re-orders of the same product.
- Provides data for analysis to identify successful styles, avoid past mistakes, and improve vendor selection.
- Supports informed decisions in new product development and strategic planning.

5.2.3 Product Pricing and Lifecycle

Product pricing is not a static process; it's a dynamic strategy that changes based on a product's stage in its lifecycle. A merchandiser must understand this relationship to maximise profitability and manage costs effectively. The product lifecycle typically has four main stages: introduction, growth, maturity, and decline. Each stage presents unique challenges and opportunities that influence pricing decisions.

Pricing Stages

The pricing strategy a merchandiser chooses depends on where a product is in its lifecycle. Here's a breakdown of the typical approaches:

- **Introduction Stage:** When a product is first launched, sales are low, and costs are high due to significant investment in research, development, and marketing.
 - **Price Skimming:** This involves setting a high initial price to target innovators and early adopters who are willing to pay a premium for a new and unique product. The goal is to recover initial costs and generate high profits before competitors enter the market.
 - **Penetration Pricing:** The opposite of skimming, this strategy sets a low initial price to quickly gain market share, attract a large customer base, and create brand loyalty. This is often used for products in a crowded market to differentiate from competitors.

- **Growth Stage:** As sales and profits increase, the product gains market acceptance, and competitors begin to emerge.
 - **Competitive Pricing:** The focus shifts to maintaining market share. Prices may be slightly lowered to stay competitive with new entrants. The merchandiser might also introduce new features or variations to justify the price and differentiate the product.
 - **Maintaining Skimming Prices:** If a product is highly successful and has a strong brand reputation, the merchandiser may choose to keep a high price for a longer period to maximise profits before inevitable price drops.
- **Maturity Stage:** This is often the most profitable stage, with sales peaking and then beginning to level off. The market is saturated, and competition is intense.
 - **Value-Based Pricing:** Pricing is based on the perceived value to the customer rather than just the cost. Strategies like special discounts, bundled offers, and loyalty programs are common. The merchandiser's focus is on maintaining a stable price while attracting customers through added value.
 - **Price Matching:** To combat fierce competition, a merchandiser may adopt a strategy of matching competitors' prices to avoid losing market share.
- **Decline Stage:** Sales and profits fall as consumer demand shifts to newer products or technologies.
 - **Harvesting:** The merchandiser's goal is to maximise remaining profits by reducing costs to a minimum, discontinuing marketing, and selling off remaining inventory. Prices may be lowered drastically to clear out stock.
 - **Phasing Out:** The product is discontinued, and a clear timeline is set for its removal from the market. Any remaining stock may be sold at a very low price.

Cost Tracking over the Production Lifecycle

Accurate cost tracking throughout the production lifecycle is essential for a merchandiser to make informed pricing decisions and maintain profitability. This involves monitoring and analysing costs from a product's conception to its final sale.

- **Pre-Production (Concept & Design)**

At this stage, costs are mainly linked to research, development, and product conceptualisation. This includes expenses for market research to understand current trends, design work by the creative team, pattern-making, and sample creation.

Example: A home furnishings merchandiser working on a new cushion design may spend ₹15,000 on market research, ₹10,000 on design sketches, and ₹5,000 on making prototype samples. Although these expenses do not directly produce revenue, they are essential investments that determine the product's quality, aesthetic appeal, and competitiveness in the market. Tracking these costs ensures they remain within the allocated development budget and that the final product will be priced competitively.

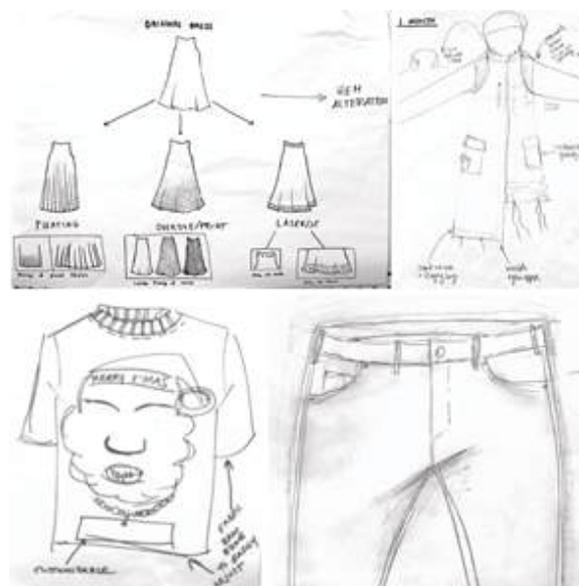


Fig. 5.2.1: Design Concepts for fast-fashion clothes

- **Production (Sourcing & Manufacturing)**

This is the most cost-intensive phase, where direct and variable costs accumulate. It includes raw material sourcing (fabric, trims, labels, and accessories), labour costs (Cut, Make, and Trim charges), and special processes such as embroidery, printing, or washing. A merchandiser must track these costs closely to ensure they do not exceed the buyer-approved budget.



Fig. 5.2.2: Manufacturing in Apparel

Example: For a batch of 5,000 shirts, the fabric cost may be ₹250 per piece, trims ₹30 per piece, and CM (Cut & Make) charges ₹100 per piece. This brings the total production cost to ₹1,900,000. If during production, fabric wastage or a price increase occurs, the merchandiser must update the costing sheet immediately and inform the buyer to avoid disputes.

- **Post-Production (Sales & Marketing)**

After manufacturing is complete, costs shift to activities such as marketing, distribution, and after-sales service. This includes advertising campaigns, promotional events, transportation, warehousing, and order fulfilment. Tracking these costs ensures that even after all overheads are considered, the product still yields a healthy profit margin.



Fig. 5.2.3: Fashion Advertising Campaigns for Luxus Magazine (Example)

Example: For the shirts mentioned earlier, if logistics cost ₹15 per shirt and marketing expenses total ₹100,000 for the campaign, the merchandiser must calculate whether the selling price (e.g., ₹550 per shirt) still leaves an acceptable margin after all expenses. If not, they may decide to adjust the selling price or seek ways to reduce distribution costs.

Here's the detailed cost tracking flowchart:

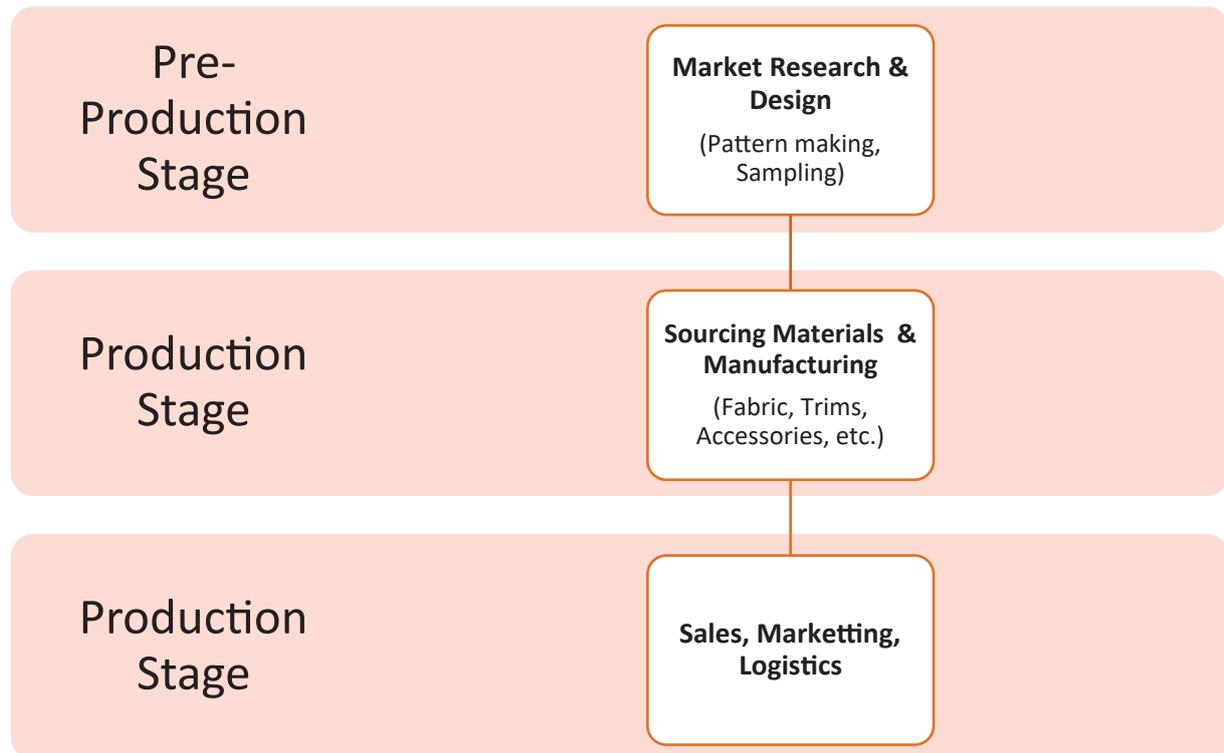


Fig. 5.2.4: Cost tracking flowchart

5.2.4 Statistical Data Collection and Recording

Statistical data collection and recording are essential for merchandisers in the apparel, made-ups, and home furnishings sectors, as they help in monitoring progress, identifying problems, and making well-informed business decisions. Properly collected and recorded data support accurate costing, quality control, production planning, and buyer communication.

Data Types and Purpose

Data Type	Examples	Purpose
Quantitative Data	Production output, defect percentage, lead times, sales volume, and cost figures	To measure performance, track efficiency, control costs, and set benchmarks
Qualitative Data	Buyer feedback, vendor reliability, fabric feel, market trends	To assess customer satisfaction, improve processes, and forecast demand

Table 5.2.1: Types of data

Methods of Recording and Storing Data

Step 1. Manual Recording

- Record daily production figures and sample approval dates in logbooks and registers.
- Maintain handwritten checklists for trims received, fabric inspections, and quality checks.
- Store physical copies of buyer communications, purchase orders, and compliance documents in labelled and organised filing systems.

Step 2. Digital Recording

- Use spreadsheets (e.g., Excel or Google Sheets) for tracking order status, consumption calculations, and costing details.
- Implement ERP (Enterprise Resource Planning) or PLM (Product Lifecycle Management) software for centralised and real-time data updates.
- Store tech packs, designs, and quality reports on cloud-based platforms (e.g., Google Drive, Dropbox) for easy collaboration with authorised team members.

Step 3. Data Security and Backup

- Protect sensitive information using password-protected files and role-based access controls.
- Schedule regular data backups to secure servers or external drives to avoid data loss during technical failures.
- Encrypt confidential buyer and costing information before sharing with external parties to prevent unauthorised use.

Step 4. Data Retrieval and Review

- Organise folders by buyer, season, and order number for quick and easy access.
- Periodically review stored data to identify trends, recurring issues, and opportunities for process improvement.

Well-maintained records ensure traceability, support audits, and serve as valuable references for future projects.

5.2.4 Statistical Data Collection and Recording

Here are the best practices in client communication and documentation:

- **Clarity & Accuracy:** Share only verified, clear, and concise product, timeline, and costing details.
- **Professional Channels:** Use official platforms (email, approved tools) for traceable communication.
- **Timely Updates:** Provide regular order status updates and follow up on pending approvals.
- **Written Documentation:** Record all agreements, approvals, and changes in writing.
- **Organised Storage:** File communications are systematically organised by the buyer along with the details of the project and date.
- **Confidentiality:** Share sensitive data only with authorised personnel using secure methods.
- **Post-Discussion Summaries:** Send brief written recaps of key points and agreed actions.
- **Consistent Templates:** Use standard formats for quotations, approvals, and submissions.

Summary

- Merchandisers communicate with buyers to collect order details, seek approvals, and process purchase orders.
- They follow organisational communication protocols to ensure smooth information flow and structured reporting.
- Sensitive product information is handled securely by adhering to confidentiality and Intellectual Property Rights (IPR).
- Costing confirmations from buyers and vendors are taken before starting production.
- Documentation includes maintaining trim sheets, fabric sheets, consumption sheets, and tech packs with timely approvals.
- Records of communications, samples, test reports, compliance documents, and previous orders are updated regularly.
- Merchandisers track product pricing, maintain statistical data, and record changes for analysis and future reference.

Exercise

Multiple-choice Question:

1. What is the purpose of obtaining buyer approval at different manufacturing stages?
 - a. To delay production
 - b. To ensure samples meet buyer requirements
 - c. To reduce fabric wastage
 - d. To avoid communication with vendors

2. Which document contains details of trims, labels, and tags?

a. Tech pack	b. Trim sheet
c. Test report	d. Purchase order

3. Why should sensitive product information be handled carefully?
 - a. To increase garment cost
 - b. To maintain confidentiality and comply with IPR
 - c. To speed up packaging
 - d. To improve colour matching

4. What must be confirmed from the buyer and vendor before production begins?

a. Fabric colours only	b. Order quantity only
c. Costing details	d. Packaging material only

5. What type of data is collected and recorded for future analysis?
 - a. Random notes
 - b. Statistical data related to orders and production
 - c. Personal opinions of workers
 - d. Machine repair history

Descriptive Questions:

1. Explain how merchandisers communicate with buyers to get sample approvals at different stages of manufacturing.
2. Describe the procedure for collecting detailed order information from buyers.
3. Discuss how sensitive product information is managed while following confidentiality and IPR guidelines.
4. Explain how merchandising documents like trim sheets, fabric sheets, and consumption sheets are maintained and updated.
5. Describe the importance of recording statistical data and product pricing changes for analysis and future reference.

6. Organise and Coordinate for Pre-production as per Merchandising Objectives



Unit 6.1 - Pre-Production Planning Activities

Unit 6.2 - Coordination and Issue Resolution



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Describe the coordination within the Organisation, department
2. Elaborate on the process of meeting and prepare the MOM
3. Discuss the process of handover from the product to the production department

UNIT 6.1: Pre-Production Planning Activities

Unit Objectives

By the end of this unit, the participants will be able to:

1. Elaborate on how one confirms the details of the Time and Action (TNA) plan before initiating production activities.
2. Describe how one ensures that the product file is complete with all required documents and references.
3. Discuss the process by which one conducts pre-production meetings to hand over product files to relevant personnel.
4. Explain how one tracks the warehouse status to verify the timely receipt of raw materials and trims.
5. Illustrate how one classifies the contents of a product file according to usage and preference.
6. State how one hands over a product file efficiently to the production department for smooth operations.

6.1.1 Confirming the Details of the Time and Action (TNA) Plan before Initiating Production Activities

The Time and Action (TNA) plan is a detailed schedule that outlines key activities and deadlines for an order. Before production starts, a merchandiser must verify all details to avoid delays and errors. This involves checking order specifications, material availability, approvals, and coordination among departments. Confirming the TNA ensures that each task is aligned with production targets and buyer expectations. A properly validated TNA plan helps maintain quality, timely delivery, and smooth workflow.

Style Description	Dress	Recvd Date	20-Nov				Lead Time (days)	49
			Planned Start	Planned End	Duration (days)	Actual start		
Key Processes	Planned Start	Planned End	Duration (days)	Actual start	Actual End	Duration (days)	Responsibility	Remarks
1 Order receipt (Buyer PO)	20-Nov						Merchant	
2 Consumption calculation	21-Nov						Pattern master	
3 BOM generation	23-Nov						Merchant	
4 PO issue for Fabric, trims	24-Nov						Store Mngr. (Fabric/Trim)	
5 Size set submission	25-Nov						Merchant	
6 Size set Comments	28-Nov						Merchant	
7 PP meeting	1-Dec						Merchant	
8 Production planning	11-Dec		10				Production Manager	
9 Fabric in-house	24-Nov	8-Dec	15				Store Mngr. (Fabric/Trim)	
10 Trims In-house	24-Nov	3-Dec	10				Store Mngr. (Fabric/Trim)	
11 Cutting	11-Dec	12-Dec	3				Cutting in charge	
12 Fabrication/stitching	26-Dec	30-Dec	5				Production Manager	

Fig. 6.1.1: Time and Action plan followed by a merchandiser

The process through which a merchandiser confirms the details of the TNA plan before initiating production activities is mentioned below:

- **Verification of Order Details:** Reviews the order sheet and ensures all buyer specifications, sizes, colours, and quantities are correctly recorded in the TNA plan.
- **Assessment of Material Readiness:** Checks whether all raw materials, trims, and accessories are sourced, received, and meet the required quality standards before starting production.
- **Approval Status Check:** Verifies that all necessary approvals, such as sample approvals, lab dips, and fit confirmations, are obtained and documented.
- **Evaluation of Production Sequence and Timelines:** Ensures that production processes, such as cutting, stitching, and finishing, are properly sequenced and assigned realistic timelines.
- **Departmental Coordination:** Coordinates with production, quality, and sourcing teams to confirm that each department is aware of their responsibilities and deadlines.
- **Updating and Circulating Revisions:** Updates the TNA plan with any changes communicated by the buyer and ensures all departments have the revised version.
- **Compliance and Packaging Review:** Cross-checks that compliance requirements, packaging instructions, and shipping schedules are clearly included in the plan.
- **Risk Identification and Contingency Planning:** Confirms that any potential risks or delays are identified early and contingency plans are prepared.
- **Pre-Production Readiness Confirmation:** Monitors readiness through pre-production meetings to ensure everyone agrees on timelines and deliverables.
- **Final Approval and Sign-off:** Signs off on the finalised TNA plan as an official schedule before initiating bulk production.

Stage	Action/ Activities	Planned Date/ Duration/days	Reduction of time
1	Confirmation of order	1-Sep	-119
2	Received PO	2-Sep	-118
3	Release fabric PO	7-Sep	-113
4	Release Accessories PO	7-Sep	-113
5	Bulk fabric app.(Quality)	7-Sep	-113
6	Lap dip app.	10-Sep	-110
7	Measurement app.	15-Sep	-105
8	level app.	20-Sep	-100
9	Booking of fabric	20-Sep	-100
10	Bulk fabric (FML)	25-Sep	-65
11	Fabric in house	5-Oct	-55
12	Bulk fabric app.(for shade)	6-Oct	-54
13	Send accessories for test	10-Oct	50
14	Accessories in house	12-Oct	-48
15	PP meeting with supplier	15-Oct	-45
16	Cutting	15-Oct	-45
17	Sewing	18-Oct	-42
18	Gold seals app.	5-Nov	-25
19	test result send	15-Nov	-16
20	Pre-shipment inspection	28-Nov	-3
21	Goods Ex-factory	1-Dec	0

Fig. 6.1.2: A sample format of a TNA plan

6.1.2 Ensuring the Completion of the Product File with all Required Documents and References

A product file serves as a complete reference document containing all necessary details to execute production smoothly. It ensures that information like the techpack, order sheets, size breakups, cut plans, packaging specifications, and other essential data is properly organised. By verifying each element, a merchandiser avoids miscommunication, delays, or quality issues during production. Keeping approved swatches, samples, test reports, TNA charts, and mail records together ensures quick decision-making and traceability. A well-maintained product file helps all departments work in alignment with buyer requirements and production timelines.

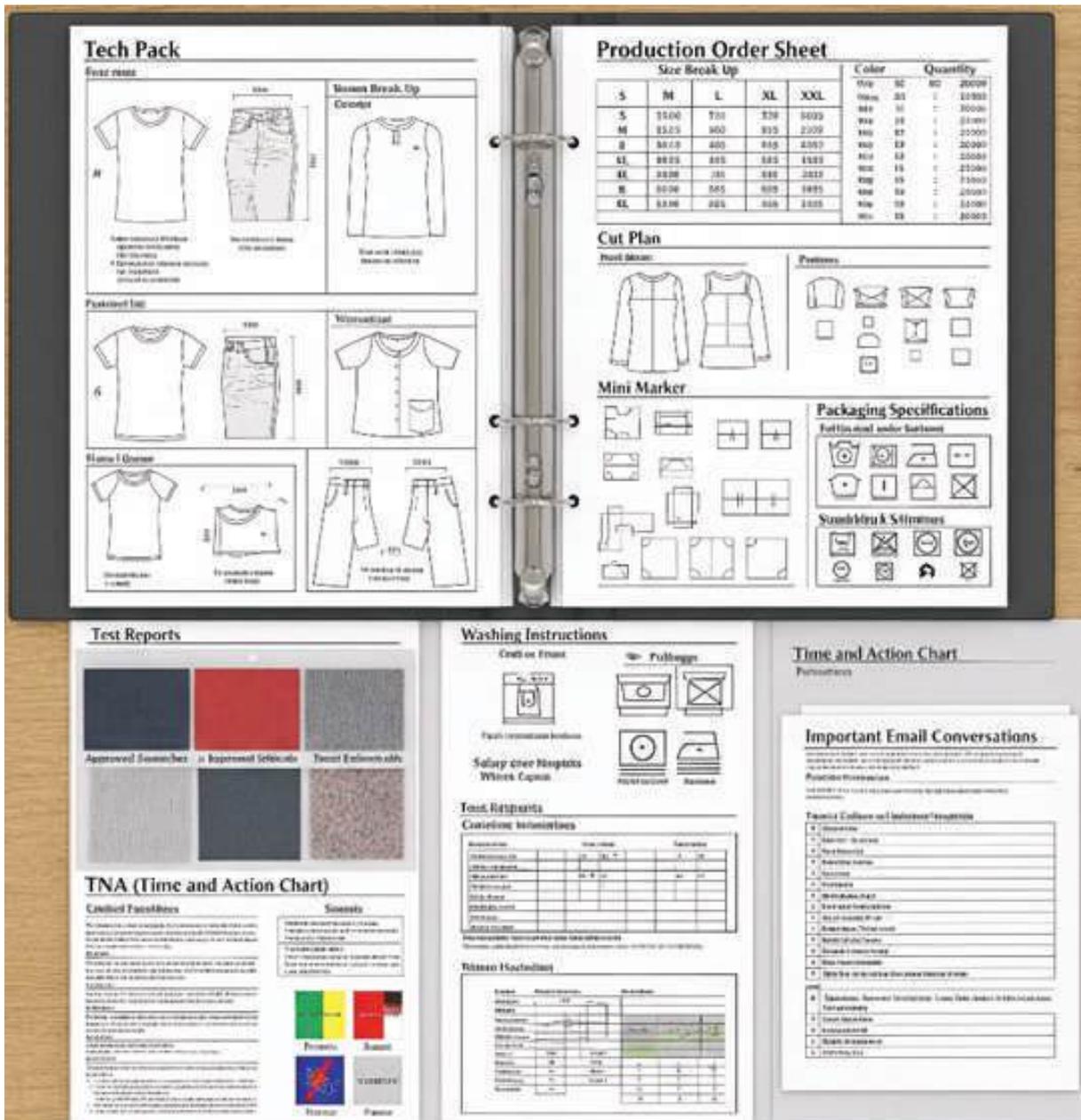


Fig. 6.1.3: Product file for garments

The process of ensuring the product file containing all the required documents mentioned above is discussed as follows:

1. **Collection of the Techpack:** Ensures the latest buyer-approved techpack with detailed design, construction, and measurement specifications is included in the file.
2. **Verification of Production Order Sheet with Size Breakup:** Confirms that the order sheet clearly reflects total quantity, size-wise distribution, and colour combinations as per buyer confirmation.
3. **Inclusion of Cut Plan and Mini Marker:** Adds accurate cut plan layouts and mini markers to guide fabric cutting, minimise wastage, and maintain size ratios.
4. **Compilation of Packaging Specifications:** Attaches detailed packaging instructions, including folding methods, carton sizes, labelling requirements, and barcodes.
5. **Addition of Washing Instructions (If Any):** Includes clear washing care requirements or garment wash procedures provided by the buyer to avoid processing errors.
6. **Filing of Approved Swatches, Samples, and Strike-Offs (If Any):** Keeps all approved fabric swatches, trims, lab dips, print/embroidery strike-offs, and pre-production samples to ensure accurate bulk production references.
7. **Inclusion of Test Reports:** Ensures test results of fabric or finished goods (colourfastness, shrinkage, durability, etc.) are documented for compliance.
8. **Insertion of TNA Chart:** Adds the finalised Time and Action plan to track timelines for each stage of production.
9. **Compilation of Important Mail Conversations:** Files key email approvals, clarifications, and buyer communications to provide evidence of decisions and changes.
10. **Final Cross-Check of Completeness:** Reviews the entire product file before production to confirm that no document is missing or outdated.

6.1.3 Process for Conducting Pre-Production Meetings for Handing Over Product Files

A Pre-Production Meeting (PPM) is held to brief all relevant departments before starting bulk production. In this meeting, the merchandiser reviews the product file and hands it over to concerned personnel, such as production, quality, and sourcing teams. The PPM ensures that every team clearly understands the buyer's requirements, production timelines, and quality standards. It helps identify potential issues early and align everyone to a common action plan. Properly conducting a PPM reduces errors, delays, and miscommunication during production.



Fig. 6.1.4: A PPM of the apparel sector

The process of conducting pre-production meetings or PPMs to hand over the product file is stated below:

1. **Preparation for the Meeting:** The merchandiser prepares the complete product file, ensuring it includes the techpack, order sheet, TNA chart, swatches, samples, test reports, and all buyer-approved documents.
2. **Scheduling the PPM:** The merchandiser arranges the meeting with key personnel from production, quality, cutting, finishing, and sourcing teams at an appropriate time before production starts.
3. **Presentation of the Product File:** The merchandiser explains each component of the product file in detail, highlighting buyer requirements, size breakups, packaging specifications, and critical timelines.
4. **Clarification of Technical Details:** Any specific garment construction methods, washing instructions, or special finishing requirements are discussed and clarified during the meeting.
5. **Discussion on Risk Areas and Solutions:** The team reviews potential production challenges, such as fabric shortages, process bottlenecks, or quality concerns, and agrees on contingency measures.
6. **Role Assignment and Responsibility Sharing:** The merchandiser ensures that each department knows its specific role, deliverables, and deadlines in line with the TNA plan.
7. **Documentation of Minutes:** Key points, decisions, and assigned responsibilities from the PPM are recorded as meeting minutes for future reference.
8. **Formal Handover of the Product File:** The merchandiser officially hands over the product file to the production head or relevant department in charge, ensuring acknowledgment of receipt.
9. **Final Confirmation and Sign-Off:** The meeting concludes with mutual agreement on timelines, processes, and readiness to begin production as per buyer requirements.

6.1.4 Tracking the Warehouse Status for Verifying Timely Receipt of Raw Materials, Trims and Other Items

Coordinating with different departments is essential to ensure that raw materials, trims, and accessories arrive at the warehouse on time. A merchandiser must monitor order status closely to prevent delays in production. Communication with sourcing, warehouse, production, and quality teams helps identify any bottlenecks early. Timely follow-ups allow corrective actions, such as expediting shipments or arranging alternate sources. Proper coordination ensures smooth workflow, adherence to the Time and Action (TNA) plan, and on-time delivery to the buyer.

The steps for coordinating with all departments and checking warehouse status are given as follows:

1. **Review the Material Procurement Plan:** The merchandiser checks the list of all ordered raw materials, trims, and accessories as per buyer requirements and the TNA chart.
2. **Communicate with the Sourcing Team:** Confirms whether suppliers have dispatched goods as per the agreed schedule and collects shipment tracking details.
3. **Update with the Warehouse Department:** Regularly checks the warehouse for receipts of materials, verifies quantities, and ensures items are stored properly upon arrival.
4. **Coordinate with the Quality Team:** Ensures that incoming raw materials and trims are inspected promptly and that quality reports are shared without delay.
5. **Follow-Up on Delayed Items:** Identifies any materials not received on time and takes corrective action, such as expediting delivery or arranging alternate vendors.
6. **Hold Internal Status Meetings:** Organises short discussions with sourcing, warehouse, and production teams to review current status and address pending issues.

7. **Update the TNA Chart and Records:** Reflects the latest material status in the TNA plan and communicates changes to all concerned departments.
8. **Document and Report to Management:** Prepares a summary of material receipt progress and highlights any risks to ensure management awareness and support if needed.
9. **Confirm Readiness for Production:** Ensures that all required materials are in-house, quality-cleared, and available before issuing them to the production floor.

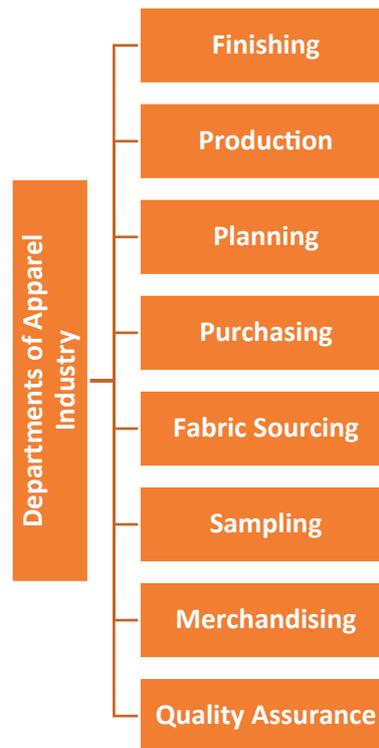


Fig. 6.1.5: Various departments of the apparel industry

The merchandiser ensures the availability of raw materials, trims, and all necessary orders by maintaining constant coordination with sourcing, warehouse, production, and quality departments. First, the merchandiser reviews the procurement plan and cross-checks the list of items required against the Time and Action (TNA) chart. Regular follow-ups with the sourcing team confirm whether suppliers have dispatched goods on time and provide shipment details for tracking. The merchandiser then communicates with the warehouse to verify that incoming materials are received in full, stored properly, and documented accurately.

In parallel, coordination with the quality team ensures immediate inspection of materials, with any rejections or issues flagged early. If delays or shortages are identified, corrective actions such as expediting shipments or sourcing alternatives are arranged promptly. Frequent status meetings with all departments keep everyone informed, while updates are reflected in the TNA plan to maintain accurate records. Finally, the merchandiser confirms that all approved materials are in-house and cleared for production before bulk operations commence.

6.1.5 Classifying the Contents of a Product File According to Usage and Preference

Classifying file contents according to usage or preference helps a merchandiser maintain clear and accessible records. Proper organisation ensures that essential documents, such as approvals, reports, and correspondence, can be retrieved quickly when needed. This reduces confusion, saves time during audits or meetings, and supports smooth production management. By grouping documents based on their purpose, such as buyer requirements, production references, or compliance records, the merchandiser maintains an efficient workflow. A structured filing system also minimises the risk of missing critical information at any stage of production.

The steps for classifying file contents according to usage or preference are discussed as follows:

- 1. Identify All Relevant Documents:** The merchandiser lists every document related to an order, including techpack, order sheets, TNA charts, swatches, test reports, and mail approvals.
- 2. Group Documents by Function:** Files are classified into categories such as product development, production planning, quality control, compliance, and buyer communication.
- 3. Arrange Documents in Logical Sequence:** Within each category, the merchandiser arranges files chronologically or by process flow to make them easy to follow.
- 4. Use Separate Sections or Folders:** Physical files are divided using labelled separators, while digital records are stored in clearly named folders for quick access.
- 5. Highlight Critical References:** Key approvals, specifications, or instructions are marked or placed in the front for faster reference during meetings or inspections.
- 6. Cross-Reference Related Documents:** Where necessary, notes or links are added to connect related files, such as a test report linked to a fabric swatch or mail approval.
- 7. Review and Update Regularly:** The merchandiser periodically checks the file to ensure it reflects the latest information and removes outdated or duplicate documents.
- 8. Ensure Accessibility to Relevant Teams:** The file, whether physical or digital, is shared or handed over to concerned personnel so that all departments work with the same information.



Fig. 6.1.6: A sample product file

6.1.6 Process of Handing Over a Product File to the Production Department

An efficient handover of the product file is crucial for starting bulk production without confusion or delays. The merchandiser ensures that the file is complete, updated, and organised in a way that the production department can easily understand. A detailed explanation of the buyer's requirements, special instructions, and timelines helps align production activities with the Time and Action (TNA) plan. Any potential risks or areas needing extra attention are highlighted in advance. This clear and structured handover process helps maintain product quality, timely delivery, and smooth operations across all departments.

The merchandiser hands over the product file to the production department by following a systematic approach to ensure no information is overlooked. The file must include every essential document, such as the approved techpack, production order sheet with size breakup, cut plan and mini marker, packaging specifications, washing instructions if applicable, approved swatches, pre-production samples with strike-offs, test reports, TNA chart, and all-important mail communications. Before the handover, the merchandiser cross-checks that these documents are current and free of discrepancies. In the pre-production meeting (PPM), the merchandiser presents the file, explains critical details like order quantity, delivery dates, special finishes, quality standards, compliance requirements, and assigns clear responsibilities to each department.



Fig. 6.1.7: Merchandiser working in India

Any issues raised by production, quality, or sourcing teams are discussed, and solutions are agreed upon on the spot. The merchandiser also highlights potential risk points—such as tight timelines or special trims that may require extra care—so they are managed proactively. After this, the file is formally handed over to the production head, with an acknowledgment of receipt and confirmation that digital copies are available if required. By documenting the handover process and ensuring everyone has access to the same updated information, the merchandiser guarantees a transparent workflow, reducing miscommunication, production delays, and last-minute errors.

UNIT 6.2: Coordination and Issue Resolution

Unit Objectives

By the end of this unit, the participants will be able to:

1. Elaborate on how one coordinates effectively with relevant departments to achieve production goals.
2. Explain how one resolves issues that arise during or after meetings to maintain workflow continuity.
3. Describe how one prepares and circulates meeting minutes accurately to all concerned departments.
4. Discuss how one clarifies production-related concerns by engaging with appropriate personnel.
5. State how one identifies issues across departments and ensures they are addressed promptly.

6.2.1 Coordinating with Relevant Departments to Achieve Production Goals

Coordinating effectively with relevant departments is vital for ensuring smooth production and timely deliveries. A merchandiser must share accurate, updated information and act as a central link among sourcing, production, quality, and warehouse teams. Continuous monitoring and follow-ups help detect issues early and implement corrective actions promptly. Proper coordination ensures that every department works in alignment with the Time and Action (TNA) plan and buyer expectations.

The merchandiser coordinates with relevant departments effectively by first ensuring that all production-related information is clearly documented and shared on time. This includes details such as the approved techpack, production order sheet, size breakup, cut plan, material status reports, packaging instructions, and the TNA chart. The merchandiser regularly communicates with the sourcing team to verify supplier dispatches, with the warehouse to confirm timely receipt and inspection of raw materials, and with the quality team to ensure testing and approvals are done without delay.



Fig. 6.2.1: A Merchandiser discussing with the production head

Frequent status meetings or conference calls are arranged to review progress, address problems like delayed trims or fabric shortages, and realign priorities when required. If any changes come from the buyer—such as revised delivery dates, design modifications, or updated packaging specifications—the merchandiser promptly circulates these updates to all departments to prevent miscommunication. Responsibilities and deadlines are clearly assigned, and follow-ups are done to confirm tasks are completed as planned. By maintaining records of discussions, approvals, and corrective actions, the merchandiser ensures transparency and accountability. This structured and proactive approach helps avoid production bottlenecks, keeps all teams focused on shared goals, and supports consistent product quality with on-time delivery.

6.2.2 Process of Resolving Issues During or After Meetings

A Pre-Production Meeting (PPM) is held to align all departments before bulk production starts. During this meeting, the merchandiser identifies and clarifies any potential issues that could delay or affect production. Clear discussions ensure that concerns related to materials, processes, timelines, or quality are resolved in advance. This preparation helps avoid miscommunication, ensures smooth operations, and maintains on-time delivery.

The process of clarifying any potential issues with production at the PPM is stated below:

1. Review the Complete Product File:

The merchandiser checks that all documents, such as the techpack, order sheet, TNA chart, and approvals, are updated and ready for discussion.

2. Present Buyer Requirements Clearly:

All specifications, size breakups, quality standards, and packaging instructions are explained to ensure there is no confusion.

3. Discuss Material Status and Availability:

The merchandiser verifies whether all raw materials, trims, and accessories are in-house or on schedule for timely receipt.

4. Highlight Special Processes or Finishes: Any unique garment treatments, washing instructions, or compliance requirements are reviewed to ensure production teams understand them.

5. Identify Possible Delays or Risks: Potential issues such as late shipments, tight timelines, or complex sewing operations are openly discussed.

6. Invite Feedback from All Departments: Production, quality, and sourcing teams share concerns or questions, and the merchandiser records these points for resolution.

7. Agree on Corrective Actions: Solutions such as expediting shipments, adjusting workflows, or arranging additional manpower are finalised to manage risks.

8. Confirm Roles and Responsibilities: Each department's tasks and deadlines are clearly defined to prevent overlap or missed actions.

9. Document Decisions in Meeting Minutes: Key points, clarifications, and action items are recorded and circulated to ensure everyone works with the same information.

10. Obtain Final Alignment Before Production Start: The meeting concludes only when all concerns are addressed and teams agree to proceed with confidence.



Fig. 6.2.2: An ongoing PPM in the apparel sector

6.2.3 Preparing and Circulating Meeting Minutes to All Concerned Departments

Meeting minutes are important records of discussions, decisions, and action points agreed upon during meetings. In the apparel sector, accurate minutes help ensure that all departments work with the same instructions and timelines. A merchandiser must prepare these minutes carefully and circulate them promptly to avoid confusion or delays. Properly written minutes provide clarity, accountability, and an easy reference for future follow-ups.

Now, the process of preparing and circulating meeting minutes accurately to all concerned departments is mentioned as follows:

1. **Record Key Details During the Meeting:** The merchandiser notes the date, time, attendees, agenda points, and major decisions as discussions happen.
2. **Summarise Decisions and Action Points Clearly:** Each topic is written in simple language, highlighting who is responsible for each task and the deadline for completion.
3. **Include Critical Information Only:** Avoids unnecessary details while ensuring all instructions, clarifications, and agreements are recorded accurately.
4. **Review Notes Immediately After the Meeting:** The merchandiser checks for accuracy, fills in any gaps, and organises points in the same sequence as the meeting agenda.
5. **Format the Minutes Professionally:** Uses a clear structure with headings, bullet points, or numbered lists to make information easy to read.
6. **Verify with the Meeting Chair if Required:** The draft minutes may be shared with the meeting chair or senior for confirmation before circulation.
7. **Circulate to All Relevant Departments Promptly:** The finalised minutes are emailed or shared as a printed document with production, sourcing, quality, warehouse, and management teams.
8. **Ensure Acknowledgment of Receipt:** The merchandiser follows up to confirm that all departments have received and understood the minutes.
9. **File the Approved Minutes for Reference:** Keep a copy of the minutes in the product file or digital records for future audits or reviews.
10. **Monitor Action Point Progress:** Uses the minutes as a checklist during follow-ups to ensure that assigned tasks are completed on time.

6.2.4 Clarifying Production-Related Concerns by Engaging with Appropriate Personnel

A Pre-Production Meeting (PPM) helps all departments align before bulk production begins. In the apparel sector, the merchandiser uses this meeting to identify and clarify potential issues that may affect quality, timelines, or smooth operations. Open discussions ensure that every team understands buyer requirements, material status, and special instructions. Resolving concerns at this stage helps avoid delays, miscommunication, and costly mistakes during production.

The process of clarifying any potential issues with production at the PPM is stated as follows:

1. **Verify Completeness of the Product File:** The merchandiser checks that the techpack, order sheet, size breakup, TNA chart, swatches, samples, packaging specs, and test reports are updated and ready for discussion.
2. **Present Buyer Requirements Clearly:** Explains garment specifications, measurements, quality expectations, and any special instructions to avoid misunderstanding.
3. **Review Material Availability:** Confirms whether all raw materials, trims, and accessories are already in-house or on schedule for delivery as per the TNA plan.
4. **Highlight Special Processes or Treatments:** Discusses unique washing, dyeing, embroidery, or finishing requirements to ensure the production team is fully aware.
5. **Identify Risk Areas in Advance:** Points out tight timelines, critical operations, or any fabric and trim issues that could affect production flow.
6. **Invite Inputs from All Departments:** Encourages production, quality, sourcing, and warehouse teams to share their concerns or queries during the meeting.

7. **Agree on Corrective Measures:** Finalises solutions such as expediting material delivery, adjusting workflow, or allocating extra manpower where needed.
8. **Assign Clear Responsibilities:** Ensures each department knows its role and deadline to prevent confusion or overlapping tasks.
9. **Document and Share Meeting Decisions:** Records all issues raised, clarifications given, and agreed actions in the meeting minutes and circulates them promptly.
10. **Confirm Readiness Before Production Start:** Concludes the meeting only after confirming that all concerns are resolved and every team is aligned to start production smoothly

6.2.5 Identifying Issues Across Departments

During a Pre-Production Meeting (PPM), different departments often highlight issues beyond those already identified by the merchandiser. These concerns may relate to raw material readiness, production capacity, manpower, equipment, or quality control processes. Addressing these points early helps avoid delays, rework, and cost overruns during bulk production. Recording and resolving such issues ensures smooth operations and alignment among all teams.

Other issues that can be raised by department personnel during the PPM are stated as follows:

1. Production Department Concerns:

May raise issues about machine availability, workflow planning, or insufficient manpower to meet the TNA schedule.

2. Quality Department Observations:

Could highlight potential risks in fabric quality, required testing procedures, or additional in-line checks needed for complex styles.

3. Sourcing or Purchase Department Inputs:

Might report delays in supplier shipments, pending approvals, or shortages of trims and accessories.

4. Warehouse Department Feedback:

Could mention space constraints, delayed inward material inspection, or discrepancies in received quantities.

5. Cutting and Sewing Team Issues:

May identify problems with marker efficiency, complex construction details, or the need for additional training on specific operations.

6. Finishing and Packing Department Suggestions:

Might flag concerns about packaging materials, labelling clarity, or special folding instructions that require clarification.

7. Logistics and Dispatch Department Alerts:

Could point out tight shipping windows, pending documentation, or transit time challenges for on-time delivery.

8. General Coordination and Compliance Points:

Other teams may request better documentation flow, safety compliance checks, or clarification of buyer-specific requirements.

9. Action Plans for Raised Issues:

The merchandiser records these concerns in the meeting minutes, discusses solutions with the team, and updates the TNA plan if needed.



Fig. 6.2.3: PPM with various departments in the apparel sector

Summary

- Pre-production planning starts with confirming the Time and Action (TNA) plan details before any work begins.
- The product file must be checked for completeness with all necessary documents and references.
- Pre-production meetings are used to hand over product files and assign responsibilities to the right personnel.
- Tracking warehouse status ensures the timely receipt of raw materials and trims for smooth operations.
- Files are classified and handed over efficiently to the production department for easy use.
- Coordination among departments helps achieve production goals and resolve issues quickly.
- Accurate meeting minutes and proper engagement with concerned personnel ensure workflow continuity and prompt issue resolution.

Exercise

Multiple-choice Question:

1. What is the purpose of confirming the TNA plan before production?
 - a. To decorate the office
 - b. To ensure production timelines are met
 - c. To hire new workers
 - d. To order more office supplies
2. Why is it important to check a product file before handing it to production?
 - a. To remove extra documents
 - b. To confirm it contains all required references
 - c. To change its colour
 - d. To make it look neat only
3. What should be done in pre-production meetings?
 - a. Plan office events
 - b. Hand over product files to relevant personnel
 - c. Discuss vacation plans
 - d. Arrange for snacks only
4. Why is warehouse status tracked in pre-production planning?
 - a. To see if workers are present
 - b. To verify timely receipt of raw materials and trims
 - c. To monitor electricity usage
 - d. To count office chairs
5. What is a key benefit of preparing accurate meeting minutes?
 - a. To keep records of discussions for reference
 - b. To design new uniforms
 - c. To decorate notice boards
 - d. To check the spelling of names

Descriptive Questions:

1. Explain how confirming the TNA plan helps in starting production activities effectively.
2. Describe the process of ensuring a product file is complete and ready for handover.
3. Discuss the importance of pre-production meetings for smooth coordination.
4. Explain how tracking warehouse status helps in timely production planning.
5. Describe how coordination among departments helps in resolving issues promptly.

7. Factory Coordination and Managing Shipment



Unit 7.1 - Order Fulfilment and Shipment Coordination



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Ensure timely execution of orders.
2. Clarify relevant issues with the buyer or the buyer's house.
3. Inspect final shipment.

UNIT 7.1: Order Fulfilment and Shipment Coordination

Unit Objectives

By the end of this unit, the participants will be able to:

1. Elaborate on how one ensures the timely execution of orders in a production environment.
2. State how a professional clarifies relevant issues with the buyer or buying house to avoid delays.
3. Describe the procedures followed while inspecting the final shipment to ensure compliance with specifications.
4. Discuss how an individual coordinates quality inspections with the buying house QA or third-party QA at various stages.
5. Explain how packing report information is managed to facilitate the preparation of accurate shipping documents.
6. Outline the process by which approved shipments are forwarded through coordination with the shipping and documentation departments.

7.1.1 Ensuring Timely Execution of Orders in a Production Environment

Timely execution of orders is critical in the apparel, made-ups, and home furnishings sectors to meet buyer deadlines and maintain customer trust. A merchandiser must monitor every stage of production, from raw material sourcing to final shipment, while coordinating closely with all departments. Proactive planning, regular follow-ups, and immediate problem-solving help prevent delays. Ensuring clear communication and proper documentation allows smooth workflow and on-time order completion.



Fig. 7.1.1: Garments getting ready to be shipped

The process through which a merchandiser ensures the timely execution of orders in production is mentioned as follows:

1. **Develops a detailed Time and Action (TNA) plan:** Prepares a clear schedule covering all activities such as material sourcing, sample approvals, production, finishing, and shipment dates.
2. **Monitors raw material and trim availability:** Ensures that all fabrics, trims, labels, and accessories are ordered, delivered, and inspected on time to avoid production stoppage.
3. **Coordinates with suppliers and vendors:** Maintains regular follow-up with suppliers to track order status and expedite deliveries if there are delays.

4. **Conducts pre-production meetings (PPM):** Discusses product details, quality standards, and delivery timelines with production, quality, and other relevant teams to align priorities.
5. **Reviews daily production progress:** Tracks actual output versus planned targets and identifies any shortfalls or bottlenecks.
6. **Resolves issues promptly:** Takes immediate corrective action if there are quality defects, machine breakdowns, or manpower shortages.
7. **Ensures proper documentation flow:** Makes sure all approvals, test reports, and production instructions are received and circulated on time.
8. **Collaborates with the quality department:** Coordinates inline and final inspections to avoid last-minute rejections or shipment delays.
9. **Maintains open communication with buyers:** Provides regular updates to buyers regarding production status and handles any changes in delivery schedules or specifications.
10. **Finalises packing and logistics plans in advance:** Ensures packaging materials are ready, shipping documents are prepared, and transport arrangements are booked well before dispatch.
11. **Reviews and updates the TNA periodically:** Adjusts timelines if required and informs relevant teams to maintain control over the overall delivery schedule.

7.1.2 Process of Professional Clarifying Relevant Issues with the Buyer or Buying House

Clear and timely communication with the buyer or buying house is essential to prevent delays in apparel production and shipment. A merchandiser must verify every detail of the order, such as specifications, approvals, and delivery schedules. Any doubts or discrepancies must be raised immediately to avoid confusion later in production. Maintaining proper documentation and confirmation records ensures smooth execution and builds buyer confidence.

The process through which a merchandiser clarifies relevant issues with the buyer or buying house to avoid delays is mentioned as follows:

1. **Reviews all order details thoroughly:** Checks purchase orders, specifications, size sets, fabric quality, trims, and packaging requirements for accuracy.
2. **Seeks written confirmation for unclear points:** Sends emails or messages to buyers for any missing or ambiguous information regarding product details or delivery schedules.
3. **Obtains timely approvals:** Ensures sample approvals, lab-dip approvals, and print or embroidery strike-off approvals are received on schedule to keep production on track.
4. **Prepares and shares updated documentation:** Submits detailed production status reports, TNA updates, and approval records to keep buyers informed.
5. **Schedules regular follow-ups:** Maintains consistent communication via calls, virtual meetings, or emails to resolve issues promptly.
6. **Escalates urgent matters quickly:** If a critical problem arises, informs senior management or the buyer immediately to avoid delays.
7. **Confirms any changes in writing:** When the buyer requests any modifications in design, quantity, or delivery timeline, the buyer gets formal written approval before proceeding.
8. **Maintains a record of discussions:** Keeps a documented trail of decisions and clarifications for future reference and accountability.

9. **Coordinates with internal teams after buyer confirmation:** Shares updated instructions with production, quality, and logistics teams to ensure everyone is aligned with buyer requirements.
10. **Builds trust through transparency:** Informs the buyer promptly of potential risks and provides solutions to maintain on-time delivery.

7.1.3 Procedures Followed While Inspecting the Final Shipment

Final shipment inspection is critical to ensure that apparel, made-ups, or home furnishing products meet buyer specifications. A merchandiser verifies quality, measurements, labelling, packaging, and overall presentation before dispatch. Any non-conformance is addressed immediately to avoid rejections or penalties. This process safeguards buyer satisfaction and maintains the manufacturer's reputation.



Fig. 7.1.2: Checking the final orders before shipment

The procedures followed while inspecting the final shipment to ensure compliance with specifications are given below:

1. **Checks product quantity against the order:** Confirms that the total number of packed items matches the buyer's purchase order and packing list.
2. **Verifies garment or product measurements:** Randomly selects samples from cartons to confirm size, fit, and dimension accuracy as per approved specs.
3. **Inspects overall product quality:** Reviews stitching, finishing, embellishments, and trims to ensure consistency and defect-free production.
4. **Confirms labelling and tagging accuracy:** Ensures price tags, wash care labels, brand labels, and barcodes are correct and placed properly.
5. **Reviews packaging and carton details:** Checks that polybags, cartons, and packing methods follow buyer-approved packaging guidelines and shipping marks.
6. **Tests product performance if required:** Conducts or verifies colourfastness, shrinkage, or fabric strength tests as per buyer or third-party requirements.
7. **Performs visual inspection for damages:** Looks for stains, holes, colour variation, or any visible flaws in the final products.
8. **Ensures compliance with AQL (Acceptable Quality Level):** Follows industry or buyer-specific sampling standards to approve the shipment quality.

9. **Documents inspection findings:** Prepares a detailed inspection report highlighting any issues and corrective actions taken.
10. **Approves or holds shipment based on results:** If all parameters meet requirements, shipment is approved; otherwise, corrections are instructed before dispatch.



Fig. 7.1.3: Pre-delivery inspection

7.1.4 Process of Coordinating Quality Inspections by a Merchandiser

Coordination of quality inspections is a crucial part of a merchandiser's role, ensuring that products meet specified standards before shipment. This process involves a close collaboration between the merchandiser, the manufacturer, and the quality assurance (QA) teams from the buying house or a third-party agency. The merchandiser acts as the central point of contact, facilitating communication and scheduling inspections at critical production stages. Effective coordination minimises defects, prevents production delays, and ultimately ensures customer satisfaction.



Fig. 7.1.4: Quality checking of the garment

A merchandiser coordinates quality inspections at various stages of production to ensure product quality. This process begins with the fabric and trims inspection, where the merchandiser informs the buying house or third-party QA to check the raw materials for any defects in colour, feel, or quality before cutting begins. They must share the production plan and fabric inward dates so the QA can schedule their visit accordingly. Once production is underway, an in-line inspection or mid-production check is conducted. At this stage, the merchandiser must coordinate with the QA to inspect a batch of products to catch any early production issues, such as stitching errors or incorrect measurements. This check is crucial for making corrections before a large quantity of defective goods is produced.



Fig. 7.1.5: Final inspection

The most critical stage is the final inspection or pre-shipment inspection (PSI), which is typically a full audit of the finished goods. The merchandiser must inform the buying house or third-party QA once a specified percentage of the order, usually 80-100%, is packed and ready for inspection. They need to provide a packing list and carton details to the QA team. The merchandiser then follows up on the inspection report and ensures any required rectifications are done promptly, coordinating the shipment only after the final inspection is passed and the quality standards are met. This three-stage coordination ensures a systematic approach to quality control.

7.1.5 Process of Packing Report Information for Facilitating the Preparation of Accurate Shipping Documents

A packing report is a critical document that details the contents and dimensions of each carton in a shipment. The merchandiser manages this information to ensure accurate shipping documents, such as the commercial invoice, packing list, and bill of lading, are prepared. This process involves cross-referencing the report with the purchase order to verify quantities and product details. By meticulously handling this data, the merchandiser guarantees a smooth logistics process and avoids discrepancies that could cause customs delays or extra costs.

COMMERCIAL INVOICE

Shipper		Invoice Number		Invoice Date		BL Number	
		Reference			Buyer Reference		
Consignee		Buyer (if not consignee)					
		Country of Origin			Country of Destination		
Method of Shipping		Type of Shipment		Terms of Payment			
Vessel/Aircraft		Voyage No					
Port of Loading		Departure Date					
Port of Discharge		Final Destination		Marine Cover Policy No		Letter of Credit No	
Product Code	Description	HS Code	Unit Type	Unit Quantity	Net Weight	Unit Price	Amount
Order Total				0		0	
Additional info				Additional Charges or Discounts			
				Tax %			

Fig. 7.1.6: Commercial invoice required as a shipping document

A merchandiser manages packing report information meticulously to facilitate the preparation of accurate shipping documents. The packing report is received from the factory after the goods are packed and ready for shipment. It provides a detailed breakdown of the contents of each carton, including style numbers, quantities, sizes, net weight, gross weight, and carton dimensions. The merchandiser's first step is to carefully check this report against the original purchase order (PO) to confirm that the quantities packed match the quantities ordered. This verification is crucial for ensuring the financial and logistical accuracy of the entire shipment.

Once verified, the information from the packing report is used to draft the packing list, a key shipping document. The packing list summarises the total number of cartons, total weight, and total volume of the shipment, which is essential for the shipping company to calculate freight charges. The merchandiser also uses the packing report data to prepare the commercial invoice, which details the value of the

The detailed process of forwarding approved shipments through coordination with the shipping and documentation departments is discussed as follows:

1. Verification of Shipment Approval

- Confirm that the shipment has successfully passed all buyer or third-party inspections.
- Ensure that the final inspection certificate and approval note are received and documented.
- Double-check that any corrective actions, if required during inspections, have been implemented.

2. Cross-Checking Packing and Quality Records

- Verify packing reports for accuracy in carton count, measurements, and weight.
- Ensure that the packaging, labelling, and marking instructions match buyer specifications.
- Review any internal quality control records to confirm consistency with approved samples.

3. Sharing Shipment Details with the Shipping Department

- Provide full shipment data, including product codes, quantities, carton dimensions, and gross/net weight.
- Confirm shipping schedules and delivery windows as per the buyer's purchase order.
- Align with freight forwarders or logistics providers to secure cargo space in advance.

4. Preparation of Accurate Documentation

- Coordinate with the documentation department to prepare the commercial invoice, packing list, certificate of origin, and other required documents.
- Ensure documents match the letter of credit, purchase order terms, and any special buyer requirements.
- Get documents internally reviewed to detect discrepancies before submission.

5. Finalising and Dispatching Goods

- Confirm that carton sealing and labelling are completed under supervision.
- Arrange the handover of goods to the shipping department with clear dispatch instructions.
- Ensure transport is organised to deliver goods to the port, airport, or buyer's nominated warehouse on time.

6. Handover of Shipping Documents

- Ensure that airway bills, bills of lading, or other transport documents are correctly issued.
- Share scanned copies of shipping documents with the buyer for their reference.
- Forward original documents to the buyer or bank as per trade terms (FOB, CIF, LC, etc.).

7. Post-Dispatch Communication and Record-Keeping

- Confirm with the logistics provider that the shipment is successfully loaded and dispatched.
- Update the buyer on shipment status, providing relevant tracking information.
- Maintain an organised record of all shipment documents for future audit or reference.

BILL OF LADING Page 1 of _____

SHIP FROM		Bill of Lading Number: _____						
Name: _____ Address: _____ City/State/Zip: _____ COD: _____		BAR CODE SPACE						
SHIP TO		CARRIER NAME: _____						
Name: _____ Location #: _____ Address: _____ City/State/Zip: _____ COD: _____		Trailer number: _____ Seal number(s): _____						
THIRD PARTY FREIGHT CHARGES BILL TO:		SCAC: _____						
Name: _____ Address: _____ City/State/Zip: _____		Pro number: _____						
SPECIAL INSTRUCTIONS:		BAR CODE SPACE						
		Freight Charge Terms: (freight charges are prepaid unless marked otherwise) Prepaid _____ Collect _____ 3 rd Party _____						
<input type="checkbox"/> Master Bill of Lading with attached underlying Bills of Lading								
CUSTOMER ORDER HISTORY								
CUSTOMER ORDER NUMBER	# PAGE	WEIGHT	PALLET/SLIP		ADDITIONAL SHIPPER INFO			
			Y	N				
			Y	N				
			Y	N				
			Y	N				
			Y	N				
			Y	N				
			Y	N				
			Y	N				
GRAND TOTAL			Y	N				
COMMODITY DESCRIPTION								
HANDLING UNIT		PACKAGE		WEIGHT	I.N.M. (L)	COMMODITY DESCRIPTION <small>(Indicate quantity and unit used and if necessary, describe in detail all contents of each unit and indicate any special handling instructions for each unit of each lot.)</small>	LTL ONLY	
QTY	TYPE	QTY	TYPE				NAFC #	CLASS
GRAND TOTAL								
RECEIVING STAMP SPACE								
GRAND TOTAL								
When the bill is accepted or when it is paid or when it is delivered to the consignee it is binding for goods or services of the property as follows: This bill is not binding if the property is specifically stated by the shipper to be not binding.						ODD Amount: \$ _____ Fee Terms: Collect <input type="checkbox"/> Prepaid <input type="checkbox"/> Customer check acceptable <input type="checkbox"/>		
NOTE: Liability limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. - 14502(j)(1)(A) and (B). RECEIVING SUBJECT TO INDIVIDUAL RESPONSIBILITY OF CONTRACTOR. THE SHIPPER AGREES TO PRINT WRITING BETWEEN THE SHIPPER AND SHIPPER. IT APPLICABLE, REFER TO THE RATE, CLASSIFICATION AND CODES THAT HAVE BEEN SUBMITTED TO THE CARRIER AND ARE AVAILABLE TO THE SHIPPER, OR REQUEST, AND TO ALL APPLICABLE TARIFFS AND TARIFF PROVISIONS.						The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.		
SHIPPER SIGNATURE / DATE <small>This is a warranty for the goods and services and is subject to the terms, conditions, and limitations of the bill of lading and the applicable provisions of the U.S.C.</small>		Trailer Loaded: <input type="checkbox"/> By Shipper <input type="checkbox"/> By Driver		Freight Counted: <input type="checkbox"/> By Shipper <input type="checkbox"/> By Driver/Party used to contain <input type="checkbox"/> By Driver/Party		CARRIER SIGNATURE / PICKUP DATE: <small>Carrier acknowledges receipt of packages and/or other goods. Carrier will not be responsible for loss or damage to goods unless carrier's bill of lading is signed by the shipper. Property and/or other goods are not to be loaded unless carrier is notified.</small>		

Fig. 7.1.8: Bill of lading (A shipping document)

Summary

- Timely order execution in production ensures smooth delivery schedules.
- Clarifying issues with buyers or buying houses helps prevent delays.
- Final shipment inspections verify compliance with required specifications.
- Quality inspections are coordinated with the buying house QA or third-party QA at different stages.
- Packing report information is maintained accurately for preparing the correct shipping documents.
- Approved shipments are forwarded through proper coordination with the shipping and documentation teams.
- Effective order fulfilment and shipment coordination maintain customer satisfaction and quality standards.

Exercise

Multiple-choice Question:

1. What is the main purpose of timely order execution in production?
 - a. To increase garment prices
 - b. To ensure smooth delivery schedules
 - c. To reduce manpower requirements
 - d. To add more designs at the last minute

2. Who should be contacted to clarify issues that may cause shipment delays?
 - a. Retail customers
 - b. Buying a house or a buyer
 - c. Factory housekeeping staff
 - d. Local transport companies

3. Why is the final shipment inspected before dispatch?
 - a. To change packaging styles
 - b. To verify compliance with specifications
 - c. To increase production cost
 - d. To reduce fabric usage

4. Which document is prepared using packing report information?
 - a. Salary slip
 - b. Shipping documents
 - c. Attendance sheet
 - d. Production incentive report

5. Who coordinates with the shipping and documentation departments for approved shipments?
 - a. Security personnel
 - b. Quality inspectors only
 - c. Production or shipment coordinators
 - d. Local suppliers

Descriptive Questions:

1. Explain the importance of ensuring timely order execution in the production environment.
2. Describe how professionals clarify relevant issues with buyers or buyers of houses to prevent delays.
3. Discuss the procedures followed during final shipment inspection to meet specifications.
4. Explain how quality inspections are coordinated with buying house QA or third-party QA at different stages.
5. Outline the process of forwarding approved shipments through coordination with the shipping and documentation teams.

8. Adhere to Industry, Regulatory, and Organisational Standards and Embrace Environmentally Sustainable Practices



Unit 8.1 - Workplace Ethics and Compliance

Unit 8.2 - Environmental Sustainability and Efficiency



Key Learning Outcomes

By the end of this module, the participants will be able to:

1. State the importance of ethics, values, punctuality, and attendance in ensuring effective governance and professional conduct.
2. Explain how practising values and ethics benefits both individuals and organisations.
3. Describe customer-specific and country-specific requirements and regulations in the apparel sector and their importance.
4. Outline organisational reporting procedures and the limits of personal responsibility in addressing deviations.
5. Clarify doubts on organisational policies, procedures, and compliance requirements through authorised personnel.
6. Discuss the role of greening solutions, policies, legislation, and regulations in creating a sustainable workplace.
7. Evaluate resource usage and energy conservation practices, including the importance of switching off machines when not in use.
8. Identify procedures to address unmet legal, regulatory, or ethical requirements and correctly interpret industry-specific standards.
9. Mention work functions in accordance with organisational standards, sustainable practices, and compliance obligations.
10. Demonstrate proper methods of handling, storing, and segregating waste materials to ensure safe disposal and recycling.

UNIT 8.1: Workplace Ethics and Compliance

Unit Objectives

By the end of this unit, the participants will be able to:

1. Elaborate on the importance of having an ethical approach to governance in organisational settings.
2. Explain the benefits to the self and the organisation arising from the consistent practice of ethics and values.
3. Describe why punctuality and regular attendance are essential for professional effectiveness.
4. Discuss customer-specific requirements that must be met as part of the work process.
5. Outline the key country/customer regulations governing the apparel sector and explain their importance.
6. Illustrate the reporting procedures followed by organisations in case of deviations from standard practices.
7. State the limits of personal responsibility within an organisational framework.
8. Mention the correct way to report possible deviations from regulatory requirements in a timely manner.
9. Clarify how doubts on policies and procedures can be resolved through consultation with supervisors or authorised personnel.
10. Identify and discuss the procedures to follow when legal, regulatory, or ethical requirements of the organisation are not met.
11. Elucidate how to interpret legal, regulatory, and ethical requirements accurately within the apparel industry.
12. Explain the importance of adhering to organisational policies strictly within the limits of self-authority.
13. Describe how to carry out work functions in compliance with organisational standards and regulations.

8.1.1 Importance of Having an Ethical Approach to Governance in Organisational Settings

An ethical approach to governance builds trust, ensures transparency, and strengthens credibility in organisational operations. In the garment sector, it helps prevent unfair practices, supports worker welfare, and aligns businesses with global compliance standards. Ethical governance reduces risks of legal issues, audit failures, and buyer dissatisfaction. Promoting responsible decision-making improves long-term relationships with clients, suppliers, and employees.

The four principles of ethical governance are stated as follows:

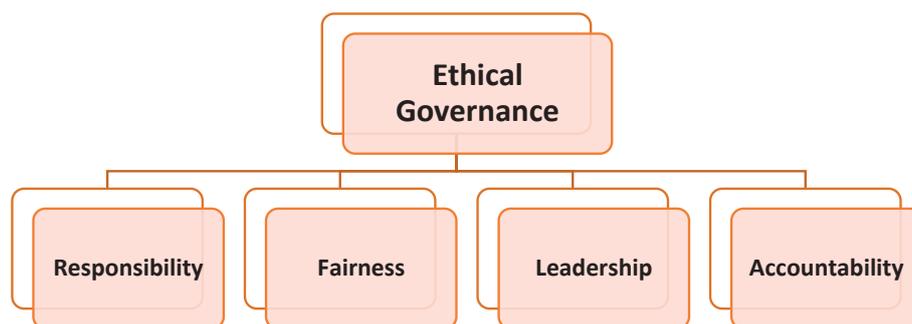


Fig. 8.1.1: Principles of ethical governance

The importance of an ethical approach to governance in organisational settings in the apparel sector is mentioned below:

- **Ensures Fair Trade Practices**
 - Maintains honesty in pricing, sourcing, and negotiations with buyers and suppliers.
 - Prevents fraudulent documentation or misrepresentation of product details.
- **Builds Buyer Confidence**
 - Encourages transparency in production timelines, quality assurance, and shipment commitments.
 - Strengthens the reputation of the organisation in international markets.
- **Supports Worker Welfare**
 - Promotes safe working conditions and compliance with labour laws.
 - Eliminates unethical practices such as underpayment, forced labour, or unsafe factory environments.
- **Aligns with Global Compliance Standards**
 - Meets international audit requirements set by buyers, trade organisations, or certification bodies.
 - Reduces the risk of shipment rejections, penalties, or loss of contracts due to non-compliance.
- **Improves Decision-Making**
 - Encourages transparent policies in procurement, production planning, and vendor selection.
 - Minimises conflicts of interest by prioritising collective goals over personal gain.
- **Prevents Legal and Financial Risks**
 - Reduces chances of disputes, lawsuits, or government penalties.
 - Avoids unnecessary costs caused by unethical shortcuts or violations.
- **Strengthens Long-Term Relationships**
 - Builds trust with stakeholders, including buyers, suppliers, and employees.
 - Creates opportunities for repeat business and long-term partnerships.
- **Enhances Organisational Reputation**
 - Demonstrates a commitment to responsible and sustainable business practices.
 - Attracts socially conscious buyers who value ethical sourcing and governance.

Within a code of ethics, integrity, respect, excellence, commitment, and loyalty are frequently identified as central principles. These values serve as a compass for guiding behaviour, decisions, and interactions for both individuals and organisations. By embracing these principles, a positive and ethical environment is fostered.

8.1.2 Benefits to Self and the Organisation arising from Practising Ethics and Values

Consistent practice of ethics and values helps build trust, responsibility, and long-term credibility in the apparel sector. For a merchandiser, these practices ensure transparent communication with suppliers, buyers, and team members. Ethical conduct reduces conflicts, prevents errors, and strengthens professional relationships. When both individuals and organisations follow strong values, it results in improved performance, sustainability, and global recognition.

The benefits to oneself are stated as follows:

- **Professional Reputation:** Builds a strong standing in the apparel and home furnishing industry.
- **Confidence in Decision-Making:** Increases clarity and assurance while dealing with buyers, vendors, and production teams.
- **Fair Judgement:** Supports making unbiased decisions without compromising standards.
- **Personal Satisfaction:** Creates a sense of pride and accountability for quality work.
- **Reduced Stress:** Avoids dishonest practices that can lead to conflicts of interest.
- **Career Growth:** Improves long-term opportunities by gaining trust from employers and clients.
- **Work Discipline:** Encourages consistent performance and reliability.

On the other hand, the benefits to the organisation are mentioned below:

- **Global Credibility:** Builds trust with international buyers who prioritise ethical sourcing.
- **Customer Loyalty:** Increases repeat business through transparent operations.
- **Legal and Compliance Safety:** Minimises risks of penalties or disputes.
- **Team Harmony:** Enhances cooperation as employees feel respected and treated fairly.
- **Positive Workplace Culture:** Attracts and retains skilled and motivated employees.
- **Operational Efficiency:** Reduces delays, disputes, and quality issues.
- **Stronger Business Relations:** Improves partnerships with suppliers and stakeholders.
- **Sustainable Brand Image:** Positions the organisation as trustworthy and responsible.

8.1.3 Importance of Punctuality and Attendance

Punctuality and attendance are vital qualities that enhance personal efficiency and organisational success. For a merchandiser in the apparel, made-ups, and home furnishings sector, being on time helps coordinate tasks effectively and maintain smooth communication with buyers and suppliers. These habits prevent delays, reduce stress, and improve workflow consistency. They also demonstrate responsibility and professionalism, earning the trust of colleagues and clients.

- **The importance of punctuality and attendance to oneself is mentioned as follows:**
- **Develops Professional Discipline:** Creates a habit of managing time effectively.
- **Builds Personal Credibility:** Establishes reliability in the eyes of management, suppliers, and buyers.
- **Improves Time Management Skills:** Encourages prioritising tasks efficiently.
- **Reduces Personal Stress:** Prevents panic caused by missed schedules or unprepared meetings.
- **Enhances Career Opportunities:** Consistent discipline often leads to better appraisals, promotions, and recognition.
- **Supports Skill Growth:** Being present regularly increases opportunities to learn and gain practical exposure.

On the other hand, the importance of punctuality and attendance in an organisation is discussed below:

- **Ensures Smooth Workflow:** Avoids disruptions in sampling, quality checks, and shipment approvals.
- **Improves Team Coordination:** Keeps everyone aligned to production timelines and buyer commitments.
- **Reduces Operational Delays:** Minimises bottlenecks caused by absenteeism or late arrivals.
- **Boosts Productivity:** Maximises effective use of working hours for planned tasks.
- **Strengthens Buyer Trust:** Demonstrates professionalism that reassures clients about timely delivery.
- **Creates a Positive Work Culture:** Inspires other employees to maintain similar discipline.



Fig. 8.1.2: A merchandiser discussing in the Indian apparel industry

8.1.4 Customer-Specific Requirements

Customer-specific requirements are detailed expectations that must be followed to meet buyer standards and ensure satisfaction. In the apparel, made-ups, and home furnishings sector, merchandisers must strictly comply with these requirements to maintain quality, timely delivery, and brand reputation. These requirements can relate to product specifications, compliance standards, packaging, and documentation. Adhering to them avoids costly rejections, strengthens buyer relationships, and secures repeat business.

The customer-specific requirements mandated as part of the work process are stated below:

- **Product Specifications**
 - Ensure fabric quality, GSM (weight), weave, colour shade, and finish match the approved samples.
 - Maintain correct sizes, measurements, and tolerances as stated by the buyer to avoid fit issues.
 - Use trims, labels, threads, and accessories from nominated suppliers where specified.

- **Quality Standards**
 - Follow buyer-approved inspection plans to meet AQL (Acceptable Quality Level) standards.
 - Ensure consistent stitching quality, secure seams, and proper finishing to avoid defects.
 - Carry out in-line and final inspections to catch errors before shipment.
- **Compliance Requirements**
 - Fulfil social and ethical compliance audits covering worker safety, wages, and labour laws.
 - Meet environmental compliance, like restricted chemical use or sustainable sourcing certifications.
 - Keep records ready for unannounced factory audits by buyers or third-party agencies.
- **Packaging Instructions**
 - Use specified packaging materials such as polybags, cartons, and barcodes to meet buyers' retail needs.
 - Apply accurate carton markings, labels, and size/quantity breakdowns as instructed.
 - Ensure packaging is strong enough to protect goods during transit while meeting eco-friendly requirements.
- **Delivery Schedules**
 - Follow strict production timelines to meet ex-factory or port delivery deadlines.
 - Arrange for pre-shipment inspections by buyers or third-party agencies without causing delays.
 - Maintain a buffer period to handle any unforeseen production issues.
- **Testing and Certification**
 - Send fabric, trims, and finished goods to buyer-approved labs for mandatory tests like colour fastness, pH balance, shrinkage, and harmful substances.
 - Obtain certificates of compliance (e.g., OEKO-TEX, GOTS) when required by the buyer.
- **Documentation Accuracy**
 - Prepare commercial invoices, packing lists, shipping bills, and a certificate of origin in the buyer's required format.
 - Avoid clerical errors, as they may cause shipment clearance delays or legal issues.
- **Communication Protocols**
 - Share sampling updates, approval requests, and production status regularly as per the buyer's preferred method (email, portal, or call).
 - Maintain records of all buyer approvals to avoid disputes later.
- **Cost and Pricing Agreements**
 - Follow the agreed cost sheet without making unauthorised changes in raw material or production costs.
 - Ensure payment terms like L/C (Letter of Credit) or T/T (Telegraphic Transfer) are clearly understood and followed.



Fig. 8.1.3: Sewing a garment according to customer-specific requirements

- **After-Sales Support**
 - Respond promptly to buyer feedback on quality, delivery, or product performance.
 - Provide corrective actions to build buyer trust and ensure future orders.

8.1.5 Country/Customer Specific Regulations for the Apparel Sector and their Importance

Country- and customer-specific regulations in the apparel sector are mandatory standards that control product safety, labelling, chemical use, and ethical practices. A merchandiser must understand and implement these regulations to ensure that shipments meet legal and buyer requirements. Non-compliance can lead to shipment rejections, penalties, or even bans in certain markets. Following these rules builds credibility with buyers and supports long-term business growth.

The country/customer-specific regulations for the apparel sector are discussed as follows:

- **Chemical Restrictions and Safety Standards**
 - Comply with REACH (EU), CPSIA (USA), and similar standards restricting harmful chemicals such as azo dyes, formaldehyde, and lead.
 - Ensure products meet flammability and safety norms, especially for children's wear.
 - Use certified dyes and auxiliaries approved by buyers or accredited agencies.
- **Labelling and Product Information Requirements**
 - Follow country-specific labelling rules regarding fibre content, wash care instructions, size, and country of origin.
 - Include special warnings or age-appropriate information for kids' apparel.
 - Ensure labels are durable, accurate, and in the required language of the destination country.
- **Sustainability and Eco-Certifications**
 - Meet buyer or country mandates for certifications like OEKO-TEX, GOTS, or Fair Trade for sustainable sourcing.
 - Avoid materials from endangered species or unsustainable sources.
- **Ethical and Social Compliance**
 - Adhere to labour laws, minimum wage standards, and workplace safety audits (e.g., SEDEX, BSCI, WRAP).
 - Ensure no child labour, forced labour, or unsafe conditions in the production process.
- **Testing and Quality Approvals**
 - Conduct mandatory lab testing for colour fastness, pH balance, shrinkage, and harmful substances before shipment.
 - Use buyer-approved or accredited labs to issue valid certificates.
- **Import/Export Regulations**
 - Follow quota rules, duty structures, and customs regulations of the importing country.
 - Obtain certificates of origin or preferential trade certificates where required.



Fig. 8.1.4: Checking the country/customer-specific requirement in the apparel sector

On the other hand, the importance of following country/customer-specific regulations is given below:

- **Prevents Shipment Rejection and Delays:** Ensures goods are accepted at customs without penalties or legal issues.
- **Builds Buyer Confidence:** Strengthens long-term relationships by proving reliability and professionalism.
- **Protects Brand Reputation:** Avoids negative publicity or loss of contracts due to safety or ethical violations.
- **Meets Legal Obligations:** Helps the organisation comply with both domestic laws and international trade rules.
- **Ensures Consumer Safety and Satisfaction:** Delivers products that are safe, high-quality, and meet the end-user's expectations.
- **Improves Market Access:** Allows entry into high-value markets with stricter regulations like the EU, USA, or Japan.
- **Supports Sustainable Business Growth:** Encourages practices that reduce environmental impact and meet global buyer trends for eco-friendly products.

Furthermore, the Garments Quality SOP, or Standard Operating Procedure, also plays an integral part in meeting the customer-specific requirements in the garment manufacturing process. It is a set of written guidelines and instructions that a garment factory or quality control department uses to ensure that all products meet specific quality standards. These SOPs are crucial for maintaining consistency, reducing defects, and meeting the requirements of both the company and its buyers. There are 16 SOPs that need to be followed by the manufacturers to meet the customer-specific requirements in the apparel manufacturing process across the world.

Therefore, a Garments Quality SOP can be referred to as a vital tool for any apparel manufacturer. It's the blueprint for a quality management system, ensuring that every garment produced is a "right-first-time" product that meets the highest standards of quality and safety.





Fig. 8.1.5: Garments Quality SOP

8.1.6 Reporting Procedures followed by Organisations in case of Deviations from Standard Practices

Every organisation has a defined reporting procedure to address deviations from planned processes, quality standards, or customer requirements. A merchandiser must promptly identify any variation and communicate it to the concerned authority to avoid delays or shipment issues. Proper documentation and timely escalation help in taking corrective actions quickly. Following the reporting procedure ensures accountability, smooth workflow, and customer satisfaction.

The reporting procedure of the organisation in case of deviations from standard practices is mentioned as follows:

- **Identify the Deviation Clearly**
 - Detect any variation in product specifications, timelines, production methods, or quality parameters.
 - Verify the deviation against buyer requirements or organisational standards.
- **Document the Details Accurately**
 - Record the nature of the deviation, date, affected order or style, and department involved.
 - Maintain photographic or sample evidence wherever required.
- **Inform the Immediate Supervisor or Department Head**
 - Report deviations through the established communication channel—email, report form, or ERP system.
 - Ensure the information is passed to the right authority without delay.
- **Escalate to the Quality or Compliance Team**
 - Forward documented reports to the quality assurance or compliance team for investigation.
 - Share findings with merchandising, production, and sourcing teams as necessary.
- **Participate in Root Cause Analysis**
 - Provide relevant information during meetings or audits to identify reasons for the deviation.
 - Suggest practical solutions to avoid recurrence.
- **Follow Corrective and Preventive Actions (CAPA)**
 - Assist in implementing the approved corrective measures within set timelines.
 - Ensure preventive steps are added to future workflows to maintain compliance.

- **Maintain Records for Reference**
 - Keep deviation reports, approval notes, and corrective action records for audits or buyer verification.
 - Update organisational databases to reflect issue closure.
- **Confirm Resolution with Relevant Teams**
 - Verify that corrective actions have been implemented successfully.
 - Obtain closure approval from the authorised personnel before proceeding with production or shipment.

8.1.7 Limits of Personal Responsibility

Personal responsibility is the moral and ethical obligation of an individual to take ownership of their own actions, decisions, and behaviours. It is the belief that an individual is the primary cause of the outcomes of their lives, both positive and negative, and that the individual has the power to shape their destiny through their choices. From the viewpoint of the apparel sector and a merchandiser, personal responsibility is an all-encompassing concept that defines their role as the central orchestrator of the entire production process. A merchandiser is not just an order-taker; they are the crucial link between the buyer and the factory, and their personal responsibility is a constant driver for every decision and action they take.



Fig. 8.1.6: Few responsibilities of a merchandiser in the apparel sector

The limits of personal responsibility for a merchandiser working in the apparel sector are stated below:

- **Defined Job Duties:** A merchandiser must perform activities such as product development, costing, order coordination, and buyer communication as outlined in the job description. Taking up tasks beyond these defined duties can lead to confusion and errors.
- **Approval Restrictions:** Key decisions like price approval, shipment dates, or order quantities require management authorisation. Acting without approval may result in financial or contractual issues.
- **Escalating Major Issues:** Significant quality problems, delays, or cost escalations should be reported to senior authorities. Attempting to resolve such issues alone may exceed personal authority and create risks.
- **Accountability for Own Work:** A merchandiser is responsible for the accuracy and timeliness of tasks directly handled. Proper planning and attention to detail help maintain efficiency and avoid delays.
- **No Independent Negotiations:** Negotiating terms with buyers or vendors must be done only with prior approval from management. Unauthorised discussions can harm relationships or breach company policy.
- **Maintaining Confidentiality:** Costing details, buyer information, and order data must be kept secure. Sharing sensitive information outside authorised channels may damage the company's reputation.
- **Providing Inputs, Not Overruling Teams:** A merchandiser can suggest improvements to production, sourcing, or quality teams, but should not override their final decisions. Respecting defined roles ensures smooth teamwork.
- **Proper Documentation of Actions:** All actions, approvals, and communications must be documented to maintain transparency. This helps clarify individual responsibility while avoiding overstepping authority.

8.1.8 Correct Way of Reporting Possible Deviations from Regulatory Requirements

In an apparel merchandising environment, deviations may occur in product specifications, timelines, costings, or quality standards. Reporting these deviations promptly ensures that corrective measures are taken before they impact buyer satisfaction or order delivery. A structured reporting procedure helps maintain accountability and clear communication across departments. Following this process also protects the merchandiser from taking unauthorised decisions or carrying personal risk.



Fig. 8.1.7: Apparel merchandising

The reporting procedure in case of deviations is discussed as follows:

1. **Identify and Verify the Deviation:** The merchandiser first checks whether the issue relates to quality, quantity, timelines, or costing. Verification prevents false alarms and ensures only genuine deviations are reported.
2. **Document the Details Clearly:** All deviation information, such as the nature of the problem, affected styles, and timelines, must be recorded accurately. Proper documentation supports transparency and future reference.
3. **Notify the Immediate Supervisor:** The merchandiser informs the reporting manager or department head at the earliest opportunity. Early escalation helps management take timely corrective actions.
4. **Follow the Standard Reporting Format:** Reports must be submitted using formats approved by the organisation, such as deviation forms or email templates. Consistency ensures that all required information is captured for decision-making.
5. **Provide Supporting Evidence:** Photographs, inspection reports, test results, or correspondence must be attached to the report wherever possible. Evidence strengthens the case and speeds up the resolution.
6. **Avoid Taking Independent Corrective Actions:** The merchandiser should not attempt to fix major deviations alone without management approval. This avoids conflicting decisions or additional errors.
7. **Track Management Response and Action Plan:** Once reported, the merchandiser follows up to confirm actions taken by senior authorities. Tracking ensures that no deviation remains unresolved.
8. **Update Relevant Departments:** Information about deviations and corrective measures should be shared with production, quality, and logistics teams. This prevents the same issue from recurring in future orders.

8.1.9 Clarifying Doubts on Policies and Procedures

In an apparel merchandising organisation, an accurate understanding of company policies, buyer requirements, and standard procedures is critical for smooth operations. Merchandisers are often required to follow strict guidelines on quality checks, order follow-ups, packaging standards, or export documentation. When confusion arises, clarifying doubts through the right authority prevents costly errors and delays. This systematic approach also reinforces accountability and supports professional growth.

The process of clarifying doubts on policies and procedures from the supervisor or other authorised personnel is mentioned below:

1. **Recognise Areas of Uncertainty:** The merchandiser must first identify exactly which instruction, policy, or step is unclear. For example, uncertainty may arise in understanding a buyer's labelling requirement or the organisation's quality approval process.
2. **Review Available Information Before Seeking Help:** Existing manuals, SOPs (Standard Operating Procedures), or circulars should be read before approaching a senior. This shows preparedness and avoids wasting time on easily available information.
3. **Approach the Correct Person for Guidance:** The merchandiser must contact the immediate supervisor, quality manager, or authorised senior, depending on the nature of the doubt. Asking the right person ensures accurate and consistent information rather than conflicting opinions.
4. **State the Query Clearly and Professionally:** The merchandiser should present the doubt politely and describe the situation without confusion. For example: "There is a difference in the measurement chart from the buyer and the production sample; please confirm which to follow."

5. **Request Practical Clarification or Examples if Needed:** If written instructions seem complex, it helps to ask for a real case example or previous sample reference. This makes it easier to translate theoretical guidelines into practical work steps.
6. **Make Notes of All Clarifications Provided:** Recording key instructions immediately avoids miscommunication or forgetting details later. A short written summary can also be shared with the supervisor for confirmation, if necessary.
7. **Confirm the Understanding Before Taking Action:** The merchandiser should repeat or summarise the guidance back to the supervisor to confirm that the doubt is fully cleared. This step prevents mistakes caused by partial understanding.
8. **Apply and Monitor the Guidance in Future Work:** Once clarified, the merchandiser applies the instruction in ongoing work and observes results. Consistently using updated knowledge improves accuracy and builds trust with management.
9. **Share Learning if Required:** When appropriate, the merchandiser can share the clarified information with team members who might face similar confusion. This practice encourages uniform understanding across the department.

8.1.10 Identifying and Discussing the Procedures to be followed

In an apparel merchandising organisation, compliance with legal, regulatory, and ethical requirements is essential to maintain credibility, avoid penalties, and meet buyer expectations. Issues such as misuse of child labour, incorrect labelling, non-compliance with export regulations, or unfair trade practices can lead to serious consequences. A merchandiser must know how to identify such non-compliance and take prompt action through the proper channels. Following a clear and systematic procedure ensures accountability, transparency, and timely resolution of issues.



Fig. 8.1.8: Merchandising of garments

The procedures to follow when legal, regulatory, or ethical requirements are not met are stated below:

1. Identify and Verify the Deviation

- The merchandiser first observes or receives information about a possible violation, such as misuse of restricted chemicals, wrong country-of-origin labels, or non-compliance with labour laws.
- The situation must be checked carefully using available documents, inspection reports, or communication records to confirm the accuracy of the information.

2. Document the Non-Compliance Clearly

- All relevant details, such as date, time, nature of deviation, and supporting evidence, should be recorded accurately.
- This documentation helps to present facts objectively and avoids confusion or misinterpretation.

3. Report the Issue to the Immediate Supervisor or Compliance Officer

- The merchandiser must escalate the issue promptly to the person responsible for compliance within the organisation.
- Timely reporting ensures that corrective actions can be initiated before the issue affects production schedules or shipment approvals.

4. Follow the Organisation's Escalation Procedure

- If the supervisor is not available or does not respond, the merchandiser should take the matter to higher authorities, such as the head of the department or the compliance manager.
- The escalation path must follow the organisation's hierarchy to maintain proper control and record keeping.

5. Cooperate with Investigations and Provide All Information

- When an internal or external audit team investigates, the merchandiser must share all records and clarify any queries.
- Transparent cooperation helps resolve issues quickly and demonstrates commitment to compliance.

6. Participate in Implementing Corrective Actions

- Once the deviation is acknowledged, the merchandiser may assist in corrective measures such as changing labels, updating documentation, reworking samples, or improving supplier practices.
- Ensuring timely implementation prevents recurrence and restores compliance.

7. Learn and Update Knowledge on Relevant Regulations

- After the issue is resolved, the merchandiser should study the related policies or legal requirements to avoid repeating the mistake.
- Continuous awareness strengthens professional competence and builds trust with clients and authorities.

8. Maintain Confidentiality When Required

- Sensitive matters such as ethical violations or legal breaches should be discussed only with authorised personnel.
- This prevents rumours, protects the organisation's reputation, and ensures fair handling of the issue.



Fig. 8.1.9: Types of compliance involved with the apparel sector

Compliance in the apparel sector covers legal, quality, ethical, and environmental requirements to ensure products meet global standards. Legal compliance addresses regulations like labour laws, wage norms, and export-import rules. Quality compliance ensures garments pass tests for durability, colour fastness, and safety certifications. Ethical and environmental compliance focuses on responsible sourcing, fair labour practices, and reducing ecological impact through sustainable production.

8.1.11 Process of Interpreting Legal, Regulatory, and Ethical Requirements

In the apparel industry, understanding legal, regulatory, and ethical requirements is crucial to ensure compliance with buyer expectations, trade laws, and workplace standards. A merchandiser must correctly interpret these requirements to avoid shipment delays, financial penalties, or damage to the company's reputation. Proper interpretation involves reading official guidelines, seeking expert advice when unclear, and applying them to day-to-day operations such as sourcing, production, and quality control. Maintaining updated knowledge enables the merchandiser to align business practices with global and domestic standards effectively.

The process of interpreting legal, regulatory, and ethical requirements accurately within the apparel sector is discussed as follows:

1. Study Official Documents and Standards Carefully

- The merchandiser must review buyer manuals, government notifications, and international trade guidelines to understand compliance needs.
- Reading the exact text prevents misinterpretation or reliance on second-hand information.

2. Relate Requirements to Day-to-Day Operations

- Laws and regulations should be mapped to practical activities like fabric sourcing, labelling, packaging, and shipping.
- This ensures that compliance is not just theoretical but directly applied to ongoing work.

3. Clarify Unclear Points with Authorised Personnel

- Any confusion regarding standards such as chemical restrictions, labour laws, or export documentation must be discussed with supervisors, compliance managers, or legal experts.
- Timely clarification avoids costly mistakes or delays.

4. Refer to Industry Best Practices and Buyer Specifications

- Apart from mandatory laws, merchandisers must also understand ethical codes set by buyers, such as sustainable sourcing or fair wage policies.
- Comparing these with legal standards helps maintain both compliance and client satisfaction.

5. Keep Updated with Regular Changes

- Regulations in textiles, labelling, or environmental compliance may change frequently due to trade agreements or market policies.
- The merchandiser should attend workshops, review circulars, and follow official updates to stay informed.

6. Use Checklists or Compliance Tools for Accuracy

- Structured checklists or compliance software help track whether each requirement is met correctly at every production stage.
- This reduces human error and ensures systematic monitoring.

7. Verify Information from Reliable Sources

- Only recognised sources such as government websites, certified testing labs, or buyer-approved agencies should be trusted for compliance information.
- Avoiding unverified information prevents wrong decisions and quality issues.

8. Document All Interpretations and Instructions

- Written records of interpretations, clarifications, and instructions help maintain consistency in the team.
- This ensures everyone involved follows the same understanding of the legal and ethical standards.

8.1.12 Importance of Adhering to Organisational Policies

In the apparel industry, a merchandiser must work within defined organisational policies and authority limits to maintain order, efficiency, and accountability. Acting beyond assigned authority can result in financial loss, compliance issues, or conflict with clients and internal teams. Strict adherence to policies ensures that decisions align with company goals and protect the organisation from operational or legal risks. It also establishes a disciplined workflow where tasks are executed by the appropriate personnel at the right level of responsibility.



Fig. 8.1.10: An example of a merchandiser working in the Indian apparel sector

The importance of adhering to policies within self-authority strictly within the limits of self-authority is stated as follows:

- **Prevents Errors and Miscommunication**
 - Following organisational policies ensures that instructions are correctly communicated and executed.
 - Staying within authority avoids overlapping roles and confusion among team members.
- **Maintains Organisational Discipline**
 - Respecting boundaries upholds the structured chain of command.
 - It builds a culture of professionalism and accountability in the merchandising department.
- **Protects the Company from Financial and Legal Risks**
 - Acting within limits ensures decisions regarding sourcing, pricing, and order confirmation are approved by authorised personnel.
 - This helps avoid penalties, contract violations, or financial losses due to unauthorised commitments.
- **Supports Efficient Workflow**
 - Clearly defined roles prevent delays in decision-making and allow faster approvals.
 - When everyone follows policy, tasks flow smoothly from merchandising to production and shipping.
- **Enhances Trust with Supervisors and Clients**
 - Consistently operating within authority levels demonstrates reliability and respect for organisational procedures.
 - Supervisors and buyers feel confident that responsibilities are being handled correctly.
- **Facilitates Accurate Decision-Making**
 - Working within self-authority encourages seeking approval from the right level for complex issues.
 - This ensures decisions are reviewed by experienced personnel, reducing the risk of mistakes.
- **Ensures Compliance with Ethical and Regulatory Standards**
 - Company policies are often aligned with industry laws and buyer codes of conduct.
 - Adhering to these policies automatically keeps operations compliant with legal and ethical requirements.

8.1.13 Process of Carrying Out Work Functions in compliance with Organisational Standards, Greening Solutions, Procedures, Policies, Legislation and Regulations

A merchandiser in the apparel, made-ups, and home furnishings sector must perform all tasks in strict alignment with organisational expectations and industry requirements. Compliance ensures product quality, operational efficiency, and buyer satisfaction while maintaining legal and environmental responsibility. Greening solutions must be integrated to reduce waste and promote sustainability throughout sourcing, production, and delivery stages. By following documented procedures, company policies, and applicable legislation, a merchandiser supports ethical practices and safeguards the reputation of the organisation.

The process of carrying out work functions in compliance with organisational standards is mentioned as follows:

- Ensure fabric inspection, trim testing, and pre-production samples conform to company-specified benchmarks before approvals.
- Standardise internal reporting formats to capture sourcing, production, and delivery updates clearly.
- Align all product development activities with the organisation's quality manual to maintain buyer confidence.
- Review production against time-and-action (T&A) plans to detect delays early and implement corrective actions.
- Maintain clear communication with suppliers and buyers to confirm adherence to agreed specifications.

On the other hand, the process of carrying out work functions in compliance with greening solutions is stated below:

- Prioritise suppliers who use sustainable or recycled materials such as organic cotton or eco-friendly dyes.
- Introduce process controls to minimise fabric wastage, energy consumption, and water use during production.
- Encourage the use of biodegradable or recyclable packaging to reduce environmental pollution.
- Work with supply chain partners who hold certifications like GOTS (Global Organic Textile Standard) or OEKO-TEX to prove green compliance.
- Educate internal teams on eco-conscious practices such as switching off idle machines and segregating waste properly.

Moreover, the process of carrying out work functions in compliance with organisational procedures is given as follows:

- Follow step-by-step workflows for order booking, approvals, shipment follow-ups, and vendor payments to avoid discrepancies.
- Document all approvals, rejections, and communications in company-prescribed formats to maintain transparency.
- Escalate deviations (like fabric shortages or delayed trims) promptly through defined channels.
- Use approved ERP (Enterprise Resource Planning) software or reporting systems to track progress against targets and deadlines.
- Conduct internal checks to ensure sampling, costing, and production adhere to procedural requirements.

Furthermore, the process of carrying out work functions in compliance with organisational policies is discussed below:

- Respect authorisation levels while making decisions on pricing, discounts, or sample approvals.
- Implement ethical sourcing policies by avoiding suppliers who use child labour or unsafe working conditions.
- Ensure pricing negotiations align with company profit margins and cost control guidelines.

- Adhere to the organisation's confidentiality policy while sharing buyer data or costing sheets.
- Support management initiatives on workplace culture, team collaboration, and employee well-being.

Now, the process of carrying out work functions in compliance with legislation is mentioned as follows:

- Verify supplier factories meet labour laws, minimum wage standards, and employee welfare regulations.
- Ensure export orders meet country-specific compliance requirements, including labelling and duty norms.
- Keep accurate records of taxes, invoices, and shipment documents to comply with government audits.
- Monitor vendor adherence to occupational safety standards as per the Factories Act or equivalent laws.
- Confirm that hazardous chemicals used in processing are managed under applicable environmental laws.

Lastly, the process of carrying out work functions in compliance with regulations is stated as follows:

- Follow mandatory labelling laws (fibre content, country of origin, care instructions) for both domestic and export markets.
- Prepare for external audits by maintaining updated compliance checklists and factory certifications.
- Implement corrective action plans after any non-compliance report to meet regulatory demands.
- Stay informed about new trade rules, such as updated import-export policies or product safety standards.
- Collaborate with freight forwarders and clearing agents to ensure customs documentation is accurate and timely.

UNIT 8.2: Environmental Sustainability and Efficiency

Unit Objectives

By the end of this unit, the participants will be able to:

1. Elaborate on the importance of adopting greening solutions to promote environmental sustainability at the workplace.
2. Describe the significance of using specified resources effectively and responsibly within the work area.
3. Explain the different ways to conserve energy in the apparel sector for improved efficiency.
4. Discuss how sustainable decision-making contributes to creating an environmentally responsible workplace.
5. Mention the importance of switching off machines when not in use to save energy.
6. State the correct methods for handling and storing waste materials safely.
7. Outline the process of waste segregation to ensure safe and eco-friendly disposal.

8.2.1 Importance of Adopting Greening Solutions to Promote Environmental Sustainability at the Workplace

Green solutions, also known as sustainable or eco-friendly solutions, are a broad category of practices, technologies, and products designed to address environmental challenges. Their primary goal is to minimise the human footprint on Earth's ecosystems by promoting a more efficient and less harmful way of living and operating. This includes everything from developing renewable energy sources like solar and wind power to creating closed-loop systems for manufacturing that reduce waste.

The key aspects of greening solutions are stated below:

- **Resource Efficiency:** Resource efficiency means using fewer resources to get the same outcome, as seen with water-saving irrigation and better building insulation that reduce consumption.
- **Waste Reduction:** Green solutions minimize waste by employing strategies like recycling, composting, and creating durable products, with the "reduce, reuse, recycle" mantra serving as a foundational principle.
- **Pollution Prevention:** Pollution prevention focuses on stopping pollution at its source by using non-toxic materials, adopting cleaner production processes, and transitioning to zero-emission vehicles, rather than dealing with the aftermath.
- **Use of Renewable Resources:** Green solutions fundamentally rely on transitioning from finite fossil fuels to renewable energy sources like solar, wind, geothermal, and hydropower.

Adopting greening solutions in the workplace helps reduce environmental impact and conserve natural resources. In the garment sector, it ensures efficient use of materials, minimises waste, and lowers pollution from production processes. Green initiatives also improve compliance with buyer requirements for sustainable sourcing. By promoting eco-friendly practices, organisations enhance their reputation and contribute to global sustainability goals.

The importance of adopting greening solutions to promote environmental sustainability at the workplace is discussed as follows:

- **Reduces Resource Consumption**
 - Encourages efficient use of water, energy, and raw materials in production.
 - Minimises wastage of fabric, trims, and packaging supplies through better planning.
- **Minimises Pollution and Waste**
 - Promotes recycling and reuse of production leftovers and packaging material.
 - Reduces chemical discharge by adopting eco-friendly dyes and finishes.
- **Meets Buyer and Regulatory Requirements**
 - Ensures compliance with environmental standards set by global buyers.
 - Avoids penalties or shipment rejections due to non-adherence to sustainability norms.
- **Improves Cost Efficiency**
 - Lowers operational expenses through energy-saving equipment and processes.
 - Reduces disposal costs by cutting down on waste generation.
- **Strengthens Market Reputation**
 - Positions the organisation as an environmentally responsible manufacturer.
 - Attracts buyers who prioritise sustainable sourcing and production methods.
- **Enhances Workplace Environment**
 - Creates a cleaner, healthier space for workers by reducing toxic emissions.
 - Promotes employee awareness and participation in sustainability efforts.
- **Supports Long-Term Business Growth**
 - Contributes to building stronger relationships with eco-conscious clients.
 - Helps secure future business opportunities in markets that value green production.
- **Aligns with Global Sustainability Goals**
 - Reflects commitment to reducing the carbon footprint in the garment industry.
 - Contributes to worldwide initiatives for protecting the environment and conserving resources.

8.2.2 Significance of Using Specified Resources

The specified usage of resources ensures disciplined and efficient use of materials, tools, and energy in the workplace. In the garment and home furnishings sector, it supports cost control, product quality, and timely delivery. This approach avoids unnecessary waste, prevents resource misuse, and aligns operations with sustainability requirements. It also helps meet buyer expectations and organisational policies regarding responsible production practices.

Renewable resources are types of natural resources that naturally regenerate over time or exist in abundant, practically limitless supply. Unlike non-renewable resources, which can be used up, these resources can be harnessed repeatedly without the risk of depletion. Common examples include solar energy, wind power, water, geothermal heat, and biomass.



Fig. 8.2.1: Hydropower

India is rapidly expanding its reliance on renewable energy across multiple sectors, supported by ambitious government goals and the declining cost of clean technologies. The shift includes a combination of solar, wind, hydro, and biomass energy, with solar power showing the fastest growth. The country's renewable energy transformation is progressing strongly, marked by major advancements in solar and wind, along with initiatives to broaden its portfolio through hydro and green hydrogen. Backed by supportive policies and high targets, India is emerging as a key player in the global renewable energy arena.



Fig. 8.2.2: Solar and wind energy (renewable energy)

The significance of the specified usage of resources in the work area is mentioned below:

- **Cost Control and Budget Adherence:** Specifying how resources are used prevents overconsumption of fabric, trims, threads, and packaging materials. This reduces material costs and ensures that production remains within the planned budget for each order.
- **Consistent Product Quality:** Using resources in the prescribed way helps maintain uniformity in production. Correct handling of fabrics, dyes, and accessories reduces defects and ensures that final products meet buyer specifications.
- **Timely Delivery and Smooth Workflow:** Efficient resource management reduces delays caused by shortages or misuse. When materials and equipment are used as planned, production schedules can be followed without interruptions.
- **Environmental Responsibility:** Controlled use of water, electricity, and chemicals supports eco-friendly practices. This aligns with global standards on sustainable manufacturing and enhances the organisation's reputation.

- **Compliance with Organisational Policies:** Merchandisers are expected to monitor material usage closely and follow company guidelines for inventory control and resource allocation. This supports transparency during audits and inspections by buyers or third parties.
- **Better Coordination with Departments:** When resources are used as specified, coordination with production, procurement, and quality teams becomes smoother. Clear records of consumption also assist in accurate planning for future orders.
- **Buyer Confidence and Trust:** Responsible resource usage reflects professionalism and reliability. Buyers are assured that their orders are produced efficiently, without wastage or unethical practices.

8.2.3 Different Ways to Conserve Energy in the Apparel Sector

Energy conservation in the apparel sector is essential to reduce production costs and environmental impact. Efficient energy use improves productivity, enhances competitiveness, and supports sustainable practices. Merchandisers play a key role in ensuring that energy-saving measures are implemented throughout manufacturing processes. By adopting modern technologies and responsible work practices, the apparel sector can significantly improve energy efficiency.



Fig. 8.2.3: Using LED and CFL lights in the sewing floor of the apparel sector



Fig. 8.2.4: HVAC system

Both LED and CFL lights are used to reduce both power consumption and operational costs in the apparel manufacturing units. On the other hand, HVAC systems (Heating, Ventilation and Air Conditioning) are used to maintain ideal working conditions with less energy.

Area of Focus	Energy Conservation Method	Benefits for Efficiency
Lighting	Use LED lights and install motion sensors	Reduces power consumption and operational costs
Machinery	Schedule regular maintenance of sewing and cutting machines	Ensures smooth operation and prevents energy wastage
Heating and Cooling	Optimise ventilation and use energy-efficient HVAC systems	Maintains ideal working conditions with less energy
Water Heating	Use solar water heating systems in dyeing and finishing	Cuts reliance on electricity and reduces utility bills
Compressed Air Use	Repair leaks in compressed air lines	Prevents unnecessary energy loss in production
Production Planning	Implement lean manufacturing practices	Minimises idle time and reduces energy demand
Material Handling	Use energy-efficient conveyors and equipment	Improves workflow with lower energy consumption
Employee Awareness	Train staff on energy-saving habits	Encourages consistent energy-efficient behaviour

Table 8.2.1: Various ways of conserving energy in the apparel sector

8.2.4 Process of Contributing Sustainable Decision-making to Creating an Environmentally Responsible Workplace

Sustainable decision-making ensures that business operations protect the environment while maintaining profitability. In the apparel sector, it guides the selection of materials, technologies, and production practices that minimise resource consumption. This approach supports international compliance, reduces costs through efficiency, and strengthens brand image. Organisations adopting sustainable decisions become leaders in responsible manufacturing and meet growing consumer expectations for eco-friendly products.

Sustainable decision-making contributes to an environmentally responsible workplace by embedding ecological considerations into every business choice. A merchandiser ensures that raw materials are sourced from suppliers following sustainable practices, such as using organic or recycled fibres and avoiding hazardous chemicals. Energy-efficient machines and automated systems are preferred to reduce power usage and operational costs, while processes like zero-discharge dyeing or water recycling plants help conserve water resources.

Packaging decisions involve using biodegradable or recyclable materials to reduce waste. Transportation and logistics plans are optimised to lower fuel consumption and emissions. Additionally, sustainable decisions include setting up workplace awareness programs to train employees on resource-saving methods and waste reduction. This holistic approach not only helps organisations comply with international environmental standards like ISO 14001 but also improves operational efficiency, lowers long-term costs, and attracts environmentally conscious buyers. By integrating sustainability into daily decision-making, the apparel sector creates a responsible, competitive, and future-ready workplace.

8.2.5 Importance of Switching Off Machines

Switching off machines when not in use is a critical energy-saving practice in apparel manufacturing units. Idle machines waste electricity, add to production costs, and place an unnecessary burden on power infrastructure. Regularly shutting down equipment when not required also improves machine life and ensures safer working conditions. This habit supports both cost efficiency and sustainability goals in the garment sector.

The importance of switching off machines when not in use to save energy is mentioned below:

- **Reduces unnecessary energy consumption:** prevents machines from drawing standby power, ensuring electricity is used only during active operations.
- **Lowers production costs:** minimises electricity bills, helping maintain competitive pricing for apparel, made-ups, and home furnishing products.
- **Prevents overheating and damage:** idle machines generate heat and mechanical stress, which can lead to frequent breakdowns and higher maintenance costs.



Fig. 8.2.5: Switching off an embroidery machine

- **Extends equipment lifespan:** reduces running hours, helping sewing machines, cutters, and pressing equipment function efficiently for longer periods.
- **Promotes workplace discipline:** builds a culture of responsibility among staff, ensuring machines are not left running unnecessarily.
- **Supports environmental sustainability:** lowers energy consumption, reducing greenhouse gas emissions and the overall environmental footprint of the factory.
- **Complies with buyer requirements:** many international buyers prefer working with manufacturers that follow energy-efficient practices.
- **Improves operational efficiency:** keeps machines available only when they are scheduled for work, avoiding clutter and confusion on the production floor.
- **Enhances brand image:** positions the business as environmentally conscious, improving market reputation and customer trust.
- **Aligns with government and industry initiatives:** supports national energy conservation programs and sustainable manufacturing guidelines.

8.2.6 Correct Methods for Handling and Storing Waste Materials

Proper handling and storage of waste materials in the apparel sector ensure workplace cleanliness, safety, and compliance with sustainability standards. Segregating paper, sketches, colouring tools, and electronic waste prevents contamination and makes recycling easier. Organised waste management reduces hazards, improves resource recovery, and aligns with buyer expectations for eco-friendly operations. Effective methods include separate bins, clear labelling, safe storage practices, and timely disposal through authorised vendors.

Type of Waste	Images	Handling Method	Storage Method
<p>Paper and Sketches</p>		<p>Collect separately to prevent mixing with other wastes. Avoid tearing or scattering.</p>	<p>Store in closed, labelled bins or bundles for recycling.</p>
<p>Colouring Tools (markers, pencils, paints)</p>		<p>Ensure partially used tools are capped or sealed to avoid leaks. Keep away from food or fabrics.</p>	<p>Store in small containers or trays, segregated as reusable or disposable.</p>
<p>Fabric Cuttings and Scraps</p>		<p>Gather in dedicated bags during production to avoid floor clutter.</p>	<p>Store in labelled sacks or bins for recycling or reuse in sampling.</p>
<p>Electronic Waste (batteries, old devices, cables)</p>		<p>Handle carefully to prevent damage or leakage. Do not mix with general waste.</p>	<p>Keep in marked, secure boxes or containers for handover to authorised recyclers.</p>
<p>Chemical or Ink Residues</p>		<p>Use gloves when collecting waste to prevent skin contact.</p>	<p>Store in sealed containers, labelled as hazardous for safe disposal.</p>

Type of Waste	Images	Handling Method	Storage Method
Mixed Waste (miscellaneous items)		Sort manually to separate recyclable and non-recyclable items.	Place in general waste bins for proper municipal disposal if not recyclable.
Packaging Waste (plastic or cardboard)		Flatten cardboard and rinse plastic before disposal to reduce volume and contamination.	Store in separate bins or bundles for recycling or reuse.

Table 8.2.2: Methods for handling and storing waste materials

8.2.7 Process of Waste Segregation

Waste segregation is an important step to maintain a clean and environmentally responsible workplace in the apparel sector. Separating different types of waste makes recycling easier and ensures compliance with sustainability standards. Proper segregation reduces health risks, prevents contamination, and helps meet buyer requirements for eco-friendly practices. The process involves identifying, collecting, and storing waste according to material type for safe and appropriate disposal.



Fig. 8.2.3: Various bins for keeping different forms of waste materials

The process of waste segregation to ensure safe and eco-friendly disposal is stated below:

1. Identify waste categories clearly: such as paper, sketches, fabric scraps, colouring tools, packaging materials, electronic waste, and hazardous substances.
2. Use colour-coded bins or containers (e.g., blue for paper, green for biodegradable, red for hazardous waste, yellow for electronic waste) to make segregation simple and visible.
3. Place bins at strategic points in design rooms, sampling areas, and production floors to encourage proper waste disposal by workers.
4. Separate recyclable materials (like paper, cardboard, and fabric offcuts) from non-recyclable or contaminated waste to support recycling initiatives.
5. Store hazardous waste securely in sealed, labelled containers to prevent spills, leaks, or accidental contact.
6. Educate and train staff regularly to ensure awareness about the importance of segregation and how to handle different types of waste correctly.
7. Perform periodic inspections to ensure waste bins are being used properly and to check for mixed waste that needs re-sorting.
8. Maintain documentation of waste quantities, types, and disposal methods to comply with sustainability audits and buyer requirements.
9. Arrange for authorised collection services for e-waste, hazardous chemicals, or bulky scrap materials to ensure legal and eco-friendly disposal.
10. Promote a culture of resource recovery by encouraging creative reuse of fabric scraps, paper samples, or packaging wherever possible before disposal.



Fig. 8.2.4: Fashion waste

Summary

- Workplace ethics promote integrity, punctuality, and compliance with organisational policies and regulations.
- Ethical practices benefit both individuals and organisations by improving effectiveness and trust.
- Employees must understand reporting procedures, limits of responsibility, and how to clarify policy doubts.
- Legal, regulatory, and ethical requirements in the apparel sector ensure consistent quality and compliance.
- Environmental sustainability requires efficient use of resources, energy conservation, and eco-friendly decisions.
- Safe handling, segregation, and storage of waste materials reduce environmental hazards.
- Switching off machines when not in use and adopting greening solutions enhances workplace efficiency and responsibility.

Exercise

Multiple-choice Question:

1. Why is punctuality important in the workplace?
 - a. To impress friends
 - b. To maintain professional effectiveness
 - c. To avoid taking lunch breaks
 - d. To leave work early

2. What is the correct way to report deviations from standard practices?
 - a. Ignore them and continue working
 - b. Inform the concerned supervisor promptly
 - c. Tell only co-workers
 - d. Wait until the end of the year

3. Which of the following helps promote environmental sustainability?
 - a. Leaving machines on when not in use
 - b. Implementing greening solutions
 - c. Wasting energy resources
 - d. Ignoring waste segregation

4. Why is waste segregation important?
 - a. To make waste colourful
 - b. To ensure safe and eco-friendly disposal
 - c. To increase the amount of waste
 - d. To decorate the workplace

5. What is a key benefit of practising workplace ethics?
 - a. More free time during work hours
 - b. Improved trust and organisational effectiveness
 - c. Reduced need to follow regulations
 - d. Increased personal authority over others

Descriptive Questions:

1. Explain how an ethical approach to governance benefits both employees and organisations.
2. Describe the reporting procedures to be followed when deviations from regulations occur.
3. Discuss methods to conserve energy and improve efficiency in the apparel sector.
4. Explain why waste materials must be handled and segregated safely in the workplace.
5. Describe how adopting greening solutions supports environmental sustainability at work.

9. Promote and Sustain Safety, Health, and Security in the Workplace, while Fostering Gender and Persons with Disabilities (PwD) Sensitisation



Unit 9.1 - Workplace Safety and Risk Control

Unit 9.2 - Emergency Preparedness and Response

Unit 9.3 - Health, Welfare and Compliance Awareness



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Describe the process involved in maintaining a safe and secure working environment.
2. Discuss the importance of gender sensitivity and awareness of Persons with Disabilities (PwD) in the workplace.

UNIT 9.1: Workplace Safety and Risk Control

Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe workplace health and safety practices applicable to daily operations.
2. Explain the importance of complying with safety instructions at the workplace.
3. Outline organisational procedures for safe handling and operation of equipment.
4. Discuss potential risks arising from unsafe individual actions in the workplace.
5. Illustrate methods to identify hazards, risks, and threats within work processes.
6. Explain how to report hazards, risks, or unsafe conditions to supervisors.
7. Describe the correct use of personal protective equipment in different work situations.
8. State the need to perform tasks in line with approved work guidelines and procedures.
9. Mention methods for monitoring workplace processes to detect potential risks or threats.

9.1.1 Workplace Health and Safety Practices applicable to Daily Operations

Workplace health and safety practices are essential to maintain a productive and hazard-free environment in the apparel sector. A Merchandiser must ensure that safety rules are followed during every stage of production and communication with vendors, buyers, and internal teams. These practices reduce risks of accidents, protect workers' well-being, and ensure compliance with legal and industry standards. Maintaining safety also improves product quality and builds trust with stakeholders.

The workplace health and safety practices applicable to daily operations are mentioned as follows:

- **Ensure vendor compliance with safety standards:** verify that factories follow proper safety norms before placing orders.
- **Monitor working conditions:** check whether adequate ventilation, lighting, and cleanliness are maintained in production units.
- **Inspect use of protective equipment:** confirm that workers in sampling, cutting, and finishing areas wear gloves, masks, or safety shoes as required.
- **Follow safe material handling:** ensure fabrics, trims, and chemicals are stored and transported properly to avoid accidents.
- **Report unsafe conditions immediately:** communicate any observed hazards, such as exposed wires or faulty machines, to supervisors or safety officers.
- **Stay updated on legal requirements:** understand occupational health and safety laws relevant to apparel production and merchandising activities.
- **Participate in safety audits and compliance checks:** assist in verifying that suppliers meet buyer and industry safety requirements.
- **Use ergonomic practices in office tasks:** maintain proper posture when working on computers or handling documents to prevent strain injuries.
- **Plan factory visits carefully:** wear suitable clothing and follow all entry and safety protocols when visiting production floors.

- **Coordinate emergency procedures:** know evacuation routes, fire exits, and emergency contacts in both office and production sites.
- **Document safety observations:** keep written records of safety issues, corrective actions, and factory compliance status.
- **Promote safety awareness among teams:** encourage workers, vendors, and colleagues to adhere to safety practices in every process.



Fig. 9.1.1: A merchandiser working in a safe workplace

9.1.2 Importance of Complying with Safety Instructions at the Workplace

Complying with safety instructions at the workplace is essential to maintain a secure and efficient working environment in the apparel sector. A Merchandiser must ensure that all processes, from sourcing to production monitoring, follow established safety norms. These practices prevent accidents, protect human resources, and ensure smooth operations without costly disruptions. Compliance with safety standards also supports legal obligations and improves the company's credibility with clients and stakeholders.

The importance of complying with safety instructions at the workplace is discussed below:

- **Protects human life and health:** following safety instructions minimises the risk of injuries to workers in factories and offices.
- **Ensures smooth production flow:** fewer accidents mean fewer delays, keeping orders on schedule and avoiding penalties.
- **Builds trust with clients and buyers:** demonstrating compliance with safety norms assures buyers that goods are produced ethically and responsibly.
- **Supports legal and industry standards:** adherence to occupational health and safety laws prevents fines, legal actions, or loss of certifications.
- **Maintains workplace discipline:** consistent compliance creates a culture of responsibility and professionalism among teams.
- **Avoids financial loss:** accidents can damage machinery, delay shipments, and increase costs; compliance reduces these risks.
- **Promotes efficiency during audits:** proper safety practices simplify third-party audits and strengthen relationships with brands and certification agencies.
- **Sets a professional example:** when a Merchandiser follows safety protocols during factory visits, it encourages others to do the same.

- **Supports emergency preparedness:** knowledge of safety rules ensures that everyone knows what to do in case of fire, chemical spill, or equipment failure.
- **Improves long-term sustainability:** a safe workplace attracts skilled workers and reduces staff turnover, benefiting overall business growth.

9.1.3 Organisational Procedures for Safe Handling and Operation of Equipment

Organisational procedures for safe handling and operation of equipment are designed to protect workers, maintain efficiency, and ensure compliance with safety standards in the apparel sector. A Merchandiser must be aware of these procedures when coordinating with production units, inspecting machinery, or verifying factory compliance. Such procedures prevent equipment damage, reduce workplace accidents, and improve overall product quality. Following them also demonstrates professionalism and responsibility during audits or buyer visits.

The organisational procedures for safe handling and operation of equipment are stated below:

1. **Follow standard operating procedures (SOPs):** ensure that all machinery and tools are operated strictly according to documented guidelines.

A standard operating procedure (SOP) is a document containing detailed, step-by-step instructions for carrying out a specific task. Think of it as a "recipe book" for an organisation, providing clear guidance to ensure all routine operations are performed consistently, safely, and efficiently.

2. **Verify operator training:** check that machine operators are trained and certified to use specialised equipment like cutting machines, sewing machines, or pressing units.

Cutting machine	Sewing machine	Pressing unit
		

Table 9.1.1: Equipment used in the apparel sector

3. **Ensure use of protective gear:** confirm that workers handling machinery wear appropriate PPE such as gloves, masks, or safety shoes.

Gloves	Masks	Safety shoes
		

Table 9.1.2: Protective gear

4. **Inspect maintenance records:** verify that machines undergo scheduled servicing to prevent malfunctions or breakdowns.
5. **Check calibration and settings:** ensure equipment is set to correct parameters to maintain product quality and reduce waste.
6. **Identify safety signage and emergency stops:** make sure emergency stop buttons, warning labels, and safety shields are in place and functional.
7. **Monitor compliance during visits:** observe production floors to confirm that safety procedures are consistently practised by staff.
8. **Report hazards immediately:** escalate any malfunctioning machine, missing guard, or unsafe condition to supervisors without delay.
9. **Avoid unauthorised operation:** ensure that no untrained person handles machinery, even during urgent production deadlines.
10. **Document compliance:** keep records of inspections, observations, and corrective actions to demonstrate adherence to buyer and legal requirements.

9.1.4 Potential Risks arising from Unsafe Individual Actions in the Workplace

Unsafe individual actions in the workplace can cause accidents, production delays, and loss of product quality. In the apparel sector, a Merchandiser must recognise these risks when reviewing factory operations or ensuring compliance with buyer standards. Careless behaviour or neglecting safety protocols can harm workers and damage machinery. Addressing such actions early helps maintain smooth operations, worker well-being, and consistent product delivery.

The potential risks arising from unsafe individual actions in the workplace within the apparel sector are mentioned as follows:

- **Injury to workers:** ignoring safety rules, such as not wearing gloves or masks, can result in cuts, burns, or breathing problems.
- **Damage to machinery:** mishandling sewing or cutting machines may lead to costly repairs or downtime.
- **Product defects:** using tools improperly can ruin fabric quality and lead to rejected orders.
- **Production delays:** accidents caused by unsafe actions may stop production lines, resulting in missing delivery timelines.
- **Increased operational costs:** medical expenses, compensation, or machine repair costs rise due to unsafe practices.
- **Non-compliance penalties:** unsafe actions can violate buyer or legal safety standards, resulting in fines or loss of contracts.
- **Fire hazards:** careless handling of pressing irons, fusing machines, or electrical cords can increase fire risk.
- **Lower worker morale:** frequent accidents or unsafe behaviour can reduce confidence and affect team productivity.
- **Reputational damage:** buyers may reject working with factories where unsafe practices are noticed during audits.
- **Environmental hazards:** mishandling chemicals used in fabric processing may pollute the surroundings and harm health.

9.1.5 Methods to Identify Hazards, Risks, and Threats within Work Processes

Identifying hazards, risks, and threats is essential to ensure safe and efficient operations in the apparel sector. A Merchandiser needs to monitor work processes to confirm compliance with safety and quality standards. Regular observation, systematic checks, and feedback collection help in spotting potential problems early. Proactive identification prevents accidents, maintains productivity, and protects workers as well as business interests.

Method	What It Involves	Example in the Apparel Sector
Workplace Observation	Watching daily activities to detect unsafe behaviour or faulty equipment	Noticing operators working without needle guards or safety gloves
Process Audits	Reviewing each stage of production to locate risks or gaps	Checking the cutting room for proper machine maintenance records
Safety Checklists	Using structured lists to ensure all safety measures are followed	Verifying fire extinguishers, first-aid kits, and emergency exits
Worker Feedback	Gathering information from staff about unsafe conditions	Listening to operators reporting excessive machine vibration
Incident Reports Review	Studying past accidents or near-miss records to prevent repeat issues	Finding patterns of injuries from fabric roll handling
Compliance Inspections	Ensuring adherence to buyer and legal safety standards	Inspecting the labelling area for chemical handling procedures
Training Evaluations	Assessing whether workers understand safety instructions	Checking if employees know how to shut off machines in emergencies
Risk Assessment Tools	Using methods like hazard mapping or risk scoring	Highlighting high-risk zones in stitching or finishing sections
Maintenance Logs	Examining records to ensure timely machine servicing	Confirming oiling and cleaning schedules for sewing machines
Emergency Drills	Observing how workers respond to simulated hazards	Evaluating evacuation speed during a fire drill

Table 9.1.3: Methods to identify hazards, risks, and threats within work processes

9.1.6 Process of Reporting Hazards, Risks, or Unsafe Conditions to Supervisors

Reporting hazards, risks, or unsafe conditions is critical to keeping an apparel workplace safe and productive. Merchandisers, who coordinate with multiple departments, are often in a good position to spot problems quickly. Prompt reporting not only safeguards workers but also helps meet buyer requirements and avoid shipment delays. Consistent documentation of issues builds a record that improves compliance and safety culture in the factory.

The process of reporting hazards, risks, or unsafe conditions to supervisors is discussed as follows:

- **Conduct routine checks during floor visits**
 - While monitoring production or sampling, stay alert for unsafe equipment, poor housekeeping, or blocked exits.
 - Make note of recurring issues such as slippery floors near wash areas or overheating machines.
- **Collect accurate information before reporting**
 - Write down where the hazard is located, what the problem is, and who is affected.
 - Take photos if allowed by company policy to support the report.
- **Immediately notify supervisors or department heads**
 - Provide verbal alerts for urgent issues like sparking wires or broken machine guards.
 - Use quick communication methods such as intercoms, factory messaging apps, or phone calls when time is critical.
- **Fill in hazard or risk reporting formats**
 - Use printed forms, registers, or online portals as specified by the organisation.
 - Clearly describe the nature of the hazard (e.g., “Loose needle parts near sewing machines”) and its possible effect (injury, production loss, or audit failure).
- **Suggest practical control measures**
 - Mention quick fixes like cordoning off the area, switching off a machine, or alerting maintenance staff.
 - Indicate if specialist repair or replacement is required.
- **Ensure follow-up and closure**
 - Recheck whether corrective action has been taken and confirm with the supervisor.
 - If unresolved, escalate to higher management or safety officers.
- **Keep personal notes for reference**
 - Maintain a log of reported hazards to track responses and to help during buyer audits or compliance reviews.
 - Use this record to highlight repeated issues needing long-term solutions.

9.1.7 Correct Usage of Personal Protective Equipment in Different Work Situations

Personal protective equipment (PPE) is essential for reducing the risk of accidents and maintaining safety in the apparel sector. Different work situations require specific PPE to protect workers from hazards such as dust, sharp tools, noise, and chemicals. A Merchandiser must understand how PPE is used on the production floor to ensure compliance with buyer standards and workplace safety rules. Proper selection, correct usage, and regular monitoring of PPE help in improving both worker safety and audit readiness.

Work Situation	PPE Required	Correct Use
<p>Cutting department with sharp tools</p>	 <p>Cut-resistant gloves, safety shoes</p>	<p>Ensure gloves fit properly, cover the entire palm and fingers; wear shoes at all times.</p>
<p>Sewing operations with high noise</p>	 <p>Earplugs or earmuffs</p>	<p>Insert earplugs fully or seal earmuffs tightly to block excessive machine noise.</p>
<p>Fabric inspection and finishing</p>	 <p>Dust mask, safety goggles</p>	<p>Wear a mask to prevent inhaling lint; goggles must sit firmly on the face to protect the eyes.</p>

Work Situation	PPE Required	Correct Use
<p>Screen printing or chemical treatment</p>	 <p>Chemical-resistant gloves, apron, mask</p>	<p>Use gloves to prevent skin contact; a mask to avoid fumes; and an apron to protect clothing.</p>
<p>Ironing and pressing areas</p>	 <p>Heat-resistant gloves, closed shoes</p>	<p>Gloves must cover hands fully; avoid loose clothing to prevent burns or entanglement.</p>
<p>Warehouse and packing sections</p>	 <p>Safety shoes, back support belt</p>	<p>Wear shoes to prevent injury from heavy boxes; secure the belt when lifting goods.</p>

Table 9.1.4: Correct usage of personal protective equipment in different work situations

9.1.8 Need to Perform Tasks in Line with Approved Work Guidelines and Procedures

Performing tasks according to approved work guidelines and procedures ensures consistent quality, operational safety, and regulatory compliance. It minimises errors, avoids delays, and helps meet buyer expectations in the apparel industry. These practices streamline communication among departments and keep production on schedule. For a Merchandiser, adherence to procedures directly supports cost control, timely deliveries, and strong client trust.

A Merchandiser plays a key role in linking buyers, production teams, and quality assurance, making adherence to guidelines critical. Approved procedures define clear steps for material procurement, sampling, approvals, production monitoring, and shipment scheduling. By following these procedures, a Merchandiser ensures that fabrics, trims, and accessories meet quality standards and are delivered on time to production floors. This avoids mismatches, shortages, or last-minute substitutions that could compromise product quality.



Fig. 9.1.2: ISO logo

Compliance also ensures that workers on cutting, sewing, and finishing lines use proper methods, reducing defects and rework. Proper documentation and process alignment support smooth audits, buyer inspections, and certifications such as ISO (International Organisation for Standardisation) or SEDEX (Supplier Ethical Data Exchange). Additionally, it controls costs by preventing wastage, optimises resource utilisation, and allows accurate progress tracking through reports and status updates. For buyers, this consistency builds confidence in the factory's ability to handle bulk orders, while internally it helps maintain discipline, accountability, and a safe working environment.



Fig. 9.1.3: SEDEX logo

9.1.9 Methods for Monitoring Workplace Processes for Detecting Potential Risks or Threats

Monitoring workplace processes helps in preventing errors, ensuring safety, and maintaining production quality. For a Merchandiser in the apparel sector, effective monitoring ensures timely deliveries, buyer satisfaction, and adherence to compliance standards. Identifying risks early prevents rework, wastage, and financial loss. A systematic approach to monitoring also supports smooth coordination between departments such as production, quality, and sourcing.

The methods for monitoring workplace processes to detect potential risks or threats are stated below:

1. Conduct structured factory audits to ensure workstations follow approved standard operating procedures.
2. Cross-check the bill of materials (BOM) with production reports to confirm that the correct raw materials are issued and used.
3. A Bill of Materials (BOM) is a detailed list of all the components, sub-assemblies, and raw materials needed to create a finished product. It is an essential blueprint used in manufacturing and production to ensure consistency and streamline workflows.
4. Inspect cutting and stitching operations periodically to ensure patterns, sizes, and stitching quality meet approved samples.
5. Review inline quality inspection reports to identify defect trends at early stages.
6. Verify compliance with buyer-specific guidelines such as labelling, testing, and packaging instructions.
7. Monitor workforce productivity through line output data to spot inefficiencies or abnormal slowdowns.
8. Track environmental, health, and safety (EHS) compliance by checking chemical storage, waste handling, and ventilation systems.
9. Ensure timely preventive maintenance of machinery by confirming scheduled service logs are followed.
10. Observe sample approval timelines to prevent last-minute changes that could disrupt production.
11. Use risk assessment checklists during vendor or subcontractor visits to identify potential supply chain threats.
12. Monitor shipment packing lists and carton markings to confirm accuracy before dispatch.
13. Analyse production dashboards or ERP reports to compare planned versus actual performance and flag discrepancies.
14. Follow up with quality control teams daily to ensure immediate corrective actions on identified issues.

UNIT 9.2: Emergency Preparedness and Response

Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe the layout of the plant with emphasis on emergency exits.
2. Explain the purpose of emergency routes and designated assembly points.
3. Discuss workplace procedures for responding to accidents and emergencies.
4. State the roles of personnel trained for emergency situations.
5. Outline shutdown and evacuation procedures followed during critical incidents.
6. Illustrate actions to be taken during fires, evacuation drills, or similar events.
7. Mention the types and locations of emergency response equipment in the workplace.
8. Explain appropriate responses to mock drills and their importance for preparedness.

9.2.1 Layout of the Plant and Details of Emergency Exits, Escape Routes, Emergency Equipment and Assembly Points

A plant layout in the apparel sector should allow easy movement, proper ventilation, and quick access to all work areas. Emergency exits must never be locked or blocked, and escape routes should have signs that are visible even in low light. Emergency equipment like alarms, fire extinguishers, and first-aid kits must be placed at regular intervals and maintained properly. An assembly point outside ensures everyone gathers safely during emergencies, helping supervisors check if anyone is missing.

Item	Description	Why It Is Important	Who Checks or Maintains It
Plant Layout	Cutting tables, machines, and fabric storage are kept in straight lines with a wide walking space between them.	Reduces accidents and helps workers move freely.	Line supervisor or floor in charge.
Emergency Exits	Clearly marked wide doors with glowing EXIT signs that remain unlocked and unblocked.	Allows everyone to escape quickly during a fire or hazard.	Safety officer checks daily.
Escape Routes	Paths marked with arrows and emergency lights lead directly to exits.	Guides everyone safely out of the plant even if power fails.	Maintenance staff ensure that signs and lights work.
Emergency Equipment	Fire extinguishers, sprinklers, alarms, and first-aid kits at visible spots every 15–20 meters.	Helps control fire and treat injuries immediately.	The safety team inspects every week.

Item	Description	Why It Is Important	Who Checks or Maintains It
Assembly Points	Large open area outside the building with a visible sign and space for all workers.	Ensures everyone is counted and safe during emergencies.	Floor manager checks during drills.

Table 9.2.1: Layout of the Plant and Details of Emergency Exits, Escape Routes, Emergency Equipment and Assembly Points

9.2.2 Purpose of Emergency Routes and Designated Assembly Points

Emergency routes and designated assembly points are critical for ensuring safety in apparel factories during accidents or unexpected events. A Merchandiser must understand these systems to guide production teams and maintain order during emergencies. Clear evacuation routes and assembly points reduce the risk of injury and confusion. Proper planning also helps protect people, machinery, and materials while ensuring compliance with legal and buyer safety requirements.

The purpose of emergency routes and designated assembly points in the apparel sector is discussed as follows:

- **Ensure safe evacuation:** Provide clear paths for workers to exit the building quickly during fire, chemical spills, or other emergencies.
- **Prevent crowding and confusion:** Designated assembly points organise staff away from danger and allow easy headcount verification.
- **Facilitate emergency response:** Help fire-fighting teams, medical personnel, and supervisors locate and assist workers efficiently.
- **Minimise injuries:** Reduce the risk of slips, falls, or collisions while moving to safety during urgent situations.
- **Maintain operational order:** Prevent panic by guiding workers along pre-planned routes and to safe gathering areas.
- **Support accountability and reporting:** Supervisors can check attendance at assembly points to ensure no one is missing.
- **Aid compliance with legal and buyer standards:** Ensures the factory meets occupational safety and emergency preparedness requirements.
- **Protect critical resources:** Safe evacuation allows for orderly shutdown of machines and protection of sensitive materials.
- **Provide a rehearsal point for drills:** Assembly points serve as practice areas during emergency drills to improve readiness.
- **Promote a safety-conscious culture:** Visible and well-organised routes and assembly points reinforce the importance of safety among all workers.

9.2.3 Workplace Procedures for Responding to Accidents and Emergencies

Workplace procedures for responding to accidents and emergencies are critical to protect workers, minimise damage, and maintain smooth operations. A Merchandiser must be aware of these procedures to guide staff and ensure quick, organised action during incidents. Following set procedures helps prevent injuries, contain hazards, and support timely reporting. Proper response also ensures compliance with legal requirements and buyer safety standards.

The workplace procedures for responding to accidents and emergencies are stated below:

1. **Immediately assess the situation:** Determine the severity of the accident or emergency without putting others at risk.
2. **Alert emergency response teams:** Notify trained first-aid personnel, fire-fighting staff, or supervisors, depending on the type of incident.
3. **Evacuate affected areas if necessary:** Guide workers to emergency exits and designated assembly points to prevent further harm.
4. **Provide first aid:** Ensure injured persons receive basic first aid while waiting for professional medical help.
5. **Use emergency equipment appropriately:** Operate fire extinguishers, alarms, or spill kits as required to contain the hazard.
6. **Isolate hazards:** Switch off machines, secure chemicals, or cordon off unsafe zones to prevent secondary accidents.
7. **Communicate clearly:** Keep all employees informed about the situation, instructions, and safe routes.
8. **Document the incident:** Record details including cause, affected persons, actions taken, and time for future reference and compliance.
9. **Follow up on corrective measures:** Ensure that hazards are removed and preventive actions are implemented to avoid recurrence.
10. **Review and improve procedures:** Analyse incidents to update emergency response plans and train staff on lessons learned.

9.2.4 Roles of Personnel Trained for Emergency Situations

In an apparel factory, special people are trained to give first aid, control fires, and guide workers during emergencies. They know where safety tools are kept and how to use them. A Fabric Cutter must know who these people are, where they sit, and how to reach them fast. These trained people make sure everyone stays safe and calm until full help arrives.

The details of personnel trained in first aid, fire-fighting, and emergency response are discussed as follows:

- **First Aid Personnel**
 - Gives quick help for small injuries like cuts, needle pricks, and burns.
 - Keeps records of accidents and reports serious ones to management.
 - Checks the first aid box every day to refill medicines and bandages.
 - Usually placed near cutting tables or sewing lines for quick access.
 - Wears a green badge or armband to stay visible to all workers.



Fi. 9.2.1: First aid personnel

- **Fire-Fighting Personnel**

- Uses fire extinguishers to stop small fires from spreading.
- Knows locations of fire alarms, water hoses, and sand buckets.
- Guides workers calmly to emergency exits without pushing or panic.
- Checks every section to confirm no worker is left behind.
- Wears a red helmet or jacket for easy identification during drills or real fire.



Fig. 9.2.2: Fire-fighting personnel

- **Emergency Response Personnel**

- Plans the safest path to escape when there is smoke, a gas leak, or building danger.
- Call the fire brigade, ambulance, or police when needed.
- Make sure workers assemble at a safe, open area outside the factory.
- Conducts regular safety drills and explains escape routes to new workers.
- Wears a yellow safety vest with “Emergency Leader” written on it.



Fig. 9.2.3: Emergency response personnel

9.2.5 Shutdown and Evacuation Procedures followed During Critical Incidents

Shutdown and evacuation procedures are essential to protect workers, equipment, and materials during critical incidents in apparel factories. A Merchandiser must understand these procedures to coordinate safe and efficient actions during emergencies. Following structured shutdown and evacuation steps reduces injuries, prevents damage, and ensures compliance with safety regulations. Properly executed procedures also help maintain order, speed up recovery, and protect the factory's reputation.

The shutdown and evacuation procedures followed during critical incidents are mentioned as follows:

- **Identify the nature of the incident:** quickly assess if it is a fire, chemical spill, electrical failure, or other emergency.
- **Alert all personnel immediately:** use alarms, intercoms, or announcements to notify workers about the incident.
- **Initiate machine shutdown:** ensure production machines, pressing units, and electrical equipment are safely turned off to prevent further hazards.
- **Activate emergency protocols:** follow pre-defined safety procedures, such as isolating chemicals or cutting off power where required.
- **Guide workers to evacuation routes:** lead staff to the nearest marked emergency exits, avoiding blocked or unsafe areas.
- **Assemble at designated assembly points:** ensure all personnel gather at safe locations for headcount and further instructions.
- **Assist injured or vulnerable workers:** provide first aid or help with evacuation for workers needing special attention.
- **Communicate with emergency teams:** inform supervisors, safety officers, or external emergency responders about the situation.
- **Document the incident and actions taken:** record the shutdown and evacuation steps followed, including time and affected areas.
- **Review and evaluate procedures post-incident:** analyse effectiveness and update guidelines to improve safety and response in future incidents.

9.2.6 Actions to be Taken during Fires, Evacuation Drills, or Similar Events

During fires, evacuation drills, or similar emergencies, prompt and organised action is essential to protect workers and assets. A Merchandiser must be aware of the correct procedures to ensure safety and maintain order in the factory. Properly executed actions reduce injuries, prevent equipment damage, and support compliance with safety standards. Regular practice of these steps also improves readiness and response efficiency.

Action Step	Purpose	Example in the Apparel Sector
Raise the alarm	Alert all personnel about the emergency	Activating the fire alarm in the cutting or stitching area
Assess the situation	Determine severity and required response	Checking if a small fire can be contained or if evacuation is needed
Guide workers to emergency exits	Ensure safe and orderly evacuation	Directing staff along marked evacuation routes in the finishing area
Use fire safety equipment if trained	Contain or control small fires safely	Operating fire extinguishers near electrical panels
Assist vulnerable personnel	Support those with mobility issues or injuries	Helping injured operators or new staff exit safely
Direct staff to assembly points	Organise personnel for headcount and instructions	Gathering all workers at the designated open space outside the factory
Coordinate with emergency responders	Provide information for effective intervention	Informing fire or medical teams about affected sections
Follow drill procedures	Train workers and improve emergency readiness	Conducting evacuation drills periodically in production areas
Document actions taken	Maintain records for compliance and improvement	Recording timing, actions, and observations during a fire drill
Review and provide feedback	Identify gaps and enhance safety procedures	Updating the evacuation plan based on drill observations

Table 9.2.2: Actions to be taken during fires, evacuation drills, or similar events

9.2.7 Types and Locations of Emergency Response Equipment in the Workplace

Emergency response equipment is essential for controlling accidents, minimising damage, and ensuring worker safety. In an apparel factory, a Merchandiser must know the types of equipment and where each is located. Quick access to the right equipment helps prevent minor incidents from becoming major emergencies. Proper placement and regular maintenance of this equipment ensure readiness at all times.

Type of Equipment	Purpose	Typical Location in the Apparel Sector
Fire extinguishers 	To control small fires quickly	Near sewing lines, cutting tables, and electrical panels
Fire blankets 	To smother small fabric or chemical fires	In dyeing, printing, and chemical storage areas
First aid kits 	To provide immediate medical assistance	At production floors, sampling rooms, and packing sections
Eye wash stations 	To rinse eyes exposed to dust or chemicals	Close to printing, dyeing, or chemical mixing areas
Fire alarm pull stations 	To alert everyone about fire or smoke	Near main doors, staircases, and production entrances

Type of Equipment	Purpose	Typical Location in the Apparel Sector
Emergency lighting 	To guide people during a power failure	Along evacuation routes, stairways, and exits
Spill kits 	To control chemical or oil spills	In maintenance areas and near chemical storage rooms
Safety showers 	To wash off hazardous substances quickly	In dyeing or wet processing areas
Breathing masks or respirators 	To protect against smoke or chemical fumes	In finishing, chemical, or boiler sections
Emergency exit signage 	To indicate escape routes	At all production areas, corridors, and staircases

Table 9.2.3: Types and locations of emergency response equipment in the workplace

9.2.8 Appropriate Responses to Mock Drills and Their Importance for Preparedness

Mock drills are structured practice sessions designed to prepare employees for emergencies such as fires, chemical leaks, or natural disasters. They test how well safety procedures, evacuation routes, and emergency response equipment function under simulated conditions. In an apparel factory, a Merchandiser must actively coordinate with different departments to ensure compliance during these drills. Consistent participation helps the organisation meet safety standards, build employee confidence, and minimise risks during real incidents.



Fig. 9.2.4: Mock drills in the apparel sector



Fig. 9.2.5: Carrying out mock drills in the apparel workspace

The appropriate responses to mock drills are stated below:

- Receive instructions and alerts seriously – treat every drill as if it were an actual emergency.
- Stop all production or office tasks immediately to avoid delays in the evacuation process.
- Lead by example – move quickly but calmly toward the designated exit.
- Guide production workers and contract staff who may be unfamiliar with the premises.
- Ensure that important items like order files or samples are left behind to prioritise safety over materials.
- Check that exits and aisles remain clear during the evacuation to prevent crowding.
- Avoid elevators and take staircases safely to comply with fire safety protocols.

- Report at the assembly point and confirm team attendance to help complete the headcount.
- Participate in feedback sessions after drills to share issues such as blocked passages or malfunctioning alarms.

On the other hand, the importance of mock drills for preparedness is mentioned as follows:

- Identify weak points in the emergency response plan, such as unclear signage or slow evacuation times.
- Ensure every department knows emergency exits, alarms, and assembly points, improving speed and coordination.
- Familiarise employees with safety devices like fire extinguishers, sprinklers, alarms, and first-aid kits.
- Reduce confusion and panic in real emergencies by training employees to follow a clear plan.
- Improve cooperation between teams, including supervisors, quality staff, and production workers.
- Ensure compliance with safety audits from buyers or government authorities to maintain factory credibility.
- Increase employee confidence by proving that management takes workplace safety seriously.
- Strengthen overall emergency preparedness, reducing risks to life, property, and production schedules

UNIT 9.3: Health, Welfare and Compliance Awareness

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the concept of gender equality in the apparel industry.
2. Discuss the significance of training programs for gender and PwD awareness.
3. Identify and describe health and safety signage used in the workplace.
4. State the importance of maintaining sound health, hygiene, and good habits.
5. Illustrate methods for maintaining a healthy lifestyle at work.
6. Mention the correct procedure for basic first aid.
7. Demonstrate the steps involved in performing basic CPR techniques.
8. Explain the procedures and objectives of the environmental management system at the workplace.
9. Outline the reporting protocols and documentation required for workplace incidents and observations.

9.3.1 Concept of Gender Equality in the Apparel Industry

Gender equality in the apparel industry ensures that men and women have the same rights, opportunities, and respect at work. It helps prevent discrimination in wages, promotions, and job roles, improving overall workplace harmony. For a Merchandiser, gender equality is also important for meeting international compliance standards and satisfying buyers' ethical sourcing requirements. Promoting equality leads to higher productivity, stronger team collaboration, and a better global reputation for the company.



Fig. 9.3.1: Women workers working in the Indian apparel sector

The key features of gender equality in the apparel industry are discussed as follows:

- **Pay Equity:** Ensure equal pay for equal work by regularly checking payroll records for fairness.
- **Fair Recruitment:** Adopt unbiased hiring methods to select employees based only on skills and qualifications.
- **Equal Skill Development:** Encourage equal participation in training programs to give men and women the same chances to improve their abilities.

- **Family-Friendly Policies:** Support maternity and paternity benefits to create a family-friendly workplace environment.
- **Workplace Safety:** Maintain a safe workplace by ensuring adequate lighting, clean facilities, and harassment-free policies.
- **Awareness and Sensitisation:** Conduct periodic awareness sessions on workplace respect, gender sensitivity, and professional behaviour.
- **Compliance Assurance:** Follow labour laws and buyer codes of conduct to meet national and international compliance requirements.
- **Leadership Opportunities:** Promote women into supervisory and leadership roles to build confidence and inclusivity in the workforce.
- **Grievance Mechanisms:** Establish grievance redressal mechanisms where employees can report issues without fear of retaliation.
- **Gender Balance Documentation:** Document gender balance data for audits, certifications, and buyer inspections.
- **Policy Review with HR:** Coordinate with HR to review workplace policies and ensure they encourage equal growth for all.
- **Inclusive Safety Gear:** Verify that personal protective equipment (PPE) and uniforms are suitable for all genders to avoid safety risks.
- **Respectful Workplace Communication:** Promote respectful communication within teams to reduce conflicts and create a supportive atmosphere.
- **Open Dialogue with Workers:** Encourage open discussions with workers' representatives to identify and resolve gender-related concerns quickly.
- **Showcasing Good Practices:** Highlight gender equality achievements during buyer visits to demonstrate ethical practices.



Fig. 9.3.2: Women in a training class of the Indian apparel sector

Role of A Merchandiser in Promoting Gender Equality

From the viewpoint of a merchandiser, promoting gender equality involves various strategic and operational considerations throughout the product lifecycle.

- A merchandiser, when selecting suppliers and partners, can prioritise those who have strong policies and verifiable practices that support gender equality. This includes fair hiring practices, equal pay for equal work, and a commitment to creating safe work environments for all employees, regardless of their gender identity.

- The merchandiser can advocate for a transparent supply chain where labour practices are visible and ethical. This can include audits and certifications that specifically check for gender-based discrimination, harassment, and wage disparities in manufacturing facilities.
- In product development, a merchandiser can push for inclusive sizing and design that caters to a diverse range of body types and genders, challenging traditional gender norms in fashion. This approach ensures that the final product is accessible and appealing to a broader consumer base.
- When setting pricing and negotiating with suppliers, a merchandiser can consider the living wage as a key factor. A living wage is a wage that is high enough to maintain a normal standard of living. This practice helps to combat the gender pay gap often found in the apparel sector, where a majority of the workforce in low-wage positions are women.
- A merchandiser's decisions on marketing and branding can also promote gender equality. They can choose to work with marketing teams to create campaigns that do not rely on gender stereotypes, portraying a more modern and inclusive vision of their brand.
- Finally, a merchandiser can use their influence within their own company to advocate for gender-inclusive policies and fair promotions, ensuring that opportunities for career growth are equally available to all employees in the merchandising department and beyond.

9.3.2 Significance of Training Programs for Gender and PwD Awareness

Training programs on gender and Persons with Disabilities (PwD) awareness play an important role in creating a fair and inclusive workplace. They help employees understand diversity, prevent discrimination, and encourage respectful behaviour. In the apparel industry, such programs support compliance with buyer standards, national labour laws, and international certifications. These efforts not only protect worker rights but also enhance productivity, brand reputation, and long-term business sustainability.



Fig. 9.3.3: Training program for PwD in India

The significance of training programs for gender and PwD awareness is stated below:

- **Equal Participation in Work:** Training sessions educate employees about providing equal opportunities for men, women, and PwD in every production and merchandising task, ensuring no one is excluded from critical roles.

- **Awareness of Fair Treatment:** These programs explain the importance of treating every individual with dignity, helping to prevent harassment, bias, or unfair workloads.
- **Compliance with Standards:** Factories stay aligned with national labour laws, international certifications, and buyer compliance audits through structured awareness programs.
- **Accessible Workplace Facilities:** Training emphasises the need for adjustable workstations, user-friendly machinery, and properly fitted PPE to accommodate different physical needs.
- **Improved Team Collaboration:** Employees learn to respect differences, which reduces conflicts, increases cooperation, and ensures smoother production workflows.
- **Support for Grievance Redressal:** Programs inform workers about existing complaint mechanisms, giving them confidence to report gender- or disability-related issues safely.
- **Higher Employee Morale:** When workers feel valued and respected, their motivation, attendance, and overall performance improve.
- **Stronger Buyer Confidence:** Demonstrating structured awareness programs during buyer visits shows the factory is serious about social responsibility.
- **Career Growth for All:** Employees are made aware that training and skill enhancement opportunities are open to everyone, supporting promotions and personal growth.
- **Commitment to Continuous Learning:** Regular sessions keep employees updated on best practices, reinforcing an ongoing culture of inclusivity and ethical conduct.

9.3.3 Identification and Description of Health and Safety Signage used in the Workplace

Health and safety signage in the workplace is essential to guide workers, prevent accidents, and ensure compliance with safety standards. In the apparel industry, these signs alert employees to hazards, indicate safe practices, and provide emergency instructions. A Merchandiser must ensure that the correct signage is displayed in production areas to meet buyer audits and legal requirements. Proper use of signage also creates awareness among workers and helps maintain a safe, efficient working environment.

Type of Sign or Instruction	Image	Shape / Colour	Purpose
Mandatory Signs		Blue circle with white symbol	Remind workers to wear PPE such as masks, gloves, or safety shoes during cutting, stitching, or finishing operations.
Prohibition Signs		Red circle with diagonal line through black symbol	Prevent unsafe practices like smoking in production areas or unauthorised entry into restricted zones.

Type of Sign or Instruction	Image	Shape / Colour	Purpose
Warning Signs		Yellow triangle with black border and symbol	Alert employees about sharp tools, hot surfaces, moving machinery, or chemical use in washing and finishing units.
Emergency & First Aid Signs		Green square with white symbol	Help workers quickly locate fire exits, eyewash stations, or first-aid kits during emergencies.
Fire Safety Signs		Red square with white symbol	Ensure employees can easily find firefighting equipment during fire-related incidents.
Information Signs		Written rules in clear text	Educate workers on safe machine handling, production flow, or workplace policies to minimise accidents.

Table 9.3.1: Safety signs and written safety instructions

9.3.4 Importance of Maintaining Sound Health, Hygiene, and Good Habits

Sound health, hygiene, and good habits are essential for maintaining productivity, safety, and quality in any workplace. In the apparel industry, workers who stay healthy and maintain personal cleanliness contribute to efficient production and fewer disruptions. Merchandisers must ensure that hygiene standards are followed to meet buyer requirements and international compliance norms. Good habits among workers also create a positive work culture, reduce absenteeism, and improve overall output.

The importance of maintaining sound health, hygiene, and good habits in the apparel sector is mentioned as follows:

- **Ensuring Productivity:** Healthy workers can perform tasks efficiently, reducing production delays and meeting shipment deadlines.
- **Maintaining Product Quality:** Proper hygiene prevents contamination of fabrics and garments, ensuring that products meet quality and safety standards.

- **Meeting Compliance Requirements:** Good health and hygiene practices are essential to comply with buyer audits and legal regulations in the apparel industry.
- **Reducing Absenteeism:** Healthy employees take fewer sick leaves, which helps maintain continuous workflow on the production floor.
- **Improving Workplace Environment:** Encouraging good habits fosters discipline, cooperation, and respect among workers, creating a positive atmosphere.
- **Supporting Safety Practices:** Workers with sound health can better follow safety guidelines, reducing the risk of accidents and injuries.
- **Building Buyer Confidence:** A clean and hygienic workplace demonstrates ethical practices, reassuring buyers about workplace standards.

9.3.5 Methods for Maintaining a Healthy Lifestyle at the Workplace

Maintaining a healthy lifestyle at work improves employee well-being, efficiency, and workplace morale. In the apparel industry, long working hours and production pressures can affect workers' physical and mental health if proper measures are not taken. Merchandisers play a role in encouraging practices that promote good health and productivity on the shop floor. Healthy habits help meet production targets, reduce absenteeism, and ensure compliance with buyer standards.

The methods for maintaining a healthy lifestyle in the workplace in the apparel sector are discussed below:

- **Encouraging Balanced Nutrition:** Ensure workers have access to clean drinking water and healthy meal options during breaks to maintain energy levels.
- **Promoting Regular Physical Activity:** Recommend stretching exercises or short activity breaks to reduce fatigue and improve posture during long work hours.
- **Monitoring Ergonomic Work Practices:** Ensure workstations are designed to reduce strain on the back, shoulders, and eyes.
- **Ensuring Clean and Safe Facilities:** Maintain hygienic restrooms, clean canteens, and proper waste disposal systems to prevent illness.
- **Supporting Mental Well-being:** Encourage open communication, provide counselling access when needed, and reduce stress by maintaining realistic production targets.
- **Providing Adequate Rest Breaks:** Schedule regular breaks to allow workers to recover from continuous tasks, improving focus and reducing errors.
- **Promoting Use of Personal Protective Equipment (PPE):** Ensure workers use appropriate PPE to prevent health risks from dust, chemicals, or machinery.
- **Organising Awareness Programs:** Conduct health education sessions on topics like nutrition, hygiene, and stress management to develop long-term healthy habits.

9.3.6 Correct Procedure for Basic First Aid

Basic first aid is the immediate and temporary assistance provided to someone injured or suddenly ill until full medical treatment is available. It prevents minor injuries from becoming serious and helps reduce the risk of permanent damage or death. In the apparel industry, where workers handle machines, cutting tools, chemicals, and heavy loads, accidents can occur if safety measures fail. A Merchandiser ensures that workers know first aid procedures, and that proper facilities and trained personnel are available to maintain safety and meet industry compliance.

The correct procedure for basic first aid in the apparel sector is stated below:

- **Assess the Situation and Ensure Safety**
 - Confirm the area is free of hazards such as live wires, sharp tools, or moving machinery.
 - Prevent additional injuries by stopping machines or isolating dangerous equipment before helping.
- **Check for Responsiveness and Breathing**
 - Gently shake or tap the person and call out to check for responsiveness.
 - If there is no response, immediately call for emergency medical help or inform the on-site nurse.
 - Observe chest movement and listen for breathing to determine if further action, such as CPR, is needed.
- **Control External Bleeding**
 - Use a sterile cloth, gauze, or clean fabric to apply direct pressure to wounds.
 - If bleeding continues, maintain pressure without removing the cloth; add additional layers if required.
 - Elevate the injured limb (if no fracture is suspected) to reduce blood flow.
- **Clean and Dress Minor Wounds**
 - Rinse small cuts and abrasions with clean water to remove dirt or particles.
 - Apply an antiseptic solution or cream to prevent infection.
 - Cover the wound with a sterile adhesive bandage or dressing to keep it protected.
- **Stabilise Major Injuries Without Movement**
 - If there is a suspected fracture, spinal injury, or head injury, keep the person still.
 - Use splints or firm support to prevent further damage until professional help arrives.
- **Perform CPR When Breathing or Pulse Stops**
 - Place the person on a flat surface and begin chest compressions in the centre of the chest.
 - Follow the standard CPR ratio of compressions to rescue breaths (30:2) if trained.
 - Continue CPR until medical professionals arrive or the person regains breathing and pulse.
- **Treat for Shock**
 - Lay the injured person flat on their back with feet slightly elevated if possible.
 - Keep them warm using a blanket or jacket and reassure them to stay calm.
 - Avoid giving food or water if internal injury is suspected.
- **Use First Aid Kit Properly and Keep It Stocked**
 - Ensure the kit contains bandages, antiseptics, gloves, scissors, adhesive tape, pain relievers, and CPR masks.
 - Train workers to use items correctly and replace used or expired supplies promptly.
- **Report and Document the Incident**
 - Inform supervisors and safety officers about the injury immediately.
 - Record the details of the accident, first aid provided, and actions taken to prevent recurrence.

9.3.7 Steps involved in performing basic CPR Techniques

CPR, or Cardiopulmonary Resuscitation, is a life-saving action used when a person is not breathing or their heart has stopped. It helps keep blood and oxygen flowing to the brain and body. Anyone with basic training can give simple CPR until medical help arrives. Doing CPR quickly increases the chance of saving the person's life. It is important to stay calm and follow the correct steps.



Fig. 9.3.4: Process of providing CPR

The process of providing simple CPR when a person is not breathing properly is mentioned as follows:

1. **Check the Person's Response:** The person should gently tap the injured person and ask, "Are you okay?" If there is no response and the person is not breathing or breathing abnormally, CPR is needed.
2. **Call for Help Immediately:** The person should call emergency services or ask someone nearby to do it. Quick help from professionals is very important.
3. **Place the Person on a Flat Surface:** The person should gently lie the injured person on their back on a hard, flat surface. This helps give proper chest compressions.
4. **Begin Chest Compressions:** The person should place both hands, one on top of the other, in the centre of the chest. They should press down hard and fast (about 100–120 times per minute), letting the chest rise fully between pushes.
5. **Give Rescue Breaths (If Trained):** If trained, the person can give two rescue breaths after every 30 compressions. They should tilt their head back, lift their chin, pinch their nose, and blow into the mouth until the chest rises.
6. **Continue Until Help Arrives:** The person should keep giving CPR—30 compressions and two breaths (if trained)—without stopping. They should only stop if the person starts breathing or medical help arrives.



Fig. 9.3.5: Giving CPR

9.3.8 Procedures and Objectives of the Environmental Management System at the Workplace

An Environmental Management System (EMS) is a structured approach that helps workplaces reduce environmental impact while meeting regulatory and customer requirements. It identifies, monitors, and controls activities that affect the environment, such as waste generation, water usage, and chemical handling. In the apparel industry, an EMS ensures sustainable production practices, which improve efficiency and brand image. A Merchandiser supports EMS by aligning sourcing, production schedules, and compliance with eco-friendly standards.

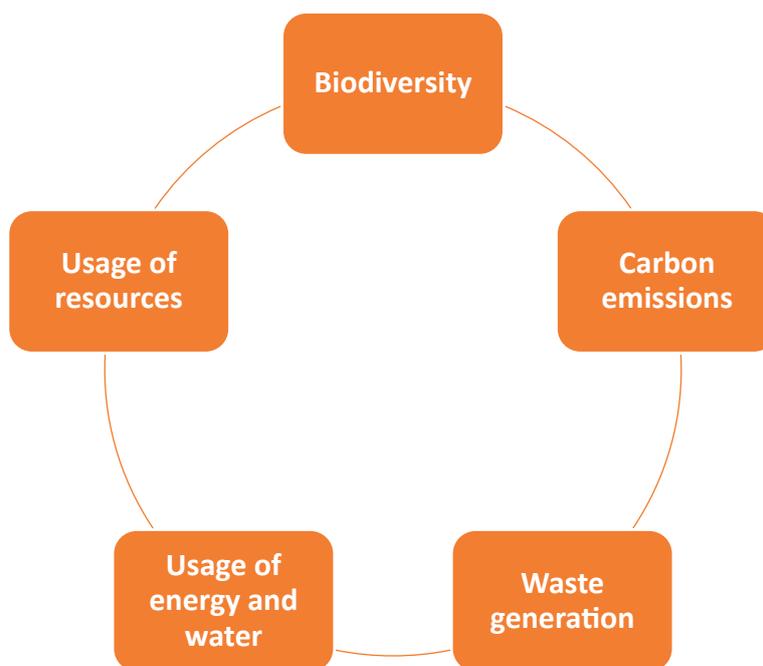


Fig. 9.3.6: Environmental Management System

The procedures of the environmental management system are discussed as follows:

- **Identify Environmental Aspects:** Determine activities such as water use, energy consumption, chemical discharge, and fabric waste.
- **Assess Legal and Buyer Requirements:** Review compliance guidelines and sustainability standards such as ISO 14001.
- **Set Environmental Targets:** Define measurable goals like reducing water usage or eliminating hazardous dyes.
- **Develop Policies and Procedures:** Document eco-friendly operational standards and ensure alignment with production needs.
- **Ensure Supplier Compliance:** Verify that vendors follow restricted substances lists (RSL) and chemical safety rules.

The Indian apparel sector adheres to a list of restricted substances primarily based on the global standards set by the ZDHC (Zero Discharge of Hazardous Chemicals) Manufacturing Restricted Substances List (MRSL) and the AFIRM RSL (Restricted Substances List). These standards govern chemical safety in textiles, leather, and footwear. Common restricted chemicals include heavy metals (such as lead, cadmium, and chromium), certain dyes (like azo dyes), formaldehyde, pesticides, phthalates, and volatile organic compounds (VOCs). Ensuring compliance involves rigorous testing of materials, adhering to the MRSL for chemicals used in manufacturing processes, and managing RSL requirements for final products. This commitment protects consumers, workers, and the environment from harmful substances.

- **Conduct Audits and Inspections:** Monitor environmental performance at factories and production sites.
- **Provide Worker Training:** Educate staff on waste segregation, safe chemical handling, and resource conservation.
- **Maintain Records:** Keep documentation of resource usage, waste disposal, and emissions for reporting purposes.
- **Take Corrective Actions:** Implement immediate measures to fix non-compliance or environmental hazards.
- **Review and Update EMS:** Continuously improve systems to meet updated regulations and buyer expectations.

On the other hand, the objectives of the environmental management system are mentioned below:

- **Minimise Environmental Impact:** Reduce waste, pollution, and resource overuse in apparel production.
- **Ensure Regulatory Compliance:** Meet environmental laws, buyer requirements, and industry certifications.
- **Improve Operational Efficiency:** Enhance production processes to save time, energy, and cost.
- **Promote Sustainable Sourcing:** Select eco-friendly fabrics, trims, and accessories from approved suppliers.
- **Strengthen Brand Image:** Demonstrate a commitment to responsible and sustainable practices.
- **Protect Worker Health and Safety:** Control emissions, chemical exposure, and workplace hazards.
- **Build Client Trust:** Align operations with international clients who prioritise sustainability.
- **Support Long-Term Sustainability:** Conserve natural resources for continued business success.
- **Encourage Innovation:** Develop new methods and products that are environmentally friendly.
- **Achieve Global Certifications:** Obtain ISO 14001 and similar credentials to enhance competitiveness.

9.3.9 Reporting Protocols and Documentation Required for Workplace Incidents and Observations

Reporting protocols and documentation for workplace incidents and observations ensure that hazards, accidents, or non-compliance are recorded, investigated, and prevented from recurring. Clear procedures help organisations maintain safety, meet legal requirements, and assure clients of compliance. In the apparel industry, timely reporting supports quality, efficiency, and worker well-being. A Merchandiser contributes by coordinating with suppliers, production teams, and management to ensure proper records are maintained and corrective actions are implemented.

The reporting protocols for workplace incidents and observations are discussed as follows:

- **Immediate Notification:** Inform supervisors or safety officers as soon as an incident or hazard is identified.
- **Follow Chain of Command:** Ensure reports are sent through the proper reporting hierarchy within the organisation.
- **Provide Accurate Details:** Record the date, time, location, and nature of the incident clearly.
- **Identify Persons Involved:** Document the names and roles of employees or visitors affected.
- **Report Near Misses:** Include unsafe situations even if no injury or damage occurs to prevent future risks.

- **Classify Incident Severity:** Categorise events as minor, major, or critical for appropriate follow-up action.
- **Escalate Urgent Issues:** Report severe hazards immediately to higher management or compliance teams.
- **Maintain Confidentiality:** Share sensitive details only with authorised personnel to protect privacy.
- **Ensure Timely Submission:** Submit incident reports within the required timeline as per company policy.
- **Confirm Corrective Actions Taken:** Verify that safety measures or process changes are implemented and acknowledged.

On the other hand, the documentation required for workplace incidents and observations in the apparel sector is as follows:

- **Incident Report Forms:** Standardised templates to capture all essential event details.
- **Observation Checklists:** Records of routine inspections to track potential hazards or non-compliance.
- **Photographic Evidence:** Images of damaged equipment, unsafe conditions, or injuries to support the report.
- **Medical Records:** Documentation of first aid or hospital treatment provided after an incident.
- **Corrective Action Reports:** Written confirmation of remedial measures implemented to resolve issues.
- **Compliance Logs:** Registers showing adherence to safety and quality protocols over time.
- **Meeting Minutes:** Notes from safety review or compliance meetings discussing incidents and preventive steps.
- **Training Records:** Evidence that workers received instruction on hazard reporting and emergency response.
- **Supplier Audit Reports:** External or internal audit documents verifying factory safety compliance.
- **Legal and Regulatory Records:** Copies of mandatory filings submitted to authorities if required by law.

Summary

- Workplace safety requires following health guidelines, proper equipment handling, and personal protective equipment use.
- Identifying hazards, risks, and unsafe actions ensures timely reporting and risk control in daily operations.
- Emergency preparedness includes knowing plant layouts, exits, assembly points, and evacuation procedures.
- Trained personnel, roles, fire drills, and emergency equipment locations are essential for handling critical incidents.
- Health and welfare practices include gender equality, awareness training, and recognising safety signage.
- Maintaining hygiene, good habits, and knowledge of first aid or CPR helps ensure employee well-being.
- Environmental management systems and proper incident reporting promote compliance and sustainability at the workplace.

Exercise

Multiple-choice Question:

1. Why is personal protective equipment (PPE) important in the workplace?
 - a. To improve fashion and appearance
 - b. To prevent workplace injuries and hazards
 - c. To decorate the workspace
 - d. To reduce production speed

2. What is the purpose of emergency routes and assembly points?
 - a. To store materials during breaks
 - b. To ensure safe evacuation during emergencies
 - c. To create parking spaces for vehicles
 - d. To mark restricted areas only

3. Which of the following is an example of health and safety signage?
 - a. A company logo
 - b. A no-smoking sign
 - c. A price tag on garments
 - d. A notice board for events

4. What is the first step when a hazard is identified in the workplace?
 - a. Ignore it and continue working
 - b. Report it to supervisors immediately
 - c. Fix it without informing anyone
 - d. Wait for someone else to notice it

5. Why are mock drills conducted at workplaces?
 - a. To entertain employees
 - b. To test emergency preparedness and response
 - c. To increase working hours
 - d. To avoid routine tasks

Descriptive Questions:

1. Describe workplace health and safety practices that should be followed daily.
2. Explain the purpose of emergency exits, assembly points, and evacuation procedures.
3. Discuss the significance of gender equality and training programs for gender and PwD awareness.
4. Illustrate the steps involved in giving basic first aid and performing CPR techniques.
5. Explain the objectives of an environmental management system and how it helps in workplace compliance.



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10. Employability Skills



DGT/VSQ/N0102

Employability Skills is available at the following location



<https://www.skillindiadigital.gov.in/content/list>

Employability Skills



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11. Annexure



Module No.	Unit No.	Topic Name	Page No	Link for QR Code (s)	QR code (s)
Module 1: Introduction and Orientation (Bridge Module)	Unit 1.1: Introduction to the role of Merchandiser – Made-ups & Home Furnishing	1.1.1 Apparel Sector	11	https://youtu.be/ddisteV3tOo?si=uFDW4QKnI-toOKnY	 Textile Sector in India
		1.1.2 Merchandiser	11	https://youtu.be/uSw4hS979ZA?si=1KoTbKKD-0QHrwFa0	 Retail Management
		1.1.3 Roles and Responsibilities of a Merchandiser	11	https://youtu.be/idESC9I8gbA?si=2e9QYDmrfxsxaUAi	 What is merchandising?
		1.1.5 Role of the Merchandiser in the Apparel Production Process	11	https://youtu.be/IDOq4c-K4tY?si=My642kj8G8jFf1Qe	 Role of a merchandiser in garment manufacturing business
Module 2: Analyse the Product	Unit 2.1: Business Understanding and Client Orientation	2.1.1 Merchandising-Related Business Processes	37	https://youtu.be/Vk6XgqMAMPw?si=zCfmiLa-TQJr6g3me	 Full Concept of Merchandising

Module No.	Unit No.	Topic Name	Page No	Link for QR Code (s)	QR code (s)
	Unit 2.2 Product and Market Research Skills	2.2.5 Understanding Intellectual Property Rights	37	https://youtu.be/7AE5vftS-jFk?si=eLDvOrqIJZCuN6PF	 Textile Dyeing and Printing
Module 3: Analyse Product and establish merchandising objectives in accordance with business plans (AMH/ N0901)	Unit 3.1: Pre-Production Planning and Compliance in Garment Manufacturing	3.1.4 Understanding Fabric and Trim Characteristics for Design Suitability	77	https://youtu.be/lbZA4mo-08g?si=crC6obBZrko96UGO	 Types Of Fabric Names and Pictures
		3.1.5 Tech Packs and Their Role in Product Development	77	https://youtu.be/gYPH7Odi-jn8?si=RLqFAFSaG4XJr1Vf	 What Is Clothing Manufacturing Tech Pack?
	Unit 3.2: Garment Construction Techniques, Costing, and Sample Development	3.2.1 Key Garment Construction Techniques and Processes in Apparel Production	77	https://youtu.be/QaS4sl0n5Qg?si=wY4PLJFdl-LNVR9ML	 Garments Full Production Process
		3.2.5 Preparing a Detailed Bill of Materials (BOM)	77	https://youtu.be/WrDu5rHAclM?si=asZD4pl4M-kWZqnXc	 Bill of materials

Module No.	Unit No.	Topic Name	Page No	Link for QR Code (s)	QR code (s)
Module 4: Develop and Present Merchandising Plan (AMH/N0903)	Unit 4.1: Sample Development, Approvals, and Documentation	4.1.1 Seeking Confirmation on Patterns and Drawings	112	https://youtu.be/ub_WXoT6boA?si=r8yeDmJLc-puBwLPB	 Pattern Making class
	Unit 4.2: Coordinating Production Planning and Costing	4.2.2 Managing Purchase Orders (P.O.) and Performance Invoices (P.I.)	112	https://youtu.be/5376OWDy-0aA?si=6L5KUSrjvJgrCv8a	 What is difference between Purchase Order and Proforma Invoice in Export import Business.?
Module 5: Communicate with Client and Manage Merchandising Documents (AMH/N0912)	Unit 5.2: Merchandising Documentation and Record Management	5.2.3 Product Pricing and Lifecycle	130	https://youtu.be/eijE5H2VatM?si=OpL47b-teNaqmueE	 Product Life Cycle, Product life cycle in hindi, Product Life Cycle in marketing management, PLC,
Module 6: Organise and Coordinate for Pre-production as per Merchandising Objectives (AMH/N0904)	Unit 6.2: Coordination and Issue Resolution	6.2.4 Clarifying Production-Related Concerns by Engaging with Appropriate Personnel	147	https://youtu.be/9H3dQM-87V2c?si=FfWLCsiMn4LSFOp	 PP meeting in apparel industry

Module No.	Unit No.	Topic Name	Page No	Link for QR Code (s)	QR code (s)
Module 7: Factory Coordination and Managing Shipment (AMH/N0905)	Unit 7.1: Order Fulfilment and Shipment Coordination	7.1.5 Process of Packing Report Information for Facilitating the Preparation of Accurate Shipping Documents	162	https://youtu.be/Z8OXMMqT4Mo?si=r9VIV33g-OHrzYeX_	 How to Export Garment Step by Step Process, Profitable Export Explained by Paresch Solanki.
Module 8: Adhere to Industry, Regulatory, and Organisational Standards and Embrace Environmentally Sustainable Practices	Unit 8.1: Workplace Ethics and Compliance	8.1.1 Importance of Having an Ethical Approach to Governance in Organisational Settings	194	https://youtu.be/ltW7KVY-J1go?si=wzE1VK2cFgALdNY_	 Business Ethics, Nature of Business ethics, Elements of business ethics, ethics in business, ethics
Module 9: Promote and Sustain Safety, Health, and Security in the Workplace, while fostering Gender and Persons with Disabilities (PwD) Sensitisation (AMH/N0620)	Unit 9.1: Workplace Safety and Risk Control	9.1.7 Correct Usage of Personal Protective Equipment in Different Work Situations	230	https://youtu.be/p_9hOqd-w75o?si=2f5UZjfSqra6A8Jy	 Personal Protective Equipment (PPE)



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