IJCRT.ORG

ISSN: 2320-2882



## INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

# "STUDY ON THE SHIPPMENT BARRIERS IN **BUYING HOUSE**"

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# CHAPTER-1

# **SYNPOSIS SYNOPSIS**

The dissertation is to understand the problems faced in the buying house, "how to reduce the barriers in shipment delay", the study of various terms in which the supplier is not giving the impact of the problem during the shipment. The buyer is not followed up with the detailing of the delay.

The survey of the buying house has been done in the office, with the help of the suppliers in the factory. The major task of getting, it is through which the duration of the periodic time of work during production of the order approval from the buyer, must be initially updated, to the supplier for the placement of order to make an adequate process chart of availability of materials sourcing, consumption, and position of the product based on the necessary requirements based on the buyer's choice. The study includes of "what, why and how often it is occurring". The buying house office must create solutions with the experience for such situation. If the buying house makes the solution for more complicated process, it will drop the orders as per the buyer's decision, which will create loss in order and loss in profit for the company.

The terms for the dissertation work are:

- To analyse and study the process of the work in the Loyal International Sourcing Pvt. Ltd, buying house office.
- To understand the buyers product, as per the requirement.
- To check the updates between the buyer to the suppliers term of process through work
- To check the target possibilities to reach the buyer demand.
- To research on the production duration time period.

To make the solution to reach the product in the agreed duration for the buyer.

The analysing the buyers, suppliers and the office, gives the most important knowledge about the successful type of business. The buyers, asks to assist them to speed up delivery from their suppliers. To solve this issue, first we need to understand what really caused the delay.

#### REVIEW OF LITRETURE

Review of Literature of followed with few articles as follows, Written by Tim Jackson and David Shaw, 2000, the authors have done extensive research for this book, especially focusing on the middle and senior level management in the fashion business. They have mostly used original material and have thus added significantly to the existing body of knowledge in this field. The shipment plays a vital role in the time of production which is very essential in the manufacturing unit. Due to which the products reach the buyer on the efficient scheduled period of time. In which easy methods of reducing the problems is essential.

Written by Steven Chow, the author gives a valid reason why the delay in shipment is occurred at the stage of order placement or during the production process. So it is mainly to aim the major standards to which the area of the flow of work is not happening systematically and accurate errors are occurring in the time of the project of the ordered development.

#### THE MAJOR AIM FOR THE PROJECT

The aim to reduce the delay in shipment is the following terms:-

- Making discussions accurately at each step to which solutions are formed in the each stage of work process. The company must be able to handle the situation with the buyer if any delay occurs in the stage of purchasing or manufacturing. To which management communication skills must be executed to reach the goal of the company by updating the each pre planned process.
- ➤ The manufacturing efficiency as per the planned term of the order given by the buyer till the production to the shipment without any changes, by strictly following the pre planned method of output. As a success of the company target.

#### **HYPOTHESIS**

The major task in the shipment activity is the main criteria in how to make an order successfully analysing in the area of errors placing issues. The solutions must be created at handling without any difficulties to which can make the requirement based on the buyers approval, of executed work must be quality based and enhancing.

The area of work and the workers must be updated to which the shipment scheduling must be pre- checked with no clashes of delays. If so occurred it depends based on the company and buyer's area of tracking as the seasonal bases, if the pre-production or post production is suitable based on the buyer. The decision for the solution is the shipment, it is accurately stabilising in the each process of the stage of production. To which the systematic flow process is followed and at each stage of the product development make sure the limitation of the scheduled time period is updated, as an essential rule of any production process.

#### THE PROJECT OUTCOME FOR THE SOLUTION:-

The department in each unit of the company have a clear communication, which is the main term company can solve the issue. Mostly the communication with the buyer and supplier miscommunication of the follow up for orders occurs error by the company. Sometimes the supplier is not able to give the requirement as the buyer's choice and the buyer is requiring the same commitment as given in the order during the time of approval with the company.

The garmenting activities are primarily worker driven functions and employee play a very important role. As, the production for the order is clearly understood by the worker it is necessary, the clarification of the unit in each department follows the chart of production. Even if the style or the silhouette variation is occurred the supervisor of the department must give a demo instruction for the workers to understand the style and the method of production for the each assembling pieces of the product.

It is essential to communicate with the buyers regarding the order. The updates for the status of the order are the main purpose to handle the production of the product to the buyer, to give a valid reason for the work flow for the order placement. Only through the right communication it can meet the deadline for the concerned orders.

The lead time to get a competitive advantage is required in any stage of production. The shrinkage is formed in the product life cycles demanding shorter lead times. So the garment preproduction activities taking 60-70% of total lead-time. The scheduled, Time and Action Calendar (TNA) must be updated as per the basic order as discussed with the buyer. Suppliers need approval on samples at various stages from buyer to ensure that everything is followed up to which the bulk production does not occur any changes.

The buyer's requirements after receiving the specification in the sample order. In many cases, there are modifications pertaining to the specifications in the order to dispatch on time and the right quality. As spoken with the company, on the execution of sample orders, as the right information is required in decision making.

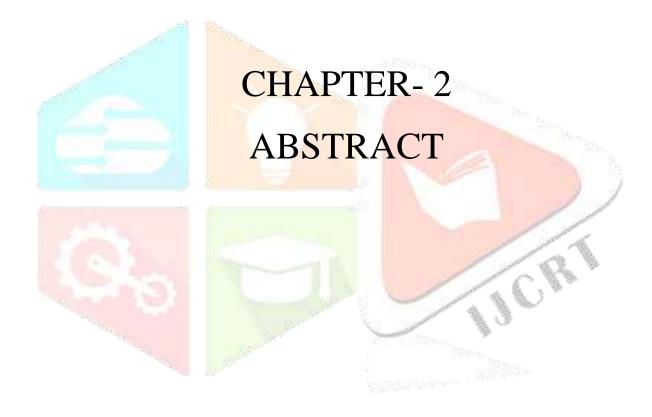
Meeting the delivery on time is the most important factor in today market to have good reputation and existence with good market share in this competitive world. To keep the work simple and easy to analyse, with the dynamic market conditions these days one need to be able to get more of the fastest selling merchandise on sale during season whilst its appeal lasts and correspondingly eliminate lines which are not popular and become drain on resources. The main areas of concern are:-

- Merchandise development
- Communication
- System compatibility
- Long delivery time

So the goal is not only to deliver the product at minimum cost, but most importance it is to create within a shorter period of time the product which can be achieved by ensuring proper coordination among different activities.

In today scenario the lean manufacturing is the buzz word made to delivery quickly and on time is the main objective of any retailer and manufacturer. Reducing the delay elements which are normally non value added elements and making the entire supply chain more efficient and clear.





#### **ABSTRACT**

The present project deals with the "Study on the Shipment Barriers in Buying House".

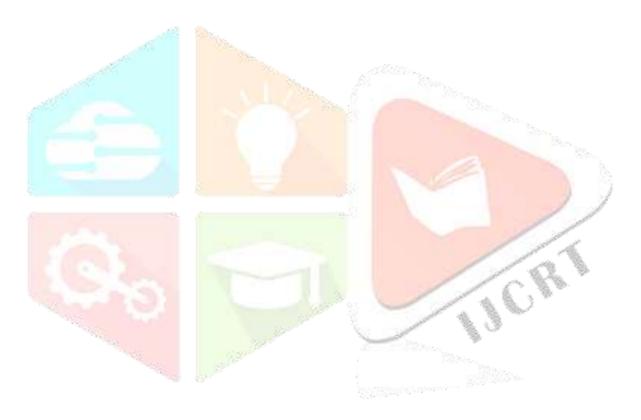
The methods of solving the shipment barriers occurring due to the ordered date, the working of the product date, delivery of the product date. The buying house have various factors to which the survey is created.

The work process scheduled in the office is to make the buyer order approved as an essential term of profit in the company. To which the term of work is done based on the work duration is reaching the target to the costumers choice and demand. The each stage in the company, work process is to make the requirement the best quality and quantity is done to which the buyers or customer demands are achieved.

The project carries the detailed information to which the situation of movement of work process in the approval of the order till the shipment is securely reaching to the destination for the buyer or customer. To which detail of order documentation till the analysis is followed.

In present market of buying office, the main criteria is to make the work flow of any type of order work on the method based on the scheduled event must be planned method in which the work is executed in an easy format expecting from the company. To which it is needed to get the knowledge of executing new strategies, the optional methods of including the styles and methods which is not much durational process. This information helps the company to manage the process of the completion of the product of finished goods, to reach the buyer at the right quality, for the right quantity, at the right place, at the right time of the order placement for shipment.

# CHAPTER- 2 INTRODUCTION



### INTRODUCTION

The project is mostly based on understanding the work process strategies which is affecting in the end of shipment. The essential stages from the buyer order placement till the shipment procedures are explained in which at the stage of the method of work the problems are occurred at the end of the consumption dates occurred.

The company Loyal International Sourcing Private Limited, is basically a buying house which works with other factories. The company has various department such as the Chief Executive Officer, Head Designer, General Manager, Account Officer, Product Department Officer to maintain the placement of order and execution, some quality controller (QC) to maintain the products quality. The garment buying house is the buying house procures garments from the manufacturers and exports to other countries. So, the communication between the buyer and the factory is the main target in the company

way to execute the job to which the basic knowledge followed to analysis as a branch to make sure the work process is included at each stage of work.

The people in the company such as the buying house and factory, the employees and the workers are good enough in their each skill in doing their work in their professional way based on the terms and conditions of the company. The buying office team, in the company places the order to the factory after confirmation of the price which is under buyer target and once price is confirmed they will release the purchase order to factory with complex details about styles and spec sheet with customer delivery date and started following up with a factory merchandiser team and production team to execute the order on time.

Making a plan and execution of the plan is 'must do' task to meet the lead time. As a standard procedure the company make plans and do extensive follow up of tasks. Still the company does not meet their target dates for final inspection and fail to ship good on agreed shipment date. The most visible reasons that causes the delay in shipment, is the factory efficiency is not essentially following it in a right format. This can affect at the stage of sampling, production and even sometimes at the delivery of the product to the buyer. So, the buyer and the company have set the order based on the scheduled procedure, but the factory must be able to follow the processes changed with the knowledge at the time when the planes occurred. So, in terms of understanding the company plans a procedure to which the output will be executed at the same procedure.

The terms of production stage at the development of the samples or sampling stage in the pre- production processes. It includes samples approvals, finalizing the vendors and the cost negotiation with the raw material suppliers. So, it is must be controlled if it is completely planned bases on the scheduled. The planned cut date necessary to be checked at every updates given in the stage of sample or development of the sample. But sometimes, the factory does not achieve the fabric purchase on time which the delay is occurring due to the import or local import of the fabric from a country or state, mostly the factory is trying to rectify the issue, but the problem occurs in the custom clearance. Due to this the each stage of the ordered scheduling till the shipment.

The on time approval must be systematically followed, if not occurred it can affect at the stage of production till shipment. It is necessary to take approval from buyers at each stage of the product to make sure that the product is working based on the buyers requirement. From the purchasing of the raw material to the production and inspection till packing and shipment the approvals must be always pre-planned then executed to which the bulk production is not affected.

The special process in the garment if used on light weight fabric or heavy weight fabric the wash techniques must be as per the order procedure.

For example:- The cold pigment wash is used based on the buyers requirement, it is essential to make sure the percentage of using the chemicals must be calculated in terms to which the solution must not increase or reduce. If it occurs with these issues it may cause wastage of the time and process consumption.

The fabric defects are common problems, if it is imported due to the delivery period of time to the factory, because of this the company has to re-order the fabric which is required because the defected areas if eliminated the shortage of the fabric can occur, which can again create consumption in the time period. But the back logs mostly occurs in the finishing stage it happens as the factory is supplement many other orders at the same time which the scheduling period clashes for the order period.

For example:- When the stitching stage of the production is completed and sent to the finishing department, so the other particular style for the order must dispatch in two days the order which must be send on that next day is affected.

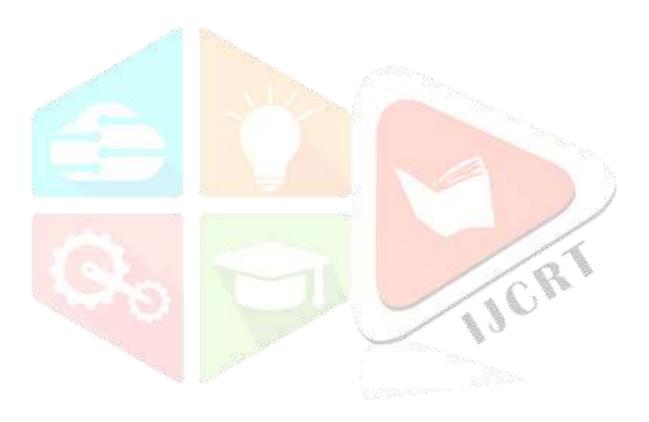
Due to this the process of the shipment is delaying as no respond is given for the order which must be send soon to the buyer, time consumption is taken place. Then the buyer requires urgency for the production is occurred due to the delays in the previous stages before pre-production to which the workers are pressurised to complete the work within 3-4 days. Due to this the company needs to urgently send to the buyer. At this stage the work consumption may create errors and few missing finishes such as extra attachment of buttons, or size labels (in few samples).

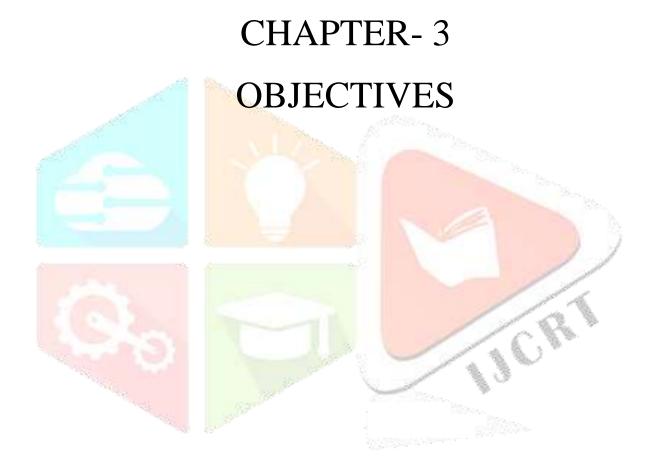
The implementation of the Time and Action Calendar is mostly tried to make the work easier but, at this stage the factory mostly make the process jumbled up method instead of going through the systematic method. The utilization of time is occurred, so the process followed in the time of production for a short period it must not have complicated process. If it occurs with more process in the short production process then it will affect at the time of delivery or during shipment.

Mostly when the shipment is done based on the time scheduled for the order goods sometimes it is held in port due to the information is not updated correctly to the forwarder, this can occur as a problem for the company and the penalty must be paid as the documentation submitted is not checked properly. Even if the codes are not rechecked before sending for shipments it may affect at the time of documentation of the order. These stages must be taken essential care by the company to recheck and create approval from the company the documentation sent to the buyer or received from the buyer, if a particular documentation is not sent that will also affect the shipments.

So, when it reaches to the buyer the good of the ordered products. Mostly, the process control is not followed by the requirements based on the buyer choice, such as quality assurance for the final production it can affect the presentation of the finishing of the order outlook. The company must take essential steps in constructing the product based on the time consuming levels as a immediate buffer system which must be followed for the production process, So, perspective from buyer to buyer it will affect the order in which the discount is asked by the buyer 5%-10% which will create a minimum profit for the company.

Finally, the results establish a link between changes in product unit values and the variation in past investment outlays taking place in anticipation of the improved access to which in the market it won't affect in the further upcoming future analysis in the company. Thus it is necessary to make sure the each stage of the standard order placement it must work with less complication and must work on day to day activities as the placement of success at each scheduled period of time.

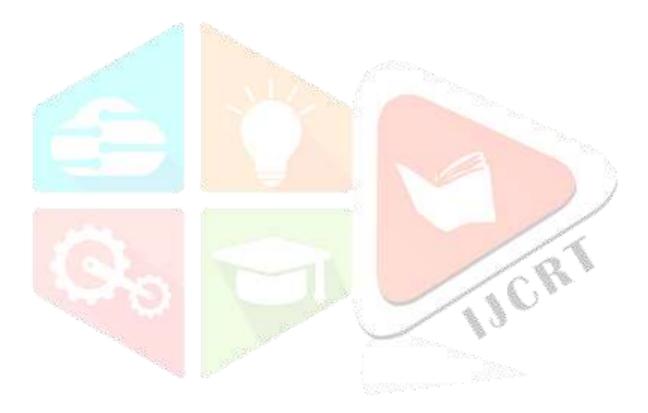


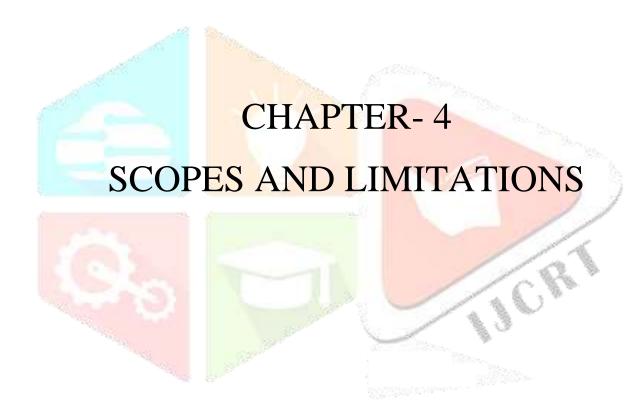


## **OBJECTIVES**

- To making discussions accurately at each step to which solutions are formed in the each stage of work process.
- To reach raw materials at in house on the accurate time based on the scheduled.

- To increase the manufacturing efficiency as per the planned term of the order given by the buyer till the production to the shipment.
- To approvals of samples on time.
- To handle the back logs in the finishing stages.
- To make on time bulk production dispatched from the factory, for shipment in which the documentations are correctly managed.





## **SCOPES & LIMITATIONS**

#### **SCOPES:-**

- ➤ It helps to understand the ability of the buyer perspective of which type of product is enhancing for their brand.

  The availing products which the buyer is ready to source the style or the product.
- The communication efficiency is the best method to make the updates on day to day analysis. As a conversation convinces the buyer, even at particular stage of delay it must be updated in advance, due to issues faced at the stage the solution can be executed at an easy method.
- > Creating the process chart in which the systematic flow of work is clarified to which the delay activity is eliminated.
- Developing the company order frequency, as a frequent establishment in which the styles and trends of the upcoming seasons are been executed as an order approval.
- Arrangement of documentation to which the major forms are assembled at the stage of pre-production to post-production.

#### **LIMITATIONS:-**

- The management takes decision of any order facilities by the buyers, it is a time consuming process to update if the ordered production can be done or not.
- The production alignment must have process in which the work execution is easy to understand. It must be not a time consuming work it is to make sure the final product has the right quality and quantity.
- ➤ The extra shipment, it occurs to when the style or the production of the colour ways is created in the term the buyer asks 5 to 3 types of variations. But the company creates extra which exceed to 5%-6%. It is required to not make order beyond the buyers requirement, but it depends from buyer if the costing is high or willing to pay the extra budget.



# CHAPTER- 5 REVIEW OF LITRETURE



Review of Literature is carried for the following topics as follow,

- 1. Buying house
- 2. Manufacturing units
- 3. Vendors
- 4. Products
- 5. Shipment Dept
- 6. Common Shipment barriers

#### **BUYING HOUSE**

Written by TIM JACKSON and DAVID SHAW, 2000, the authors have done extensive research for this book, especially focusing on the middle and senior level management in the fashion business. They have mostly used original material

and have thus added significantly to the existing body of knowledge in this field. The shipment plays a vital role in the time of production which is very essential in the manufacturing unit. Due to which the products reach the buyer on the efficient scheduled period of time. In which easy methods of reducing the problems is essential.

Written by RAJKISHORE NAYAK and RAJIV PADHYE, 2015, the authors have provides an insiders' look at this multifaceted process, systematically going from design and production to finishing and quality control. As technological improvements are transforming all aspects of garment manufacturing allowing manufacturers to meet the growing demand for greater productivity and flexibility, the text discusses necessary information on product development, production planning, and material selection. Subsequent chapters covers garment design, including computer-aided design (CAD), advances in spreading, cutting and sewing, and new technologies, including alternative joining techniques and seamless garment construction. Garment finishing, quality control, and care-labelling are also presented and explored.

Written by ANNIKA GUSTAFSON, ALICE VON SCHMIESING-KROFF, SZE LIT NG (PHILIP), 2004, the author specify on the consumer demands which are changing more often and companies have to react quickly when new trends and consumer requirements appear, thus the competition becomes more sensitive. The apparel fashion industry checks the time is a crucial factor and can make the difference between the success and failure of a company in this business this article deals with the development of a supply chain model for a fashion apparel retailer with focus on short lead – times through the entire supply chain. The basis for this model constitutes on the one hand various theoretical models and time concepts from the literature and on the other hand a case from the successful fashion retailer.

The transportation has become the key factor in time value and one of the most important determinants of the competitive success; it determines how often and how quickly a product moves from one point to another (known as time-in transit).

#### MANUFATURING UNITS

Written by DENIS R. TOWILL, 1996, the author basically checks on the strategies of modern supply chains which are expected to respond rapidly, effectively and efficiently to changes in the marketplace. Simultaneously the drive to achieve world class customer service levels coupled with minimum reasonable inventory (MRI). Marketing wants the complete product range available off-the-shelf; production is still, all too often, looking to manufacture in economic batch quantities so as to achieve economies of scale; and materials management is trying to minimize storage and distribution costs which, in turn, requires that a total systems MRI policy be adopted.

Confirms that, on the basis of industrial studies, collapsing cycle times drive the business into a more competitive scenario. This means that time compression strategies based on model simulation may be confidently used to predict improvements in supply chain performance.

Written by LOI TECK HUI, 2004, the author is basically studies on compressed cycle time enables products to be manufactured more quickly and has the potential of locking in the most profitable customer. Applies time-based process mapping (TBPM), a time compression technique, to a firm that operates in a resource-based environment, and undertake detailed case studies. Analyses the firm's key supply chains and examine related strategic issues. Competitive forces analyses indicate that depleting supply, which is valuable, in an attractive industry affects considerably the time horizon of strategy formulation. Robust supply chains integration requires a good consideration of a firm's resources, capabilities and external environments. Both the industrial organisation and resource-based view are important to sustain business timeliness and operations management. It seems, from the case studies, that in times of intense competition with shortages of resources, continued globalisation, and the fast and slow world divide, the integration of value chains and systems is an effective way of achieving business timeliness. Enabling yet effective strategies and technologies only come to their optimum with proper leadership – the interconnectivity of the time compression triangle.

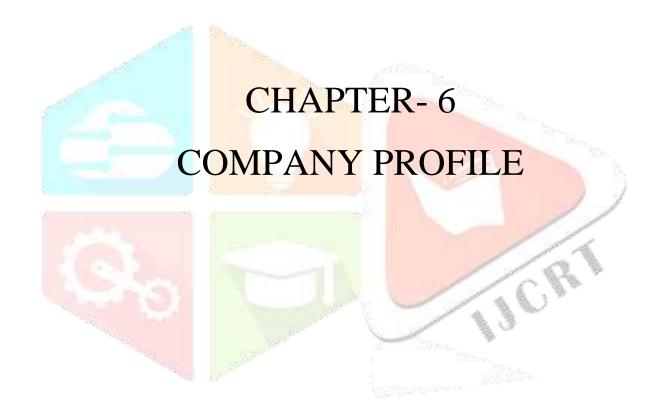
#### COMMON REASONS FOR DELAY IN SHIPMENT

Written by MEIR LIRAZ, http://www.bizmove.com/export/m7l.htm, the preparing for Export Documentation and export Shipping, the exporter needs to be aware of the necessary forms to which it must be precise to which the updates of the process at each stage of pre-shipment and post-shipment documentation is required with the proper detailing. So, the author gives a brief description of the each documentations to which the assumption of proper shipment.

Written by STEVEN CHOW, the author gives a valid reason why the delay in shipment is occurred at the stage of order placement or during the production process. So it is mainly to aim the major standards to which the area of the flow of work is not happening systematically and accurate errors are occurring in the time of the project of the ordered development.

Written by THOURAYA HAMDI, FATEN FAYALA, MOHAMED JMALI, NIZAR SAIDANE, 2015, the authors researched in the apparel industry there is nothing more crucial than making the shipment dates. Therefore, delivery delays are considered as critical to quality for their negative effects on both customer satisfaction and financial benefits. In garments, it is now forced to balance between goals that may conflict, mainly providing high-quality products, on time, and at reasonable price while maintaining manufacturing costs down. The project report proposes a method for analysing a process in a garment manufacturer. By applying DMAIC Six Sigma methodology, the project report outlines a method for defining, measuring, analysing, improving, and controlling the delivery metric, and illustrates this process with an example.





## **COMPANY PROFILE**

#### **HISTORY OF THE COMPANY:-**

Loyal textiles was established in the late 1800's, by Sir ED Sasson, as a spinning and weaving mill with imported second hand machines from England.

Karumuttu Thiagarajar Chettiar, a visionary and doyen of the South Indian Textile industry purchased the mill in the year 1953. The company transformed into a modern textiles mill under his visionary management. Loyal has been steadfast in following its founder's policy of constantly upgrading the technology used and has several firsts to its credit in terms of introducing the latest technology to Indian Textile industry.

The year 1979 witnessed the introduction of air jet technology. The first open width continuous dyeing plant was commissioned for knitting in the year 2006 and the first ozone based waste water treatment plant in 2007.

In 1996, Loyal began its International journey by acquiring "controlling interest" in a Marketing and Logistics company that was involved in design, marketing, warehousing and logistics in Italy.

In the area of safety clothing, Loyal is the only Indian company to manufacture a wide range of EN certified garments for high visibility, flame retardant, antistatic flame resistant, acid and chemical resistant garments.

After loyal came under the Karumuttu fold, it has grown from being a spinning and weaving mill into a fully integrated textile plant from ginning, spinning, weaving, knitting, wet processing of both knits woven including special finishes and garmenting to warehousing and logistics.

#### THE COMPANY PHILOSOPHY:-

At loyal they believe that Corporate Social Responsibility is a continuously evolving philosophy.

Following all the laws of the land and being compliant is a pre requisite. Going beyond just following the rules of the land when it comes to caring for the environment, not seeking benefits from the government with which we cannot deliver a greater social good than leaving it with the government itself, being morally fair to our stakeholders be it suppliers, employees, customers etc.

At Loyal they constantly review to the CSR policies and refining them as they become economically more empowered and consequently socially empowered to continuously raise the bar on what they consider right and wrong and go for beyond legal requirements in all spheres.

At Loyal they have responsibility to share the wealth thus created with the shareholders, employees as well as the society at large in proportion to the profits.

The company, strongly believes that it is duty of economically empowered organisations to involve in policy advocacy that reduce the unnecessary transfer of taxpayers money to private enterprises thought unwanted subsidies, incentives etc. In other words with a deep sense of responsibility towards the inclusive growth of the nation.

The company is more important to create wealth without creating distortions to the nation's inclusive growth or by compromising fairness in the dealing with stakeholders including the environment than just having a small portion of the profits with the society at large.

#### **ENVIRONMENTAL POLICY**

The company has reverential respect for the environment. At all the manufacturing units, Loyal has both ETP and STP, besides rain water harvesting.

Treated water and water from rain water harvesting are the main sources of water at Loyal's plants. Total of over 75 million litres of rain water storage has been created in the various units of the Loyal group.

#### **ENERGY POLICY**

Almost 70% of energy requirements of the mill is met from Loyal's own wind mills and soon this percentage is set to go up to 90%. They have also planned to set up a 5 MW solar power plant, with its CSR policy.

In order to reduce specific energy consumption several measures are being taken continuously. The new unit set up in Andhra Pradesh has only LED and solar lighting systems.

Water treatment and usage at the process house. The dye house is equipped with the most water frugal machines and boasts as one of the lowest specific water consumption facility. The waste water is treated using bio- towers, bio –ponds and finally electro- chemical treatment to remove colours. This is the most non- toxic process that procedures insignificant amount s solids. The caustic soda used is recovered almost fully from the wash water.

#### EDUCATION AS AN IMPORTANT EMPOWERING TOOL

The founder's Loyal group believed in empowering the society through education.

Loyal group supports several post –graduate educational institutions and schools to provide high quality subsidised education to over 3000 youth. Loyal encourages continuous education of its employees by providing the necessary support and facilities in the mill hotels. Over 300 employees are currently pursing undergraduate degree programs even as they work in the mills.

#### HEALTH CARE SUPPORT

Current lifestyle diseases are more threatening than communicable diseases in our state. The cost of treatment for these diseases is high and therefore Loyal is following an unique "at your doorstep" preventive health care initiative.

The company has healthcare workers visit homes in villages for medical care. Loyal current programme covers 40,000 villagers. The Loyal Company is expanding the extreme cost, effective, preventive medi care to other villages. Hoping to cover a larger number of villages in future.

#### COMPANY MANUFACTURING FACILITIES

GINNING: - The Company has two ginning factories, with the capacity of 46,000 kgs of lint per day to gin 30 mm+ an extra-long staple cotton without contamination. The unit follows the best work practices, giving no room for any foreign fibre.

The company has plans to increase ginning capacity by adding on ginning factories in different geography areas as including one year Bahir Dar Ethiopia.

SPINNING:- The company has total of 1,80,000 spindles and 4,800 rotors; the spinning capacity is spread over 4 locations such as :-

- ➤ Kovilpatti
- Sattur
- Arasanur and
- Naidupet- in Andhra Pradesh.

Loyal spinning blocks typical do not exceed 25,000 spindles in one shed to ensure that different blends are run at different sheds. It starts with a 2,000 spindles fully integrated unit to produce technical fiber yarns, 4000 and 5000 spindle mills to produce dyed fiber yarns, 12,000 spindle mills to produce different blend of polyester and cotton yarns.

The spinning mill has one lakh spindles with compact spinning, 5,000 spindle with Siro compact spinning. 1,000 spindles with core spun and 3,000 spindles with electronic drafting to produce multi count and slub yarns.

Majority of the spinning frames have auto doffing and link cone winding configuration.

All auto- corner have latest version of Loepfe Zenith cleaners with provision eliminate both polypropylene and colour contamination.

The carding department, being the heart of good spinning is always kept very young. The average age of the carding department is less than 5 years. With most cards having 3 lickerins. The open ends have three lickerin cards with integrated draw frames and several stages of micro dust removal machines to ensure that open end yarns are free from Moire effect.

The latest version of Orelikon Schlafhorst opne end machines have also been installed to meet the flexible requirements of the customers.

The spinning mill produces both open end (from 6's counts up to 24's) and ring yarns (from 6's count up to 160's) both 100% cotton and polyester blends. Recently VORTEX spinning machines has been added to the production line to produce polyester/cotton knitting yarns with low pilling quality. The company also spins technical fibres such as aramid fibres, cotton fibres, and other inherently flame resistant fibres in several blends.

Besides using Indian Cotton the company uses imported cotton from Egypt, Supima from U.S, Pima from Israel and also organic cotton. The cotton is checked before feeding into the cards through the camera based contamination and polypropylene eliminators at two locations in the blow room line.

#### ANNUAL PRODUCTION OF YARN IS MORE THAN 34 TONES WHICH INCLUEDS THE FOLLOWING:-

- ➤ Ring spun :- 100% Cotton ,Polyester Blends, Viscose Blends, Modal Blends, Linen Blends and Lycra Blends.
- Open end: 100% Cotton and Polyester Blends.
- > Speciality yarns: Core Spun Multi Fibre Blend, Multi Count, Multi Twist and Slub Yarn, Nippy Yarn, Siro Compact Yarn, Snow Yarn, Linen Blends.
- ➤ Melange Yarn
- Organic Cotton Yarn: BCI Cotton Yarn, and Blends.
- Carbon Yarn, Metal Yarn and other Anti-static Yarn
- Aramid and other inherently Flame Resistant Fibre Blended Yarn.

#### TWISTING AND GASSING UNIT:-

The company has twisting units in Sattur houses Murata and Peas Metler parallel winding machines, 60TFO machines, 160 drums RITE gassing machines and 720 drum winding machines. The unit is also equipped with Xorella Steam setting machines, to condition hosiery yarn and folded yarn from 2/10's to 2/140's. The company has also 240 gassing positions to produce gassed yarns for global market.

#### REPROCESSING OF WASTE:-

The company has a yarn opening line to convert waste yarns into useable fibres. The company has a full-fledged waste cleaning line which carries out several stages of micro dust extraction to reprocess the waste and make it suitable using open end machine.

100% of waste produced in ring yarn line is reproduced, only the waste produced in open end line is sold.

#### WEAVING:-

The weaving preparatory consist of Benninger (Karlmayer) wrapping and sizing machine with 5 wrapping machines, 1 sectional wrapping machine and 4 sizing machines, with size pick-up measuring and controlled device. The company has wide width of air jet looms, narrow width air jet looms and wide width looms with dobbies and twin beams. The air jet looms are from Toyota, Picanol and Mythos Somet.

The two weaving mills of the company have 450 air jet looms of the width 190 cms, 210 cms, 220 cms, 280 cms, 340 cms, Crack, cam and dobby looms with single and double beam options with up to 6 weft feeders are also available.

Loyal employs the most energy efficient centrifugal compressors and use coated aluminium tubes to reduce flow resistance, air consumption is monitored online to ensure that all looms use minimum amount of air. The loom sphere humidification system reduces power and water consumption.

The company weaves from 6s to 100s count both single and ply yarns in plain, drill, sateen and dobby weaves and 100% cotton, lycra core spun, slub, polyester blends and filament yarns to produce a very wide range of fabrics for virtually any application.

The company produces 170,000-250,000 meters of fabrics per day of width from 129 cms to 360 cms of count range from 6s to 100s including very densely woven fabrics.

#### UNCOMPROMISING OBSESSION FOR QUALITY:-

Quality assurance is carefully imbibed in every process and is every employee's obsession. It begins at the ginning. Loyal's cotton selectors chose the gins from where Loyal buys its cotton. The cotton is thoroughly tested using HVI instruments and issued for mixing, using a bale management system which ensures a narrow band of average yellowness and micronaire values. Other instruments in the lab are AFIS, Premier iQ2 LX yarn and preparatory slivers and roving

evenness tester, Uster Classimat and Tensorapid strength tester from Premier. Loyal uses a combination of cottons from Egypt, USA, Israel and India to produce yarns for different customer specifications. 100% of both knit and woven cloths grey, as well as dyed are inspected before packing.

Fully equipped quality control labs:

- 1. High volume cotton testing to ensure that every bale is tested, Loyal's own bale management system is followed while mixing the different bales.
- 2. AFIS advanced fibre information system is used to get a clearer picture of the cotton and process slivers.
- 3. Mesdon:- For online measurement of neps at carding an combers at all units
- 4. Yarn and sliver quality testing machines including fabric simulator with a software to identify the source of defect.
- 5. Tensorapid: Single yarn strength testers to determine the RKM.
- 6. Classimat: Loyal is having Class iQON, an advanced yarn fault detection and classification instrument. Using a combination of Visible Light and Infrared technology, the machine detects fibre mass variations, splice faults and foreign fibre contamination, including white polypropylene. Both cleared and un-cleared yarn are tested regularly to identify the faults and based on the test results the process parameters and clearer settings are optimised to get the best quality.

Loyal does not stop quality assurance drive with mere quantitative readings. The yarn produced at Loyal is actually knitted/ woven into fabrics and also dyed to assess the various aspects of the yarn to assess its full capability before the quality is approved.

#### COMPREHENSIVE KNITTING CAPABILITIES

Loyal's knitting plant has capacity to produce 100 tons of knit fabrics a day in Single Jersey. Interlock, Rib, 3 thread Fleece and Pique Polo Knits.

The Plant is equipped with knitting machines of diameter from 20" to 36" and gauges from 20 GG to 44 GG from Mayer and Cie, Terrot, Pailung, Unitex, Amtex, Pilotelli, stoll machines, Lafer Brushing machine and Heat set grey stretch knit fabric.

The company has a huge capacity of open-width knitting machines to produce cotton spandex fabrics. All machines have high-legs to produce 100 kilo plus rolls with scanners to monitor the quality online; they also have the latest creel that can accommodate up to 4 kilo package and with individual air jet nozzles to feed yarn to the feeder.

Flat knitting machines are used to produce collars and cuffs. The knitting capacity is 2,250 tons per month. All yarns used in knitting are Xorella conditioned waxed yarns cleared using colour and PP contamination clearers.

Loyal knits are cotton comber, carded, compact siro compact, slub, polyester blends and filament interlaced fabrics of wide range weight from 60 GSM to 450 GSM.

Loyal takes pride in having one of the best knitting facilities in the world in terms of quality of knitting, culture of needle and sinker change, labour productivity and power consumption.

#### INTELLIGENT KNIT INSPECTION SYSTEM

Loyal does 100% inspection of the knit fabrics with intelligent inspection machine. Using in-house software, the machines capture all the data on defects, contamination and grade the fabrics to ensure 100% customers delight. Once inspected and rolls cut to stipulated weight, they are automatically packed and made ready for dispatch. The 'Seven gate quality assurance system' provide a strong platform for zero defect.

#### DYE HOUSE

The dye house has two sections: -

- Woven fabric dyeing section and
- Knit dyeing section

The woven fabric dyeing section consists of Osthoff gassing, Kuster 's continuous bleaching range, Kuster 's mercerising machine, Monfort E-Control dyeing machine, Kuster 's continuous washing range, Brucker Stenters with coating attachments, Ceramic, Aluminium wire brushing, steel wire raising machines and a Sanforizing machine.

The knit dyeing section consists of Erbatech continuous bleaching, Monfort relax dryer, Benninger padder, Erbatech washing machine, Bruckner stenter compacting machine and Soft flow machines from Scalvos for exhaust and polyester blends dyeing.

The lab consists of

- ➤ Barca siedo colour mater from Tree point
- ➤ Konica Minalto Spectrophotometer 3600 d
- Mathis E-control, Lab stenter

- Exhaust dyeing machines
- ➤ Washing machines & Tumble dryers
- > Atlas flame retardant tester

#### STATE - OF -ART WAREHOUSING

Loyal employs computer assisted warehousing with automatic loading and unloading machine and also employs manual machine. Everything has a clearly demarcated space and stored accordingly. This ensures absolute precision in handling a wide range of items.

#### **ORGANIC TEXTILES**

The company strongly believe in the organic way of cotton cultivation and in eco-friendly ways of converting the raw material into finished product for better sustainable ways of production.

Loyal is certified by "Control Union World Group" (formerly known as SKAL International) to supply organic products under GOTS.

All the units-spinning, weaving, knitting, dyeing and finishing and garmenting are GOTS certified for processing organic cotton.

#### **GARMENTS UNITS**

Garments division has Gerber and Morgan automatic spreading and cutting machines,

Juki, Brother and special purpose machines including automatic pocket setters, welt pocket makers, profile stitching machines, collar making and stitching machines, belt loop attaching machines, etc.

All machines have under bed trimmers and computer stitch control. 10,000 complex garments with multiple pockets and design features can be made per day. Besides this, Loyal produces 3.5 million pieces of knitted garments per annum.

#### WASTE WATER TREATMENT

Waste water produced in the dye house is one of the lowest levels in the industry per kilo of fabric processed. This water is treated using bacteria and electro chlorination process to produce the least amount of sludge.

#### PRODUCT OF THE COMPANY

- > YARN
- Ring yarn and Open –end yarn in counts 6s to 120s
- Carded, Combed, Compact

- 100% Cotton, Polyester blends, Viscose blends, Linen blends, Lycra blends, Modal blends
- Core spun, Multi blend, Multi count, Multi twist, Slub, Slub blends
- Melange, Organic Cotton, BCI, Conventional yarn
- Speciality yarn: Carbon/ Metal/other Anti-static, Aramid and other inherently flame resistant fiber blends
- Gassed, TFO yarn from 10/2 to 120/2

#### WOVEN FABRICS

- 100% Cotton, Polyester blends, Viscose blends, Modal blends, Linen blends, Lycra blends
- Airjet looms, width 50 inches to 140 inches
- Plain, Twill and Drill, Duck, Canvas, Sateen, Dobby

#### KNITTED FABRICS

- 100% Cotton, 100% Polyester, Polyester blends, 100% Viscose, 100% Modal and blends, Melange, Slub/Fancy yarn (With and without lycra)
- Machine diameter 20 inches to 36 inches
- From 20 to 44 Gauge
- Single Jersey, Interlock, Pique, 1x1 Rib, 2x1 Rib, Fleece, Terry, All types of needle drop, Collar and cuff
- Open width/tubular single jersey with all feed lycra
- Open width while and dyed, compacted fabric from 55 inches to 78 inches width

#### PROCESSED WOVEN AND KNITTED FABRICS

- > 3500 meters of processed woven fabric per day in width of 50 inches to 63 inches
- ➤ 8 tons of processed knitted fabrics per day in the width of 55 inches to 78 inches 9 (open width only)
- ➤ 100% Cotton, 100% Viscose, 100% Polyester, 100% Modal blends, Polyester blends
- ➤ Vat/Reactive/Dispense/High Visibility
- ➤ Pre-shrunk/Compact
- Peached, Brushed, Flame Retardant, Acid Resistant, Anti-Bacterial, Stain Guard, Moisture Management, Resin, Enzyme

#### STATION PRINTING

#### **Production Capacity:**

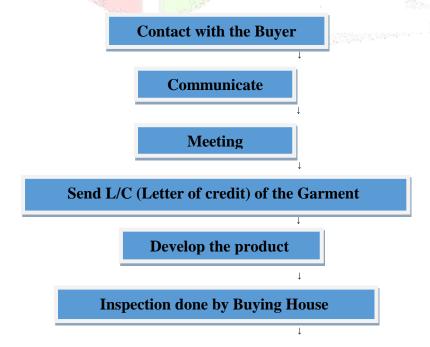
- ➤ 20,000 Strikes per day
- ➤ Upto 12 colours per print
  - Reactive
  - Pigment
  - Plastasol
  - Foam

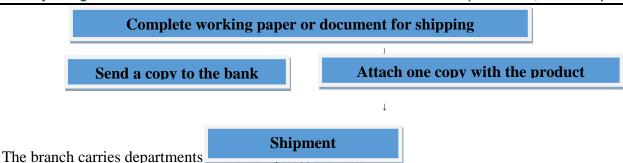
#### **COMPANY BUYING HOUSE**

Buying house is basically an office with testing machine and equipments. So every Buying house skilled co- workers in the organization, such as the Chief Executive Officer, Head Designer, General Manager, Account Officer, Product Department Officer to maintain the placement of order and execution, some quality controller (QC) to maintain the products quality. Garment buying house is the buying house procures garments from the manufacturers and exports to other countries.

The Buying houses try to communicate with buyers of other countries who want to buy garment products. Then they contact the garment factory that can make those kinds of products and fulfil the buyer's demand. So, in this way they create a contract between these two parties. Sometime buying houses make their own sample section, so that they do not have to go to factories for collecting sample and they can attract customers faster and easily. On the other hand, they create a show room of their product to attract the buyer. Moreover, this house maintain the merchandiser to follow up the product processing line perfectly and also build a quality assurance team for checking the actual quality of the product.

#### Flow Chart of Buying House:





- Showroom
- Designing Department,
- Merchandising Department,
- Marketing Department,
- Account/Finance Department,
- Quality Control Department.

#### **DESIGNING DEPARTMENT**

The department follows the work based on the merchandiser's view through which the buyer's choice, but the product should be aspired. The buyers they deal with are the international buyers and national buyers. The Head Designer is basically the important person to create a buyers perspective of design. They mainly create the tech pack in the buying house, which are of two forms that is — MERCHNDISER TECH PACK AND DESIGNER TECH PACK. The international brand follows two seasons which is high- summer and winter.

They use software such as Adobe Illustration, Adobe Photoshop (both software's version used are CS-6). They update the versions software once launched in the international market. The software they use in day to day is Adobe Illustration for the 2D structure garment or flat sketches and Adobe Photoshop for the basic purpose.

They designing department have a protocol for the fabric innovation. They mostly make products based on creative and innovative ideas such as the upcoming styles, techniques and trends. The make it aware to the buys they can implement such designs in the company. The departments have a line to which the work is apt to make through such as, trends, costing style, Grams per Square Meter (GSM based in the buyer's choice).

They have the variety of swatch card booklet collection in which specifications are created (woven and knitted). The designers make swatch card samples to send the buyer to which is arranged by the merchandiser to the manufacturer for the new fabrication type based on the buyers requirement.

The designers make presentation based on new collections in the upcoming style and present fashion trends for the buyers to which the selected sample chosen by the buyer. Some buyers prefer mood board presentation to which the stylization and colour standardization is created for the approval available of the company and new techniques, styles and trends

are created with the samples such as development samples created by the company. Some buyers give the sample which they have developed to which they require in bulk production by the company.

So the designers make the requirements based on the buyer's preference, and availability of the collections based on the market trends.

### QUALITY CONTROL DEPARTMENT

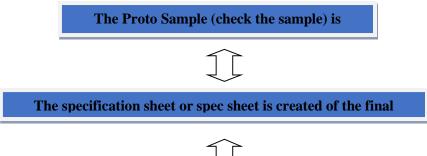
The QC department follows the samples in which are done in the industry bought to the buying house to check the errors and defects in the sample. The QC head takes the responsibility of the technical problems such as factory problem solving and grading differentiation. The buyer does not send their quality controller to the company. The orders the buyer mostly schedule the final product with the particular company mostly 60- 90 days. They directly tell the quality controller head of this organization to inspect the product work flow. The quality controller plays a vital role of the production to which each stage of the fabrication till the shipment is checked by them. Then the confirmation is sent to the buyer base on the scheduled order.

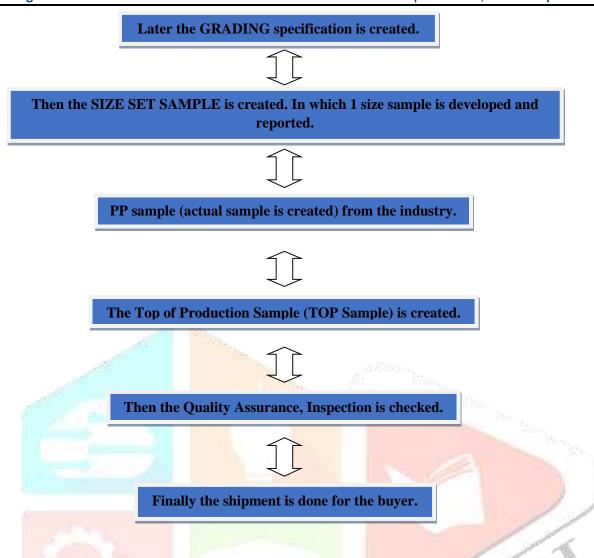
#### ➤ THEY STARTING TO THE END PROCEDURE THEY FOLLOW IN THE QC DEPARTMENT ARE:-

- STEP 1:- The buyer approves the BASIC SAMPLE OR ORIGINAL SAMPLE done by the Designers

  Design the style and silhouette of the garment. If the buyer requires changes it is done by the designer.
- STEP 2:- The buyer is given 3-10 style choices. To select the final PRODUCT SAMPLE.
- STEP 3:- The DEVELOPMENT SAMPLE is created in which the original sample is compared with the development sample. If there are defects or flaws found in the development sample it is changed.
- STEP 4:- The PROTO SAMPLE is created.
- STEP 5:- The actual fabric sample and the fit based on the size is created.
- STEP 6:- The package of the product is also checked before sending to the buyer.
- STEP 7:- The buyer checks the sample, if it is approved.
- STEP 8:- Final Shipment date to dispatch is done in the industry.

#### THE KEY VALUES THE QC HEAD FOLLOWS ARE:-





Thus the QC plays the important role in the organization till the final product is dispatched to the Buyer.

#### SHOWROOM DEPARTMENT

In this particular department, the original sample and the shipment samples are stored in the showroom. Each garment style has a hand tag in which the specifications are created such as the – date, style code, fabrication, and wearer category.

They have samples in showroom such as:-

- Development Samples
- Photo shoot Sample
- Shipment Sample

In the showroom, the photo shoot sample is done by the designer and merchandiser. To which presentation is created for the sample. Then the buyers can view the detailed sample in which the selections are done.

#### MERCHANDISING DEPARTMENT

The merchandisers work is mainly concentrate on communication to the buyer. The decision is done by everyone within the organization. Technically they communicate to two people that are the BUYER and the VENDOR. The merchandiser checks from the buyer to the vendor, till the shipment dispatch order is completed.

Their target for the buyers by the like checking the styles as per the costing, then the colour may also increase or reduce the price; these are reconfirmed to the buyer.

They make presentation for the buyers based on the digital image taken to which the selected sample is sent to the buyer. Some buyers prefer for presentation for the approval of the major customers or buyers as a confirmation of the samples available of the company and new techniques, styles and trends are created with the samples such as development samples created by the company. Some buyers give the sample which they have developed to which they require in bulk production by the company.

#### The starting work process:-

- STEP 1:- The basic costing sheet is created (tech pack of the buyer price range).
- STEP 2:- Process is followed such as tech packs like print and embroidery.
- STEP 3:- The merchandiser has studied there buyer's target of costing. The target price is high for the buyers to which they don't agree, then the minor changes are made in sewing (like bar tacks) or sewing is reduced.
- The main job is to use techniques to make the order in which the buyer is accepting.
- STEP 4:- If the order is accepted the company proceed with the Proto Sample (by the changes acquired).
  After the sample is send to the buyer make the customer checks the sample and if the customer is satisfied with the product it is then approved.
- STEP 5:- Precede the order follow- up.
- STEP 6:- The next stage is fabric quality is approved (fabrics such the knit-GSM, woven-count, denimowns)
- STEP 7:- Fabric lab dips are created in the industry. After the completion, like the fit sample done on actual fabric and trims. In which the available colors used buy the factory.
- STEP 8:- The order bulk fabric for which was approved by the buyer. Then the dyeing process is made.
- STEP 9:- Pre-production sample is created. After the sample are approved. They may also require based on 2 to 3 colours which may be ordered by the buyers for the same product.
- STEP 10:- The next stage is the Production line (sewing the product). From here the production takes the responsibility from the sewing line.
- STEP 11:- Then the finishing, after that the packing and later the updates are created for shipment is tracked by the merchandiser to whom the buyer is getting the dispatch order on the requested time period.

The merchandiser says the SOP varies from industry to industry.

The COSTING is done by the merchandiser; they start it with the basic techniques used in the garment till the packing procedure for costing. As the following given: - Fabric costing, the Trims used based on the style costing (like button, transparent tapes, threads, zippers etc.), the washing charges, the dyeing charges (based on the buyers requirement), embellishment costing, Garment rejection is applied for 3% (for basic style) and 5% (for more style created in one garment), factory overhead is applied for 12% (salary, wages, electricity, transportation, factory margins). Mostly preproduction costing is done before creating the bulk order.

They make TNA chart is in which the working and the approval is followed. The sourcing department is creating two differences the sourcing (meaning the fabric) and purchasing (meaning the trims) this is done by the department.

Based on the buyers order in the buying house they have 3 to 4 buyers at a time. Whereas the industry has maximum 2 buyers (style more than 1). If the order by the buyer wants technical aspects of style is done less than 2, they also have proper check points. This is the most important role in merchandising department.

There are huge task done in the buying house which starts with communication with buyer and ends with collecting commitment from the buyer. It is very essential for the buying house to facilitate in each stage of the work process. So a buying house is mostly making the best requirement for the company to successfully work at an equal presence based with the market.

#### Costumer of Loyal International Sourcing Private Limited (Buying House):-





BUFFALO DAVID BITTON



ABOUT THE BUYER





Red Tag Group, Partner Company is a leading fashion and lifestyle retail group in the region operating Discount and Value in Fashion and Home Stores. The group is known for its popular fashion and lifestyle stores that cater to the fastest growing consumer segment in the world. With a varied portfolio of brands that are enjoying great success, Red Tag Group has been growing at a staggering rate of 23 percent annually with more concept and lifestyle stores on the way. Red Tag Group has two main areas of operation- the newly launched Red Tag Value Fashion and Home Stores and a number of well-known regional brands under Discount Fashion and Home Stores.



The REDTAG Group opened its first store in Dubai at the Ibn Battuta Mall, March 25th, 2010. The RED TAG brand is the real revolution in fashion retail which is focused on offering an affordable range of the latest fashions, accessories and home ware. REDTAG offers customers 365 days of value and a truly enjoyable shopping experience. The REDTAG commitment to quality at the right price offers shoppers the experience to always rediscover value as they browse through the latest trends in fashion and home ware at the newly opened store.

Ernest J. Hosking, CEO of the REDTAG Group said, the brand is very happy to have the first RED TAG store opened in Dubai. This marks the presence in the Emirate and provides them with a springboard to establish as a value fashion retailer in the UAE. Their aim is to build the RED TAG brand in the UAE as the brand which has already established its presence firmly in Saudi Arabia and Kuwait. Currently there are a total of 34 RED TAG stores out of a total of 50 Group stores. The plan is to open 12 additional RED TAG stores per year over the next upcoming three years as well as to convert the remaining Group stores to the RED TAG brand during the same time frame.

He further added, the opening of the REDTAG store in Dubai also coincides with the launch of the new Spring/Summer 2010 Collection which we are very excited to showcase as we are confident that our shoppers will love it. Shoppers visiting the REDTAG store at Ibn Battuta Mall can expect good quality fashion wear at affordable prices as well as new collections in-store regularly and frequently.

The extensive women's collection teams tunic style blouses with lace edged tights in an array of patterns and colors from lilac and purple to stark black and white. A range of tops in bold tribal, ethnic and safari prints as well as uniquely styled t-shirts coordinate beautifully with a collection of skinny jeans, capris or cotton layered skirts. Women on the go will also find a range of active wear to complement their sporting instincts.

resistible mind with collection. Cute and words that easily come to the girl's are Featuring light checkered cotton dresses, tunic style blouses, and floral appliqué embroidered skirts in a range of vibrant colors and pastels as well as a sports active range.

Hard wearing and hip, the boys collection of t-shirts, shirts, cargos and jeans is highlighted by bright colors, checks and cheerful graphics that are just perfect for the rough and tumble of a little guy's life.

Vibrant colors, checks and high graphics riot through wide of impact run the range T-shirts, shirts, jeans, cargos, shorts, jackets and sportswear comprises the men's collection. An assortment of accessories like scarves, belts and shoes make the collection a mix-and-match delight.

Parents of infant boys and girls as well as babies will also find much to delight them in a range of beautifully designed clothes and accessories in bold colors and pastels. The REDTAG Spring and summer collection is rounded off by an extensive collection of decorative as well as practical items and accessories for everyday use in all areas of the home.

About RED TAG

REDTAG is a refreshing concept in today's retail scenario. It is a chain of value fashion and home stores that offer a world of choice and an enjoyable shopping experience at unbeatable value. With 365 days of value, RED TAG stores launched in 2006 are now a big hit with families that look forward to the latest in fashion and style along with a truly enjoyable shopping experience. The pricing of the products, the stringent quality assurance, the availability of customer favorites, wide variety and choice, personal preferences in sizes, shapes and colors. Everything makes RED TAG the first choice for value-conscious customers across the GCC.

#### About RED TAG Group

The RED TAG Group is part of BMA International, which has achieved important milestones in retail, fashion and lifestyle over the last three decades. BMA is also the holding company for Retail Arabia which operates hypermarkets, supermarkets, convenience stores and malls.

The RED TAG Group currently with 50 fashion and lifestyle stores across the GCC has been growing at a rate of 20 per cent annually. The RED TAG Group has two main areas of operation - the newly launched RED TAG value fashion and home stores which is poised for a quantum leap in the retail world and Discount Fashion and Home Stores which is a collection of well-known regional brands. The growth of the RED TAG Group is concentrated around the RED TAG brand. The discount fashion and home stores currently under various brand names will be upgraded into the RED TAG brand within the next three years This coupled with an ambitious plan to open at least 12 new RED TAG stores per year in malls as well as high streets will see the RED TAG brand become a leader in the value fashion and lifestyle market.



# CHAPTER-7 METHODOLOGY



Aim:

Making discussions accurately at each step to which solutions are formed in the each stage of work process. The company must be able to handle the situation with the buyer if any delay occurs in the stage of purchasing or manufacturing.

## Objectives:

- To increase the manufacturing efficiency as per the planned term of the order given by the buyer till the production to the shipment.
- To approvals of samples on time.

## Scope of the study:

- Creating the process chart in which the systematic flow of work is clarified to which the delay activity is eliminated.
- Developing the company order frequency, as a frequent establishment in which the styles and trends of the upcoming seasons are been executed as an order approval.

Hypothesis:

The major task in the shipment activity is the main criteria in how to make an order successfully analysing in the area of errors placing issues. The solutions must be created at handling without any difficulties to which can make the requirement based on the buyers approval, of executed work must be quality based and enhancing.

## Limitation:

- The production alignment must have process in which the work execution is easy to understand. It must be not a time consuming work it is to make sure the final product has the right quality and quantity.
- The extra shipment, it occurs to when the style or the production of the colour ways is created in the term the buyer asks 5 to 3 types of variations. But the company creates extra which exceed to 5%-6%.

The methodology is followed as follows,

#### THE PRIMARY DATA:-

It contains data which is required to analyze the product process, to which the various sources are as follows:-

- Understanding and research on the function of order placement (buyers, designer, merchandiser and suppliers)
- Communication with various department based on order function.
- Trying to update the process of each scheduled procedure. Achieve the right shipment on time.

## THE FOLLOWING IS BASED ON THE COMPANY FOR PROCEDURE OF THE ORDER PRODUCTION:-

The buyer is the first person for the company to make contact other countries or within the country who want to buy garment products. Then they contact with factories who can make those kinds of products and fulfil buyer's demand. So, the communication is the basic form of getting the work process flow on the required aspects based on the buyer's choice.

The basic process of the work flow for the buyers order till the shipment is the following procedure:-

• STEP 1:- The buyer send a basic types of orders such as, they give the company the TECH PACK/ SPECIFICATION SHEET/ ORIGINAL SAMPLE based on which the buyer wants the product and it is an easy process for the company to understand the buyers or customers requirement. Sometimes, the buyers ask order to the company if they create SMS samples (Salesman's Samples) based on which the sample if approved by the customer. Then the buyer gives the bulk production approval.

- STEP 2:- After the order confirmation is followed up by the buyer and the company, the next stage is the pricing of the product, with necessary purchasing the raw materials, trims, package, labour cost and shipment cost is created (as invoices or documentations).
- **STEP 3:-** The next stage is the FIT SAMPLE / PROTO TYPE SAMPLE which is the first sample given to the buyer. The sample is prepared according to requirement of buyer and based on the size chart, this is the rough sample (with actual fabric used in the original requirement) created through which the buyer decides by the final outlook of the product for further production. So, the range of sample created and given by the company is about 1-2 to vary according to the requirement of the buyer. COMMENTS ON **PROTO TYPE** OR **FIT** SAMPLE:-Buyer gives his comments on sample and also recommends the changes in the sample if required.
- STEP 4:- The next stage is, if the approval is followed with the buyer for the bulk production based on which the basic styles and trends of the product is developed. Then the DESK LOOM (pattern repeater block) / LAB DIP/ PRINT are created based on the production.
- STEP 5:- After the sample is created with the actual fabric and the necessary styles used on the samples such as (desk loom/lab dip/print) is approved by the buyer. The bulk booking is created by the buyer and then the purchase of bulk order is created such as the raw materials, trims and finishes, etc. is worked up based with the buyer's requirement quality of the product.
- STEP 6:- The next steps PRE-PRODUCTION SAMPLE (PPS) is send to the buyer with the requirement of all changes are confirmed on it or as the same as sample. 2-3 pieces are required in pre-production sample. It is in this stage a sample may be approved, if it is accepted go ahead.
- STEP 7:- In this stage when the supplied goods are bought into the factory, the PRE-PRODUCTION MEETING in this time the SIZE SET SAMPLE is conducted to which the Management, the Fabric Sourcing department, Trims Sourcing department, Pattern Maker, Cutting Master, Production department and Packing department. Based on the order discussion the easy methods and difficulty of the process are also discussed.
- STEP 8:- This stage in the manufacturing unit the production stage in which the fabrication of which the stage from Spreading → Cutting → Stitching → Washing (sometimes panel wash procedure are followed based on the buyers choice).
- STEP 9:- At this stage the production quantity or bulk of the manufactured product is sent to the PACKING UNIT in which the necessary procedure is discussed based on the buyer's choice.
- STEP 10:- At this stage the FINAL INSPECTION is checked by the QUALITY CONTROLLER to which the following method of the final product, that to ensure the defects and errors are not found in the product.
- STEP 11:- In this time process on the scheduled date the confirmation of the completed production of the order product by giving the updates to the buyer. Based on which the approval is given by the buyer. Then the documentation procedure is followed up.
- STEP 12:- After the documentations of the processed order approval is created, then the shipment dates are blocked with the forwarder with the necessary details of the product which is to be sent to the buyer.

So, the basic procedure of the ordered product, lead time is set based on the quantity of the buyer's choice. Mostly for minimum order the lead time production will be 75-90 days or 60-90 days.

#### THE SECONDARY DATA:-

The data supporting the secondary data that is the main stage in which enhances the keys of the research work helps to analyze the production process:-

- The major causes faced with which solutions are created during the shipment.
- ➤ The details of the brand and style,
  - Supplier: Loyal International Sourcing Pvt. Ltd.
  - Brand: Red Tag
  - Style: Kids Apparel (Boys)
  - Sample type: Proto type sample and original sample (order status).
- The documentations based on the company shipment process.

#### THE SOLUTIONS FOR SHIPPMENT ON THE SCHEDULED PROCEDURE:-

The systematic order of procedure is created from the purchase of order of raw materials till the shipment is the following steps, such as:-

➤ Pre-Order Risk Analysis (PORA) Risk Analysis

Before the order is confirmed from the buyers, at this stage the risk analysis, then the coating of the price based on which the raw material is followed. If the production section faces issues in the manufacturing unit duration of the production increases. Fabric inspection is checked at the stage, then the size set samples if it is not followed. To reduce these issues it is required to give the follow ups.

So to avoid such statistics the risk analysis is checked before the pre- production or pre- order period. The company can take care at the stage of bulk production were the issues are occurring.

> Structure of TNA followed in the company

Normally the company prepare a plan of the order based on the buyer's requirement in a spreadsheet by listing down the key processes in first column and planned date of action for each process in the next column. As per time and action calendar is scheduled by the processes, then it can be executed on timely basis to track whether an order is on track or it will get delayed.

In order to make time and action calendar are the below mentioned information must be available, they are:-

- The process flow of an order with the list of task which is needed to be performed.
- The Production capacity of cutting, sewing, washing and finishing stages must be scheduled duration of time taken for the ordered samples by the buyer.
- In the sewing department, the batch wise process and product wise capacity (production per day per batch)
- The followed lead time for the activities, e.g. raw material leads time, sampling lead time, etc.
- The last stage is the shipment date or planned date of dispatch is given by the company as per the buyer's choice.

Normally time and action process does not depend on fabric like woven or knits. The time and action procedure is largely depends on the particular process flow of an order, based on machine requirement and available production capacity. In TNA planned cutting date (PCD) and the factory date are the two most critical dates.

For example: - Sample TNA for T- shirt manufacturing order:-

The time and action derived by assuming the order of 10,000 pieces of t- shirts, made out of 100% cotton, plain woven solid dyed fabric, with embroidery logo and a print (pigment dye) on it. The order is for SS 2015, delivery date 24<sup>th</sup> March 2016, shipment at Dubai, UAE.

# Sampling Process

Prior to start bulk production, suppliers need approval on samples at various stages from buyer to ensure that everything is okay to follow in bulk production. Various <u>sampling stages</u> may include FIT, SMS, Size set and PP Sample. Print strike off, fabric quality approval, embroidery approvals are also included in sample approval. Any delay in sample approval, due to let submission of samples to buyer or buyers delayed in giving approval from their end, factory had nothing to do but postponing following processes.

While pre-production planner prepares <u>time and action calendar</u> for the order, time period is allocated for each process depending on the process capacity. Major capacity is required in production and finishing.

# ➤ The Actual Fabric Order Requirement

The company consider fabric as one of the raw material components similar to buttons, labels, interlining etc. One of the factors should be considered that the fabric is the most important component and complex to get the requirement based on the quality.

For example: - a wrong button or thread can be changed even at a short notice of a week, but it is very difficult to get a correct or replace a wrong fabric within a short notice. The fabric manufacturer on the other hand should understand the requirement.

A fabric order cases is finalized by a field sales representative or a sales manager and the order is placed by a fabric purchase manager without checking the feasibility and all other requirements with the manufacturing point of view. If everything is included for the delivery lead time looks feasible comfortably, then only the order should be taken by a fabric manufacturer.

Price quotations play a vital role. Traditional costing systems are dated and should only be used as a rough guideline. The pricing should be worked out in harmony with the market rates of a particular quality. When it is wiser to quote a competitive rate and minimize the cost by increased efficiency and better RFT (Right First Time) which in most cases determine the actual costs.

The fabric purchasing agency or buyer should conduct an audit of the fabric manufacturing facility based on their requirement before putting the supplier on their vendor list. Some of the important audit points are:

- The quality policy of the fabric manufacturing unit is required.
  - The testing lab, availability of required instruments like :-
    - Colour matching system,
    - Colour dispenser,
    - Fabric pilling tester,
    - Fastness tester,
    - Strength meter,
    - Abrasion resistant meter etc. & its documentation system
- 3. Pre-production sample making capability and infrastructure
- . Sample presentation and quality of labelling
- 5. ERP (Enterprise Resource Planning) Management functionality
- 6. Machinery and shop-floor housekeeping in general
- '. Documentation of order process flow-right from pre-order stage to finishing & packing.

In general, a recognized Quality Assurance Certification like ISO 9000-2000 takes care of the above points but in some cases the system is followed more on paper than delivering actual result. A wise buyer's audit should be able to see through the weak points and get assurance of correction.

• Planning the fabric Manufacturing

At any point of time, several orders would be running. The PPC (Production Planning & Control) plays a crucial role. In many cases change in manufacturing plan is effected at the bases of the people at the top, without considering the negative fallout of such decisions. This practice without considering the overall impact can create problems and must be avoided.

#### The Process Control

The manufacturing units, attempt to save costs, change the process control parameters without establishing quality beforehand. Result-undesirable output, leading to delay and quality claims. Textile fibres are very sensitive items and even a slight change in processing method may give vast difference in the results.

Also it is important to have a well maintained record of all process conditions preserved for different results performed.

Enterprise Resource Planning ERP-The Navigator of Business

A good ERP based management pays in the long run. It saves lot of time and money in avoiding costly mistakes, shipment delay, improved follow ups and has a strong documentation base. Fortunately, the manufacturers understand the importance of ERP, albeit the progress needs to be faster.

Internal Communication for order documentation

The documents received from buyer for compliance with the guideline of sales process should be carefully read and followed by everyone along the process path. The fabric samples for proto-garments, for sales samples, for correlation test yardages etc. are extremely important points and the timelines are sacrosanct. Strong administration of these points by a quality team reduces chance of late deliveries. This calls for a full proof internal communication among all concerned departments.

## External Communication

The trustworthy exchange of communication with customers is valuable in the business of textiles. The company has gone through many times, if an order goes wrong, the manufacturing side does not inform the customer. But in fact, such 'silence' actually makes the buyer more worried.

In the manufacturing unit, despite taking all precautions, things may and will go wrong sometimes. In such cases, it is wise to inform the buyer immediately and offer alternative solution.

## THE CASE STUDY OF THREE STYLES

This the order in which the styles are of boys infant age group with basic styles and various details and techniques used so the status occurred in the 3 styles for the order is the following tables below which shows the delays occurred at stages of production:-

S.no	Style 1	Style 2	Style 3
Size	INFANT	INFANT	INFANT
Digital		WEWYORK  CALUSSIELL ON TRANSPICTOR  OF TRANSPICTOR  ON TRANSPI	Servis Pacific Palisades
Style no.#	INM-4001	INM-4004	INM-4006
PO#	17797	17797	17797
PO RCVD Date	25-02-2016	25-02-2016	25-02-2016
Color	Mid Grey	Ecru	Whit e
Qty	2700	2400	2400
ORIGINAL PO Delivery date	5-may to 10-May	5-may to 10-May	5-may to 10-May
CAD SENT	NA	NA	NA
CAD Revd	25-02-2016	25-02-2016	25-02-2016
LAB DIP Delivered	08-03-2016	08-03-2016	08-03-2016
LAB DIP APPR.	24-03-2016	15-03-2016	15-03-2016
Print strike-off delivered	21-03-2016	26-03-2016	21-03-2016
Print Approval Date	24-03-2016	04-04-2016	<del>24 03 2016</del>
			04-03-2016
			19-04-2016
Barcode Artwork Submitted	08-03-2016	08-03-2016	08-03-2016
Barcode Artwork Approved	13-03-2016	13-03-2016	13-03-2016
Wash care Artwork	15-04-2016	22-04-2016	22-04-2016
Submitted	26-04-2016		
Wash care Artwork	26-04-2016	27-04-2016	27-04-2016
Approved	30-04-2016		
PP.Sample will	24-04-2016	09-04-2016	05-04-2016
delivered on		12/04/2016	14/04/2016

		<del>16/04/2016</del>	
		24/04/2016	
PP.Sample Approved Date	26-04-2016	26-04-2016	19-04-2016
Gpt Report Sent Date	09-04-2016	02/04/2016	05-04-2016
	16/04/2016		16/04/2016
GPT TRF#	TRPT16028056	TRPT16032096	TRPT16032101
Top Sample Sent	08-05-2016	08-05-2016	08-05-2016
FI-Date	10-05-2016	10-05-2016	10-05-2016
On-Board date	17-05-2016	17-05-2016	17-05-2016

#### The order status chart

The above table show the various issues occurred in the scheduled dates of time changes and variation as in the 1<sup>st</sup> style there is delay occurred GPT report in the order placement due to which the sample productions had error occurred at the shipment.

Where as in the 2<sup>nd</sup> style there is an issue occurring in the PP sample delivery on time is not achieved and the GPT report which was supposed to be sent on the dates as scheduled had occurred delay.

In the 3<sup>rd</sup> style there is an issue placed at the print approval date, Pp sample delivery and the GPT report which was occurring in the scheduled period of changes.

So each style shows the delay during production at shipment period which is having a major effect for the process taken place in order status chart. It is necessary to check the each level of production from the purchase order till the shipment the barriers must be tackled at the time to which even the status of the documentation for shipment dealing with the buyer and the company must follow the various document used during the shipment and the license of the required documents are check.

#### THE MAJOR EXPORT DOCUMENTATION AND EXPORT SHIPPING PROCEDURE

When preparing an Export Documentation and Export Shipping, the exporter needs to be aware of package process, labelling process, documentation process, and insurance requirements. Mostly the goods are being shipped by unknown carriers to distant customers, the new exporter must be sure to follow all shipping requirements.

So, based on the work process ensure the documentation that the company makes process scale as:-

- Package of the goods are correctly packed so that it arrives in good condition;
- The labelling is correctly placed at the bases of the buyers requirement, so to ensure that the goods are handled properly and arrive on time and at the right place;
- The documentation is correctly processed to meet foreign government requirements as well as proper collection standards; and
- The insured against any damage, loss, and pilferage and, in some cases, due to delay.

Because of the variety of considerations involved in the physical Export Documentation and Export Shipping process, most exporters, both new and experienced, rely on an international freight forwarder to perform these services.

#### FREIGHT FORWARDERS

The international freight forwarder acts as an agent for the exporter in moving cargo to the overseas destination. These agents are familiar with the import rules and regulations of foreign countries, methods of shipping, government export regulations, and the documents connected with foreign trade.

Freight forwarders can assist with an order from the start by advising the exporter of the freight costs, port charges, consular fees, cost of special documentation, and insurance costs as well as their handling fees - all of which help in preparing price quotations. Freight forwarders may also recommend the type of packing for best protecting the merchandise in transit; they can arrange to have the merchandise packed at the port or containerized.

When the order is ready to ship, freight forwarders should be able to review the letter of credit, commercial invoices, packing list, and so on to ensure that everything is in order. They can also reserve the necessary space on board an ocean vessel, if the exporter desires.

#### PACKING IN SHIPMENT PROCESS

In packing an item for export, the shipper should be aware of the demands that exporting puts on a package. Four problems must be kept in mind when export shipping creates is being designed:

- Breakage,
- Weight,
- Moisture, and
- Pilferage

Most general cargo is carried in containers, but some is still shipped as break-bulk cargo. Besides the normal handling encountered in domestic transportation, a break-bulk shipment moving by ocean freight may be loaded aboard vessels in a net or by a sling, conveyor, chute, or other method, putting added strain on the package. Overseas, handling facilities may be less sophisticated than in your country and the cargo may be dragged, pushed, rolled, or dropped during unloading, while moving through customs, or in transit to the final destination.

Moisture is a constant problem because cargo is subject to condensation even in the hold of a ship equipped with air conditioning and a dehumidifier.

Since proper packing is essential in exporting, often the buyer specifies packing requirements. If the buyer does not specify, be sure the goods are prepared with the following considerations in mind:

- Make sure the package is ensured with strong containers, adequately sealed and filled when possible.
- The proper bracing in the container, regardless of size, make sure the weight is evenly distributed.
- Goods should be packed in ocean going containers, if possible, or on pallets to ensure greater ease in handling.
   Packages and packing filler should be made of moisture-resistant material.
- To avoid pilferage, avoid mentioning contents or brand names on packages. In addition, strapping, seals, and shrink wrapping are effective means of deterring theft.

Normally, air shipments require less heavy packing than ocean shipments, but they must still be adequately protected, especially if highly pilfer able items are packed in domestic containers. In many instances, standard domestic packing is acceptable, especially if the product is durable and there is no concern for display packaging. In other instances, high-test (at least 250 pounds per square inch) cardboard or tri-wall construction boxes are more than adequate.

For both ocean and air shipments, freight forwarders and carriers can advise on the best packaging. Marine insurance companies are also available for consultation. It is recommended that a professional firm be hired to package for export if the exporter is not equipped for the task. This service is usually provided at a moderate cost.

Finally, because transportation costs are determined by volume and weight, special reinforced. Mostly in packing, goods to minimize the volume and weight while giving strength may well save money while ensuring that goods are properly packed.

## **LABELLING**

Specific marking and labelling is used on export shipping cartons and containers to ensure:-

- It meets the shipping regulations,
- To ensure proper handling,
- To conceal the identity of the contents, and
- To help the receivers identify shipments

The overseas buyer usually specifies export marks that should appear on the cargo for easy identification by receivers. Many markings may be needed for shipment. Exporters need to put the following markings on cartons to be shipped:

- Shipper's mark or stamp.
- Country of origin (exporters' country).
- Weight marking (in pounds and in kilograms).
- Number of packages and size of cases (in inches and centimetres).
- Handling marks (international pictorial symbols).

- Cautionary markings, such as "This Side Up" or "Use No Hooks" (in English and in the language of the country
  of destination).
- Port of entry.
- Labels for hazardous materials (universal symbols adapted by the International Maritime Organization).

Legibility is extremely important to prevent misunderstandings and delays in shipping. Letters are generally stencilled onto packages and containers in waterproof ink. Markings should appear on three faces of the container, preferably on the top and on the two ends or the two sides.

In addition to port marks, customer identification code, and indication of origin, the marks should include the package number, gross and net weights, and dimensions. If more than one package is being shipped, the total number of packages in the shipment should be included in the markings. The exporter should also include any special handling instructions on the package. It is a good idea to repeat these instructions in the language of the country of destination. Standard international shipping and handling symbols should also be used.

#### **DOCUMENTATION**

Exporters should seriously consider having the freight forwarder handle the formidable amount of documentation that exporting requires; freight forwarders are specialists in this process. The following documents are commonly used in exporting; which of them are actually used in each case depends on the requirements of both our government and the government of the importing country.

#### Commercial invoice:-

As in a domestic transaction, the commercial invoice is a bill for the goods from the buyer to the seller. A commercial invoice should include basic information about the transaction, including a description of the goods, the address of the shipper and seller, and the delivery and payment terms. The buyer needs the invoice to prove ownership and to arrange payment. Some governments use the commercial invoice to assess customs duties.

# Bill of lading:-

Bills of lading are contracts between the owner of the goods and the carrier (as with domestic shipments). There are two types. A straight bill of lading is non-negotiable. A negotiable or shipper's order bill of lading can be bought, sold, or traded while goods are in transit and is used for letter-of-credit transactions. The customer usually needs the original or a copy as proof of ownership to take possession of the goods.

#### Consular invoice:-

Certain nations require a consular invoice, which is used to control and identify goods. The invoice must be purchased from the consulate of the country to which the goods are being shipped and usually must be prepared in the language of that country.

# Certificate of origin:-

Certain nations require a signed statement as to the origin of the export item. Such certificates are usually obtained through a semi-official organization such as a local chamber of commerce. A certificate may be required even though the commercial invoice contains the information.

> Inspection certification:-

Some purchasers and countries may require a certificate of inspection attesting to the specifications of the goods shipped, usually performed by a third party. Inspection certificates are often obtained from independent testing organizations.

> Destination control statement :-

This statement appears on the commercial invoice, ocean or air way-bill of lading, and SED to notify the carrier and all foreign parties that the item may be exported only to certain destinations.

➤ Insurance certificate:-

If the seller provides insurance, the insurance certificate states the type and amount of coverage. This instrument is negotiable.

> Export license:-

It is a government document granting the licensee the right to export a specific quantity of a commodity to a specified country (when needed).

> Export packing list:-

Considerably more detailed and informative than a standard domestic packing list, an export packing list checks the material in each individual package and indicates the type of package: box, crate, drum, carton, and so on. Package markings should be shown along with the shipper's and buyer's references. The packing list should be attached to the outside of a package in a waterproof envelope marked "packing list enclosed." The list is used by the shipper or forwarding agent to determine:-

- The total shipment weight and volume, and
- Whether the correct cargo is being shipped. In addition, customs officials (foreign) may use the list to check the cargo.

Documentation must be precise. Slight discrepancies or omissions may prevent merchandise from being exported, result in exporting firms not getting paid, or even result in the seizure of the exporter's goods by local or foreign government customs. Collection documents are subject to precise time limits and may not be honoured by a bank if out of date..

The number of documents the exporter must deal with varies depending on the destination of the shipment. Because each country has different import regulations, the exporter must be careful to provide proper documentation. There are several methods of obtaining information on foreign import restrictions:

- Foreign government embassies and consulates can often provide information on import regulations.
- The Air Cargo Tariff Guidebook lists country-by-country regulations affecting air shipments. Other information includes tariff rules and rates, transportation charges, air way-bill information, and special carrier regulations.
- The National Council on International Trade Documentation (NCITD) provides several low-cost publications that contain information on specific documentation commonly used in international trade. NCITD provides a free listing of its publications.

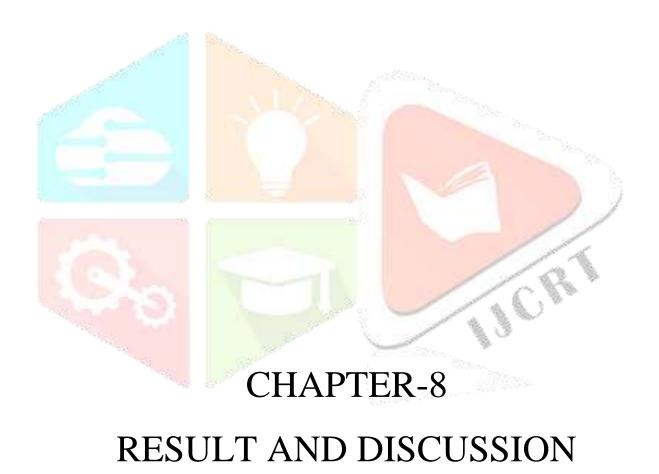
#### EXPORT IMPORT INSURANCE

Export shipments are usually insured against loss, damage, and delay in transit by cargo insurance. For international shipments, the carrier's liability is frequently limited by international agreements and the coverage is substantially different from domestic coverage. Arrangements for cargo insurance may be made by either the buyer or the seller, depending on the terms of sale. Exporters are advised to consult with international insurance carriers or freight forwarders for more information.

Damaging weather conditions, rough handling by carriers, and other common hazards to cargo make marine insurance important protection for exporters. If the terms of sale make the firm responsible for insurance, it should either obtain its own policy or insure cargo under a freight forwarders policy for a fee. If the terms of sale make the foreign buyer responsible, the exporter should not assume (or even take the buyer's word) that adequate insurance has been obtained. If the buyer neglects to obtain coverage or obtains too little, damage to the cargo may cause a major financial loss to the exporter.

So, the shipment process in the company is a very import term for the production to which the good are a source of importance for the customer. It needs a lot of courage for the business to be transparent with customers when some

disaster happens. But at the end of the day, the integrity creates a bond of trust, which is all the most required in today's tough business situation.



# RESULTS AND DISCUSSIONS

# MAJOR CAUSES OF SHIPPMENT DELAY IN THE COMPANY:-

The main cause in the buying house / Manufacturing due to shipment barrier in which, there is reasons for delayed deliveries are:-

- Sourcing of Raw Materials
- **Development of Samples**
- Quality inspection
- **Production Process**
- Washing Process
- **Packing Process**
- Approval of Documentations
- Delivery of the Product

In brief the problems faced in the unit of the Order Approval by the buyer till the shipment process is the following delays, which are:-

## > System related Problem

This is mainly related to the process activities and the way entire system works. This includes the time taken in documentation, inter-departmental communication, the release of orders, flow of work, processes followed. The system is unique to every company and it is way the various functions are executed. And developing a system to work is very difficult.

# Delay in sourcing of raw material: -

Normally factory planner discuss with supplier about their lead time for sourcing goods such as fabric and trims prior to making the final production scheduling. Suppliers fail to send good on time due to too many uncertainties. Sourcing delays also consumed extra time and make it difficult to start in-house processes on time. Few export houses experienced that yet after loading of cutting and stitching, trims such as care label, laces or main label are yet to be sourced. Partly stitched garments start piling up in the line and line supervisor load another style keeping running style aside from the line until they receive trims which can cause a major problem for the order.

# > Inferior quality in sourced goods: -

Fabrics, trims and accessories get in-housed at last. Goods are passed through quality checks before using in product or cutting. Due to which the unorganized factory mostly source the fabric from power loom and face quality related problem. It may be shade variation/ matching, wrong GSM quality, low quality print etc. If an inferior quality of raw material found, fabrics are send for re-processing or resourcing. It causes further day in planned cut date (PCD).

# > Product development and Sampling:-

Product development and sampling stage fall under pre-production processes. Other pre-production processes include sample approvals, finalizing vendors and cost negotiation with raw material suppliers. Most of the times, the manufacturing unit does not consider included development stage schedule under plan. It results no control on pre-production processes. It goes for long and long period. When sample approval gets approved with the details such as, consequentially ordering of trims and fabric get delayed. A complete plan is done when you include sampling plan under your planning schedule. Out of total lead time most part is consumed by pre-production functions. As a result planned cut date (PCD) gets postponed.

Sub Process	Causes of Delays
Cutting Sub Process	<ul> <li>Supplying Fabric when it is unavailable in stock</li> <li>Supplying Accessories when it is unavailable in stock</li> <li>Supplying embroidery parts</li> </ul>
Sewing Sub Process	<ul> <li>Supplying Fabric from the cutting room</li> <li>Supplying Accessories from the cutting room</li> <li>Low production yield in assembly lines</li> <li>High Absenteeism in assembly lines</li> <li>Reparations and rework time</li> </ul>

## > Delay of other styles: -

When a style gets delayed production processes overlapped with other orders those were running on time. At this situation factory faced capacity issue in production and finishing process. Though the factory plans for overtime working to cover backlogs, it is not always possible to finish shipment on time.

#### > Delay from Sub-contracting Jobs:-

For high fashion product, few value added processes such as panel printing, embroidery, bead work or dyeing are needed. For these value added processes factory normally send fabric or half stitch garment to sub-contractors for job-works. Sub-contractors also come with their big commitments on delivery and quality. But when factory receives goods, they their delays, happen had count some more days on this due to the absence of planning.

# > Time and Action (TNA) is not followed on a scheduled period:-

Time and Action (TNA) calendar is one of the most important tools for managing an order to keep up the order on time delivery and to know about the status where the ordered production is checked on daily follow-ups.

In the garment manufacturing section each worker will handle many numbers of customers and each customer will place different numbers of styles for production where its shows they involves a number of tasks of various timelines and utilization of various resources.

Like the number of processes, lots of people are also involved to accomplish an order. Similarly each order is unique in terms of process and time demand. So, a detailed plan with well-defined responsibility is must in order to complete each order to get completed on time. A time and action calendar defines the ideal date/time period within which the major activities of an order should occur against a scheduled delivery window.

# **TNA** in Garment Industry

TNA is the god father for merchant where he/she needs to follow it with each team (fabric, Trims, sampling, production, testing and documents) on day to day activities.

Few examples are as follows:-

- If there fabric is suppose to be in-house on 30<sup>th</sup> Apr, the merchant need to remind the fabric team/ fabric sourcing department, that before 15 days the fabric must be bought in the factory on time, so in this case if the merchant fail to do that reminder the fabric team, it will highlight if any delay in fabric in-house date. Similarly the process is followed in other (trims, productions, documentations etc).
- Setting a line for workers to which the production of the ordered product, so mostly the first day and second day is wasted due to no production, only on the third day the stitching of the ordered product is done. If it is delaying for four to five days it will have delay in production or the scheduled dates given to the buyer which can be an major problem.
- If the machine execution of work is not on smooth flow, the technician must be able to create must make the solutions for the difficulty found in the machine. If not taken action at the stage of production the delay of the future stages can occur.

- If the worker is absent on a particular day or not informed for the leave, then the company has to arrange another worker to do the work such as each stage the machine of production differs so if the person stitches collar the worker who is appointed on that particular day must know to stitch the collar,
- If the wash is not occurred based on the given direction the pieces will be lay back if done for bulk which may cause 5 -6 percent rejections and lead to discount of price which may create a loss to the company. So, in the first stage of washing the few samples are checked with the given procedure or recipe for wash to which is done. Then later the sample or Pre- production sample is send for conformation then, the approval is set by the buyer then the washing stage is done for the bulk production (based on quantity).

So, the Time and Action Calendar (TNA), a popular tool used in manufacturing industry is a technique for tracking and following up of important pre-production processes to ensure timely delivery within stipulated delivery date.

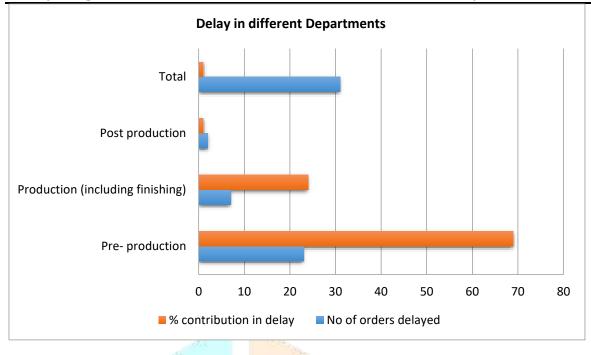
The company takes enormous care during the planning of an order. Every little detail is created into the planning system. Making a time and action calendar is not just entering activity names, but for duration in tabular forms.

It is also about scientifically working-out the activity duration; logically it is determining the preceding and succeeding activities. It consists of the short term and long term plans so carefully laid out.

Delay in different department:-

It was found that out of 35 orders that were delayed, there are 24 orders got delayed primarily in pre-production stage.

Various Departments	No of orders delayed	% contribution in delay
Pre- production	23	69
Production (including	7	24
finishing)		
Post production	2	1
Total	31	100%



## > Effective communication:-

The most effective communication tool is that proves it to be useful to this task. The time frames listed for every action planned (major ones) and the actions need to be earned out on time. The purpose of time and action process, is to cross check at frequent intervals

For example: - Once a week or on daily bases of work, whether the planning is being executed satisfactorily. The more frequent the checks, the easier it is to correct deviations. The time and action calendar is especially useful when a buyer wants to know the status of execution of an order at each stage of production. If the follow ups are not communicated ahead to the buyer the reasons it can cause miss- communication and losses of the production are on waste.

# Sample approval delay affects in shipments for export orders:-

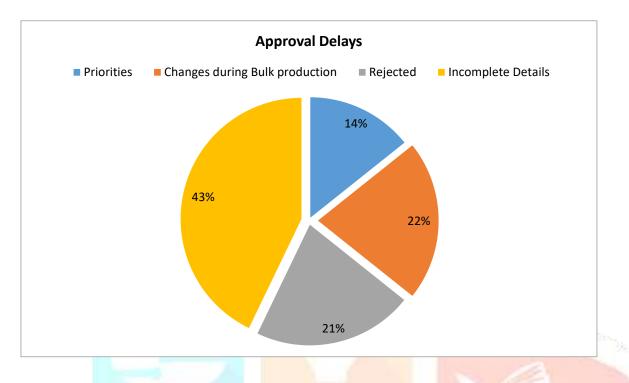
The garment sample approval requirement, delay in approvals, and shipment delays are well known facts in garment export business. The buyers place order with the garment exporters with a mutually agreed lead time that starts with receiving of orders to ends at shipment dispatch. Within the given lead time factory needs to complete pre-production, production, and post-production processes. Sample approval is one such process that falls under pre-production process.

#### Approval delays:-

S.No.	Reason	Cases Recorded	As a percentage of total
1	Priorities	2	20.5

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2	Changes during Bulk	3	27.8
	production		
3	Rejected	3	22.3
4	Incomplete Details	6	41.9



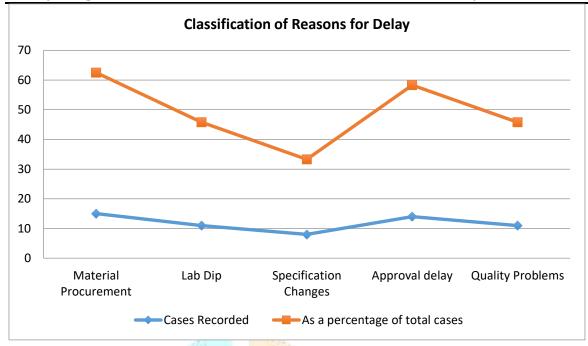
# ➤ Quality issue:-

When a shipment is getting delayed, suppliers try to push every process to complete faster and overlook standard procedures. Not always but most cases factory produces garment with lot of defective pieces. To repair defective pieces and to ready the shipment up to accepted quality level, factory needs to spend more time and money. Quality issues may further extend the delay of the shipment.

# Broad classification of reasons for delay

S.No.	Reason	Cases Recorded	As a percentage of total cases
1	Material Procurement	15	62.5
2	Lab Dip	11	45.8
3	Specification Changes	8	33.3
4	Approval delay	14	58.3
5	Quality Problems	11	45.8

(The reasons for delay are not independent, within one case the reason for delay be multiple. Percentage were calculated= Reason for delay/ Total no. of cases\*100)



# > Production urgency:-

Pressure and urgency increases when manufacturing unit starts production processes (such as cutting, preparatory and sewing), as order has already eaten up bigger part of total time scheduled for the production processes (production to finishing). Not having much time on hand, managers push everything on fast pace. They even push their whole team on quantity production. In this stage they forget to take care of the quality of the product. Once they start ignoring standard procedures they get stuck on stitching quality or related problem rises. Repair and re-inspection become a main process. These process increases production time.

#### Production cost increased:

While shipment is getting delayed due to shorter time span for production and post production processes, factory normally involves extra manpower to meet the lead time. This increases production cost for that specific style.

#### > Goods are stuck in customs.

Getting products cleared by customs before they are loaded on to the ship can also cause delays. Usually, products get stuck in customs due to the following three reasons:

#### a. Incorrect HS code:-

For most products exported, suppliers can get a tax refund of up to 17 percent from the government. The refund is based on the HS code of the products, because of which many suppliers use an incorrect HS code, just to get a higher tax rebate rate.

For example: - If the order placement was of Boys Infant T-shirt collection, and the send description is Girls Infant T-shirt collection .based on this the Buyers purchases (it will take 1-2days or exceed), due to which the bank will set a penalty for the company for payment.

When such misleading classifications are caught by customs, they will detain products until the supplier corrects the HS code and pays the penalty. This procedure, as well as the investigation, could take months, during which time the products are stuck in customs.

#### b. Incomplete or incorrect shipping documents

Shipping documents are prepared by suppliers and sent to shipping agents, who in turn send them to custom house brokers for customs clearance. A mistake on these documents could delay customs clearance and therefore shipping. If there are inaccuracies, the supplier needs to correct and resend the documents.

# > Penalty to be paid for late shipment:-

Some buyers charge penalty fee for shipment delays. Some buyers accept delayed shipment in discount rate. So, shipment delay may cost the factory further due to late penalty charges.

To avoid above consequence due to shipment delay, the factory needs to plan and complete tasks before or on the deadline. The delay in sampling approval is a regular issue; the company needs to plans accordingly and need keep buffer time to cover such uncertain delays.

#### MAJOR DELAYS OCCURRED IN THE CASE STUDY OF THE THREE STYLES

In the styles, as per the styles are of the infant boys collection of the brand Red tag the shipment barriers have occurred at the production process stage. So the major issues occurred due to which the styles occurred are the following process, such as:-

➤ Style nos: - INM-4001:-

The problem caused was:-

Garment Packing Test report approval delays

The major cause in this approval the fabric shrinkage was occur in at the wash of 1-2 times, due to this the sample for the PP sample, the shrinkage variations occurred during the washes. So, the delay was for 6 days, which was mostly the cause formed at the packing test report process.

The solution for the problem:

The finishing and the packing stage, vary from buyers as they have different requirements for GPT. It is done after one wash or after three washes. Generally for Indian domestic suppliers or US buyers, GPT is done after three washes. For European buyers, GPT is done after one wash. So, this delay occurs at the time consumption taken by the washes taken place at each stage, the major solution is to always make sure the sample is done at the time of PP sample as it is to check the time consumption for the production formation to which, the bulk production is not created into a loss.

> Style nos: - INM-4004:-

The problem caused:

• Pre- production or PP sample approval delay:

The sample approval stage the delay for 15 days which, occurred due to the color requirement the stage from the lab dip till the fabrication quality was not based on the buyer needs. Due to this reasons some buyers do not except the product bulk production as the achieved color was not followed as per the percentage changes can causes a little difference into a majority of a change in the sample output.

The solution for the problem:

Make sure the buyer expects the sample which is based on the order specification give at the placement of the approval by the company. If the company makes the requirement exact same color for the sample it must have the chemicals substance percentage at an accurate color and it must not form any difference in the final product. But sometimes it depends based on various buyers, such as some buyers except at the scale of 10:- 5% - 7% acceptance or sometimes the rejection can occur.

> Style nos: - INM-4006:-

The problem caused:

Print Approval Delays:-

The factory was not achieving to make the screen for the print, due to the detailing of the design is very intricate. Mostly the buyer prefers the same design given the style based on the CAD or the sample given by the buyer. Due to this the requirement or the costs of the particular print maybe too expensive that the company is not able to supply to the buyer. So, basically they mostly check at the time of placing the order if they can make the requirement based on the buyers.

The solution for the problem:-

It mostly to check the required supplier to make the screen to which it must be the required type of work is accurately created. But to this the expenses is more as the print intricate is created. So the company must make sure they make a substitute to which must be analyzed to give the finishing exactly the perfect outlook based on the buyers requirement.

So, the purchased fabric was with the printed as sourced to which treatment process was given to which the screen roller print was created to manufacture the print as an all over print design.

From this the study of styles caused by the delay has been achieved. Due to this, it exceeded the delay in the shipment. So, the given solution can make the major standard to achieve the profit to manage the company problem control.



# CHAPTER-9 SUMMARY AND CONCLUSION



#### SUMMARY:-

The project is mostly based on the delay of shipment, to which mainly caused at the time of the order stage till the shipment. Mostly it is not handled with initial stages for the production but it occurs during the approval period of time.

The major standards prescribed is not systematically followed and updated to the buyer, which can cause the major issue at time of shipment,

Try to

An extended lead time is one of the major problems that the apparel sourcing world is facing when exporting readymade apparels from Bangladesh is concerned. Apparel sourcing bodies are one of the major stake holders of the readymade apparel trade and they along with the Bangladesh authorities can endow their investment in improving the factors affecting the lengthened lead time issue. The prevailing factors behind this are mostly related to the efficacy of the supply chain and port facility. The major backlog in the supply chain is the incomplete support of the primary textile industries that is supposed to supply the raw materials to the readymade European Scientific Journal November 2014 edition vol.10, No.33 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 282 apparel industries, especially fabrics. Fabrics import from abroad takes up to 60 days of the lead time which is roughly 45% of the average lead time. Improvement of the backward linkage industry to a standard to be able to support the readymade apparel industries with export quality fabrics is a continuous process and it will take some time. But the development of the production and manufacturing system can be implemented in a short while and it has a proven impact on the lead time. Buyers motive towards their suppliers should be more open oriented and decisions regarding sample approvals should be more efficient. Port facilities are only a question of time; as the export market is expanding, investors will be more attracted to develop the Chittagong port to an international level. Development of Bangladesh as a major readymade apparel exporter, certainly 'the next China', will definitely be fruitful for both the manufacturers and buyers to explore in the global fast fashion industry with confident and

# CHAPTER-10

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