University of Management and Technology
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FINAL YEAR PROJECT

Project Title: "Late Shipment Dilemma in Pakistan Apparel Industry"

Submitted To:

Director IT IS

Submitted By:

Khurram Shehzad Bhatti
(081120-014)

Advisor/Supervisor:

Miss Aqsa Imran

Institute of Textile and Industrial Sciences

University of Management and Technology
Lahore

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Abstract:

The project “Late shipment Dilemma in Pakistan Apparel industries” is regarding visiting the textile mill and taken orders from mill, evaluating those orders and finding out the reasons for the delay. In the end finding solutions to solve these problems and implement in industry. The main purpose of this project is to highlight factors, from management and labor productivity point of view that ultimately turn into late shipment or cancellation of orders. Highlighting, its effects on future planning and orders either positively or negatively. This project might be successful in helping industry solving this issue.

Dedications:

We dedicate this project to Allah Almighty who gave us time and courage to complete this project and to our families who supported us throughout the project.

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Chapter 1

Introduction

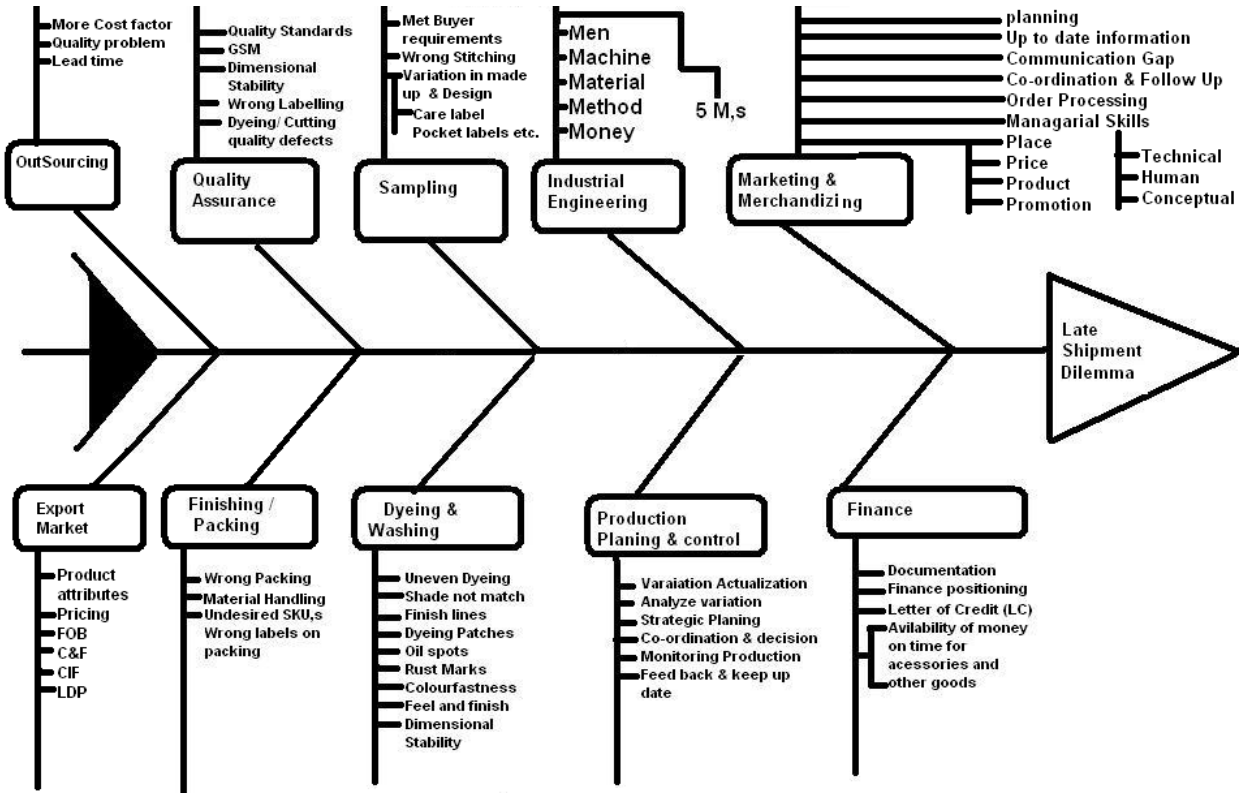
1.1 Late Shipment:

If Seller fails to ship on time, customer may purchase from elsewhere or may be delay or cancellation of order, or sending products in emergency with more cost, unless Seller's delay was due to unforeseeable causes beyond it (Lexmark standard,2002)

1.2 Departments Involved:

There are different departments involved in the production of goods and they work in line in accordance to each other, if there is little distortion in one department than it will automatically effect up coming departments and their working. Little disturbance in the start can lead to big troubles at end, which causes late shipment in the end.

1.2.1 Fish Diagram:



1.2.2 Marketing

Most people think that marketing is only about the advertising and/or personal selling of goods and services. Advertising and selling, however, are just two of the many marketing activities.

In general, marketing activities are all those associated with identifying the particular wants and needs of a target market of customers, and then going about satisfying those customers better than the competitors?

This involves doing

1. Market research on customers
2. Analyzing their needs
3. Making mix

Making strategic decisions about 4p's product design, pricing, promotion and distribution (place).

"Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, services, organizations, and events to create and maintain relationships that will satisfy individual (customer) and organizational objectives."

1.2.3 Merchandizing

Merchandizing is the process of identifying and understanding what target customer's wants and providing their desired Textile Products to them in a certain price, lead time by making a communication bridge between customer and the company

1. Merchandizing can be termed as heart of making a product fails or pass
2. Merchandizing can be difference between winning and losing a project/ customer
3. Merchandizing finding new customers and markets
4. Merchandizing means retaining the customers and extracting more orders from them
5. Merchandizing means making the customers delighted/satisfied on one hand and bringing profit for the company on the other hand.
6. Merchandizing means making the communication bridge between the company and the customers.
7. Merchandizing means completion of a project/orders placed by the buyer as per its requirements in the right time, quality and quantity.

1.2.4 Finance

A branch of economics concerned with resource allocation as well as resource management, acquisition and investment. Simply, finance deals with matters related to money and the markets

1.2.5 Production Planning Control

The process of producing a specification, or chart of the manufacturing operations to be performed by different functions and workstations over a particular time period. Production scheduling takes account of factors such as the availability of plant and materials, customer delivery requirements, and maintenance schedules.

Tasks

This role contains functions for processing planned orders in in-house production. You can use these functions to adapt planned orders to the exact current requirements situation and to then trigger the procurement of individual assemblies or components by converting the planned orders.

Activities in Production Planning

- Processing planned orders
- Converting planned orders into purchase requisitions, production orders or process orders
- Executing mass changes of planned orders

1.2.6 Procurement

Procurement is the acquisition of goods and services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations, or individuals

Simple procurement may involve nothing more than repeat purchasing. Complex procurement could involve finding long term partners that might fundamentally commit one organization to another.

Based on the consumption purposes of the acquired goods and services, procurement activities are often split into two distinct categories.

1. The first category being direct, production related procurement
2. The second being indirect, non-production-related procurement.

Direct procurement, which is the focus in supply chain management, directly affects the production process of manufacturing firms. In contrast, indirect procurement activities concern “operating resources” that a company purchases to enable its operations. It comprises a wide variety of goods and services, from standardized low value items like office supplies and machine lubricants to complex and costly products and services like heavy equipment and consulting services.

1.2.6.1 Procurement Systems

Another common procurement issue is the ‘timing’ of purchases. Just in Time is a system of timing the purchases of consumables so as to keep inventory costs low.

Procurement Steps

Procurement life cycle in modern businesses usually consists of seven steps:

Information Gathering:

If the potential customer does not already have an established relationship with sales or marketing functions of suppliers of needed products and services , it is necessary to search for suppliers who can satisfy the requirements.

Supplier Contact:

When one or more suitable suppliers have been identified, Requests for Quotation, Requests for Proposals, Requests for Information or Requests for Tender may be advertised, or direct contact may be made with the suppliers.

Background Review:

References for product/service quality are consulted, and any requirements for follow-up services including installation, maintenance, and warranty are investigated. Samples of the P/S being considered may be examined or trials undertaken.

Negotiation:

Negotiations are undertaken, and price, availability, and customization possibilities are established. Delivery schedules are negotiated, and a contract to acquire the P/S is completed.

Fulfillment:

Supplier preparation, shipment, delivery, and payment for the P/S are completed, based on contract terms. Installation and training may also be included.

Consumption, Maintenance and Disposal:

During this phase the company evaluates the performance of the P/S and any accompanying service support, as they are consumed.

Renewal:

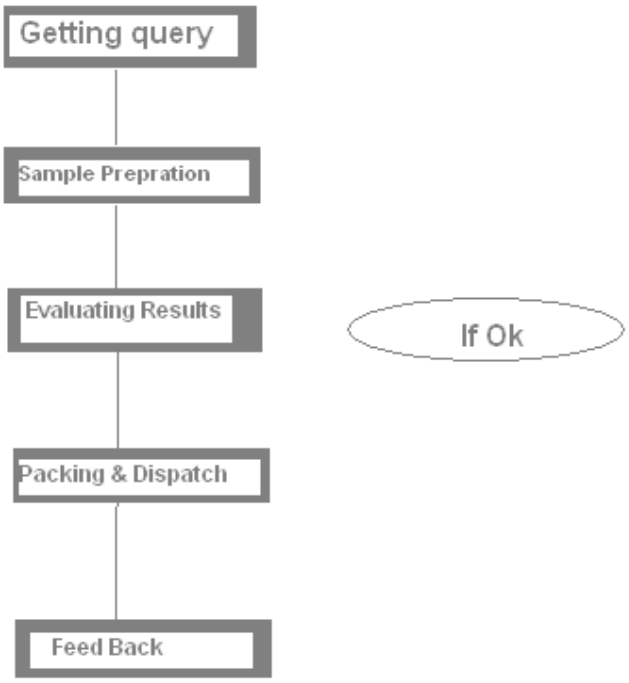
When the P/S has been consumed and/or disposed of, the contract expires, or the product or service is to be re-ordered, company experience with the P/S is reviewed. If the P/S is to be re-ordered, the company determines whether to consider other suppliers or to continue with the same supplier.

1.2.7 Production of Samples and Order Collection

The next step after the design in the fashion calendar is the production of samples. The Samples are shown to the retailers by market representatives at major trade shows or at the retailer sites. Some major customers may be also invited for on-site exhibitions. Most small companies accumulate all of their orders and then proceed with the production. As a result of capacity constraints in peak periods and recent trend of retailers willing to order much closer to and even during the selling season, some other companies have to commit themselves to some or all of their production volume prior to gathering all their actual orders.

There are different types of samples in garment industry

1. Prototype Samples
2. Size-Set Samples
3. Salesmen Samples
4. Pre-production Samples
5. Production/Shipment samples
6. Testing Samples



Design

Design is either completed in-house or commissioned to smaller design companies. The sources of design are always local. Usually cut panels are sent to source after making sure, they can produce rite quality. The first step in design is analyzing the consumer which the company is targeting. Usually, prototype garments are made for internal decision making. These tasks take considerable amount of time. Responsiveness may be greatly enhanced by reducing the time required for design development. Computer-aided design (CAD) systems are recently being used for such reduction efforts. Besides reductions in the actual design time, CAD systems also reduce the time for making the pattern and enable electronic storage of the design which makes later modifications and transmissions easy

Pricing

As mentioned earlier, pricing is subject to a few artificial restrictions (practical considerations) although in most cases the retailer can theoretically set prices to any amount. Many customers are surprisingly well aware of the prices of many apparel items at many stores. The pricing impact in such a highly competitive environment is immediate. Many independent stores therefore wish to follow the vendor's suggested retail price.

In LDS, the buyer sets the initial price, but more or less based on a company-wide price schedule. Corporate management uses pricing guides and schedules to achieve control and informality of items bought by different buyers. Small stores sometimes multiply their cost by 2 or 2.2 as a general rule in setting prices. Usually, the national brand names do not bring a good profit margin to the store due to the higher prices from the vendor, whereas private label garments have higher margins.

There are three different types of pricing

1. Cost Based Pricing
2. Competition Based Pricing
3. Value Based Pricing

1.2.8 Production

A strategic question for the apparel producers at this point is where to carry out the manufacturing operations. Some companies operate their own facilities for manufacturing. Some others use contractors. The trade-offs for this decision are typical of any manufacturing operation. Some of them are: more control over quality and time, fewer communication problems with in-house production; less capital investment and more flexibility with outsourcing.

Apparel Manufacture

Apparel manufacturing starts with the design of the garment to be made. Patterns are made from the design which is then used to cut the fabric. The cut fabric is usually assembled into garments, labeled and shipped. The apparel segment is the most labor intensive and fragmented segment of the supply chain. The firms in the women's and girl's categories tend to be smaller, while firms in the less fashion sensitive men's and boy's clothing, knit-wear and underwear categories can utilize economies of scale and tend to be larger in size.

Outsourcing

"Outsourcing" is done to get the some production activity done for which the in-house facility is unavailable or booked to capacity. Its intensity varies as it can be a form of taking the complete product from some manufacturing facility or any single process of it.

The production activities like weaving, knitting, bleaching/dyeing, finishing, printing/embroidery, brushing, sewing etc. can be outsourced. The below are reasons for outsourcing decisions.

1. Absence of in-house Facility
2. Less in-house capacity and more orders
3. Seeking better quality at less cost

Check-List for Outsourcing

Several factors are required to be considered and evaluated before outsourcing decision is taken. These factors are as follows.

1. Cost Factor
2. Lead Time
3. Capability
4. Quality
5. On-Time Deliveries
6. Regular Follow-ups

1.2.9 Quality Defects

Quality is one of the major causes that results in delays. There are different types of defects related to different department

Dyeing/Finishing:

- Uneven Dyeing
- Shade not match
- Finish lines
- Dyeing Patches
- Oil spots
- Rust Marks
- Colorfastness
- Feel and finish
- Dimensional Stability

Cutting/Sewing:

- Cutting Edge Marks
- Wrong Cutting
- Wrong Sewing
- Open Seams
- Oil Spots
- Sewing Needle break

Embellishments:

- Wrong Positioning
- Wrong Art
- Incorrect Color
- Excessive Handling

Garment:

- Wrong Sizing
- Poor Packing
- Poor Sewing
- Incorrect Accessories
- Wrong Placements
- Trims not match

1.2.10 Export Department

In export market there are some terms related to export and shipping are involved

1. Ex-Mill
2. FOB (Free on Board)
3. C&F (Cost & Freight)
4. CIF (Cost Insurance and Freight)
5. LDP (Landed Duty Paid)

Payment related Terms

1. LC (Letter of Credit)
2. CAD (Cash against document)
3. BL (Bill of lading)

Distribution

Assembled garments are labeled, packaged and usually shipped to a warehouse. The garments are then shipped to the retailers' warehouses. In an effort to compress the time from placement of the retailer order to the consumer's purchase of the apparel, several practices are gaining popularity. First, there are increased automation and use of electronic processing in the warehouses of both manufacturers and retailers. Manufacturers are assuming responsibility in many functions, once considered to be part of retailers' services. Among them are labeling products with retailer's price tags, preparing them on hangers and shipping them directly to stores.

1.3 Water Table Management

The flow of information from top management to lower management should be exact and accurate e.g. when water flows from top of table to floor it remains water till end and information should remain exact till the end.

1.4 Five M's of Industrial Engineering

Planning, implementation, and control of industrial production processes to ensure smooth and efficient operation. Production management techniques are used in both manufacturing and service industries. Production management responsibilities include the traditional "five M's": **men and women, machines, methods, materials, and money**.

Men

"Men" refers to the human element in operating systems. Since the vast majority of manufacturing personnel work in the physical production of goods, "people management" is one of the production manager's most important responsibilities.

Machine

The production manager must also choose the machines and methods of the company, first selecting the equipment and technology to be used in the manufacture of the product or service and then planning and controlling the methods and procedures for their use. The flexibility of the production process and the ability of workers to adapt to equipment and schedules are important issues in this phase of production management.

Material

The production manager's responsibility for materials includes the management of flow processes, both physical (raw materials) and information (paperwork). The smoothness of resource movement and data flow is determined largely by the fundamental choices made in the design of the product and in the process to be used.

Money

The manager's concern for money is explained by the importance of financing and asset utilization to most manufacturing organizations. A manager who allows excessive inventories to build up or who achieves level production and steady operation by sacrificing good customer service and timely delivery runs the risk that overinvestment or high current costs will wipe out any temporary competitive advantage that might have been obtained.

Managers are expected to maintain an efficient production process with a workforce that can readily adapt to new equipment and schedules. They may use industrial engineering methods, such as time-and-motion studies, to design efficient work methods. They are responsible for managing both physical (raw) materials and information materials (paperwork or electronic documentation). Of their duties involving money, inventory control is the most important. This involves tracking all component parts, work in process, finished goods, packaging materials, and general supplies. The production cycle requires that sales, financial, engineering, and planning departments exchange information, such as sales forecasts, inventory levels, and budgets, until detailed production orders are dispatched by a production-control division. Managers must also monitor operations to ensure that planned output levels, cost levels, and quality objectives are met. Production management's responsibilities are summarized by the "five M's": men, machines, methods, materials, and money.

1.5 Time & Action Plan

There is one generalized way of writing time and action plan for high and on time production.

Clarify your goal

When working on a project, production people must be clear about their goals.

- Customer requirements
- Expected Cost
- Limitation on time, money or other resources etc.

Write a list of actions.

Write down all actions you may need to take to achieve your goal.

- Analyze concept
- Actions List
- Different options and ideas

Analyze, prioritize, and prune.

- Look at your list of actions

- Necessary and effective steps to achieve your goal
- Some action can be dropped from the plan

Organize your list into a plan.

- Decide on the order of your action steps. Start from looking at your marked key actions. For each action, what other steps should be completed before that action? Rearrange your actions and ideas into a sequence of ordered action steps. Finally, look at your plan once again. Are there any ways to simplify it even more?

Monitor the execution of your plan and review the plan regularly

How much have you progressed towards your goal by now? What new information you have got? Use this information to further adjust and optimize your plan.

1.6 Reasons of Late Shipment

There are several reasons that ultimately result in late shipment and we have briefly discuss these reasons in project objectives

Planning

Most of the time, planning is major cause of late shipment. After getting order people just leave it and give gap in production which also termed as wrong or late planning which ultimately turn in delay in shipment

Sewing problem

One of the major problems in the production of garment is sewing problem or efficiency of sewing, there could be several problems related to sewing like needle whole, wrong sewing, etc

Customer Amendments

Some times customer tends to change in given plan during production and that thing leads to delays in the production process.

Labor Issues

There are many problems which are related to labor, these are efficiency problems, labor productivity, and labor absentness and many other problems are related to labor issues

Over Booking

Over Booking is also one of the major problem causing delays most of our people in industry take more orders, or unique orders for more money or by recommendation of owners. And they don't have compatible skilled labors or machines to fulfill the order which ultimately result in delays

Communication Gap

Communication Gap some times there is communication gap between productions and merchandizing department and PPC or production people don't know

about the up date of order or any amendment from customer and they keep working on wrong information which ultimately causes real blunders.

Availability of machines

Availability of machines some times merchandiser book such an order for which they don't have compatible working environment and machines and when they book an order it, they face problem and it took long time for arrangement of particular machines and goes beyond cost or order cancellation or late shipment etc.

Power Problem

Now a days load shedding is also one of the major causes in our country which produce resistance in planning and production, more over it some units are having their own power generation houses but still not in position to ship on time, then wrong planning is the problem and increasing prices of goods at the end effect on total cost.

Technology

Some orders require high speed and technologically more advance machines, while booking orders our merchandisers don't care about these things and they don't consult with production people and in the end some times it is very difficult to arrange machines on time and delay in production.

Availability of Skilled Workers

Every day new advancement in technology is replacing old machinery with new one. Most of times our workers are not educated and they don't know to work on new computerized machines, for which their productivity disturbs. There is need to get our workers trained and to ensure their full command on the machine they are working on for better and more productivity.

Delay in fabric

Some times production begins late because of unavailability of fabric

Availability of Accessories

Sometimes every thing is on plan and very small accessories like button, ribbon, or zipper etc delays and garments are ready but can not go for packing, hence delay. Or sometimes everything related to garment is ready, but packing cartons are not available which cause late shipment