Chapter V

Supply Chain Practices in the Selected Unit

5.1 Objectives & Management – Bhiwani Textile Mills
5.2 Supply Chain Management Practices in BTM
5.3 Supply Chain in Selected Textile Companies
Chapter -V

Supply Chain Practice in the Selected Unit -
Bhiwani Textile Mills (BTM)
(A Unit of Grasim Industries Limited)

Bhiwani Textile Mills, Bhiwani popularly known as BTM was established in 1938 as composite unit in Bhiwani with the name “Punjab Cotton Mills”. In the year 1964 the erstwhile aging, Punjab cotton mill got a new lease of life when it was taken over by the Grasim Group of Industries, a prestigious group headed by Honorable Shri Aditya Vikram Birla. But after the demise of Shri Aditya Vikram Birla Sh. Kumarmangalam Birla now heads it. In 1974 it came under the direct management of the Grasim Group. Bhiwani Textile Mills is a composite mill having spinning, weaving and processing divisions. The spinning division where yarn is spun is having 22300 spindles while licensed capacity is 25,000 spindles. The spinning unit is producing blended yarn of polyester & viscose blends and pure viscose yarn. The raw material as

114
the name suggests is polyester and viscose staple fibre. The weaving unit has 96 looms producing polyester viscose blend suiting & shirting under name “Graviera”. Graviera has good brand name popularity in the market and is focused at middle class segment of the society. Quality is the main focus of this unit. It is not imposed by checks and counter checks, it is a part of total manufacturing system. That is the reason that the Bureau of International Standards has conferred the unit with ISO-9002 certificate in 1994.

Modernization, Technological up gradation and computerization is an ongoing process in BTM. The mill has already installed 66 new Donier looms from Switzerland. An attractive feature of spinning division is Savio Auto Winding machines, one of the most sophisticated in its class. In order to keep pace with changing time and to combat foreign competition, Bhiwani Textile Mills has streamlined its master plan of expansion of its spinning unit. A new unit Elegant Spinning is set up with the capacity of 24000 spindles.
The Research and Development of the mill is famous for introducing new design with classic colours. Some of the latest innovations in textile technology in the advanced nations find a parallel acceptance in the working of Bhiwani Textile Mills, Bhiwani. Realizing the fact that human asset is the most important of all assets, BTM has introduced the concept of "participative management". There are 100 Quality Circles and 20 Shop Floor Councils constantly engaged in improving the work culture of the mill. The philosophy of Birla management center is the guiding spirit to move the group towards more professionalism.

A team of 370 staff members and 1800 co-workers are striving hard to achieve excellence in all sphere of management. From a turnover of Rs. 1.09 crores in the year 1964 has grown to 250 crores for the year 2003-2004. Having already established itself as one of the market leaders in the Indian market, Graviera now exports to major countries of South Asia, Middle East, Latin America, Europe & South Africa. Export turnover of the unit for the year 2003-2004 was about Rs. 35 crores.
5.1 Objectives & Management – Bhiwani Textile Mills

a. Objectives of the Company:

1. Increasing quality product and services
2. Improving work culture among the employees
3. Customers service and customers satisfaction
4. Increasing productivity of workforce
5. To introduce new product and create new market
6. Capitalizing on company strength and use of corporate assets
7. Continuous innovation
8. To provide a growth rate of about 10% per annum
9. To ensure that a large portion of its sale is directed towards the rural sectors and urban sectors
b. Some Management Practices in Bhiwani Textile Mills

World Class Manufacturing (WCM)

As a landmark the switching over to WCM and its successful implementation has paved the path for policies and plans formulation incorporating the concepts of WCM. Its motto is to “BEAT THE BEST”.

In present days one can see a major paradigm shift in world trade, stretching through all corners of the world and is known as globalisation of World Economies through liberalisation.

For achieving excellence in all spheres BTM follows the principles of World Class Manufacturing.

Objectives of WCM

1. Lead in all areas of operation
2. Excel in all areas of operation
3. Zero losses status
4. Acquire best business practices
5. Achieve synergy through team effort
Dimensions of WCM

1. Work Environment (5S)

Five guidelines, which is adopted by BTM

a. SEIRI

It means sorting out unnecessary items

b. SEITION

It means arranging of necessary items

c. SEISO

It means cleaning of workplace

d. SEIKETSU

It means housekeeping to maintain all time

e. SEITSUKE

It means maintaining discipline and training of the workers

2. Just in Time Manufacturing

It means stock reduction and no idle resource in the organisation
3. Waste Elimination

Non-value added activities, which do not contribute to the functional value of the end product (like inspection over production, idle cash etc.)

4. Strategic Quality Management

It means quality should be treated as an important issue requiring almost attention to details.

5. Total Productive Management (TPM)

It means production system effectiveness

6. Information and Cash Flow

- Key problems and opportunities
- Material requirement, planning and simple support system
- Market and competitive information

7. Liaison and Understanding

It means to understand and maintain close relationship.
MANUFACTURING PROCESS

A. Fibre to Yarn

Fibre Dyeing

→

Blow Room

→

Carding

→

Draw Frame

→

Simplex Frame

→

Ring Frame

→

Winding

→

Cheese Winding

→

Two for one (TFO)

→

Packing

Fig. No. 5.1 – Fibre to Yarn Manufacturing Process
Fig. No. 5.2 – Yarn to Fabric Manufacturing Process
5.2 Supply Chain Management Practices in BTM

The analysis of the Questionnaire reveals that "Bhiwani Textile Mills" a unit of Grasim Industries is following a professional approach of Management. The unit also has a Logistics Department, which is looking after the all activities related to Packaging, Warehousing, Distribution and Transportation. General Manager is responsible for all the activities of the Department.

It has been found that each functional area has its own strategy. It is also found that these functional areas are in strategic fit with the organisational objective. Also the operational area has simulation. For an effective supply chain it is advisable that each functional area must have its own strategy and it should have strategic fit with organisational objective.

Some of the products in which BTM is dealing are functional in nature and some of the products are considered as innovative. The supply chain they have selected is dominantly Market Efficient. The products
are not highly customized but products for Ready Made Garment department are customized.

The demand for fabrics as a whole is likely to be certain but the demand for BTMs brand i.e. Graviera Suiting is relatively uncertain. It has been found that there is match between the supply chain strategy and product category.

<table>
<thead>
<tr>
<th>Functional Product</th>
<th>Innovative Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Efficient Supply Chain</td>
<td>Match BTM</td>
</tr>
<tr>
<td>Market Responsive Supply Chain</td>
<td>Mismatch</td>
</tr>
</tbody>
</table>

Fig. No. 5.3 - Fit between Supply Chain of BTM and Product Category

It has been found that the organisation is not using postponement strategy in any terms i.e. in time, place etc. There is very low degree of customization and largely things are produced and stocked. Customization is only for Ready Made Garments (RMG). It has been
also found that the transportation adds considerable value to the product therefore its placement in the market is very important. BTM is a lean organisation and quickly responds to the market movements. It has been found that the decoupling point is near to the plant and away from customers. The organisation is basically operating on push approach. It has been found that the sales force knows well about the supply chain of the company. The sales force has expertise in the following areas:

a. Operating capability
b. Current logistics competencies
c. SCM partners, logistics goals and objectives
d. Supply chain strategic goals and objectives
e. Order cycle lead time
f. Order processing system
g. On time service rates
h. Logistical strategic capabilities and limitations
i. Inventory level
j. EDI capabilities
BTM is practicing outsourcing in a strategic way. They are mainly outsourcing in the following areas:

a. Job Weaving

b. Job processing

c. Fabrics

d. HR services

They are also saving a considerable amount by outsourcing. For each major activity they have very few partners in the supply chain. They do not share reward and losses with the channel partners. The following are some of the practices they adopt with the channel partners:

a. Joint improvement driven by mutual interdependence

b. Exists conflict-resolution mechanism

c. Exists standardization for each functional area

d. Exists standardization for cooperative arrangement

In the unit the performance of the supplier is evaluated. Following are the parameters which are given relative importance:

1. Supplier’s achievement of defect free deliveries

2. The delivery performance of the supplier
3. Pricing against the market

4. Supplier initiative

5. Supplier’s response to problems

6. Supplier’s interest to problems

7. Supplier’s interest in developing relations

8. Ability of suppliers representative

BTM is considering its logistics as a strategic function. The basic mode of transportation is by:

   a. Rail
   b. Road
   c. Ship

They have defined the following for the logistic system:

   a. Performance parameters
   b. Reliability
   c. Storage Environment
   d. Storage
   e. Mode of transportation

BTM is practicing in house logistics system.
Inventory

BTM has adopted a concept, which they call as adequate inventory, and they also practice material requirement planning.

Information Technology (IT)

BTM is taking help of IT into decision-making. They are using internet as a source for communication outside and Intranet for inter organisation communication.

BTM is using SYBASE which activates other softwares like:

a. Office automation system
b. Transaction Processing System
c. MIS
d. DSS

Still in BTM, IT is not fully utilized. It has given them the following benefits:

a. In planning
b. Develop flexibility in operation
c. Accurate Information
d. Enables to take action faster
The whole cycle time of Bhiwani Textile Mills is 85 to 145 days. Fig. No. 5.4 gives the detailed view of total cycle time.

Fig. No. 5.4 – Total Cycle Time
The process time from fibre to fabric takes around 85 days. Fig. No. 5.5 gives a detailed view of the cycle & the time from fibre to fabric.

![Diagram showing the process flow from raw material to finished product with time durations for each step.

Fig. No. 5.5 – Process Time from Fibre to Fabric

130
Fig. No. 5.6 a and 5.6 b shows the supply chain model and supply chain practices in BTM respectively.

The Supply Chain

![Supply Chain Diagram]

Fig. No. 5.6 a - Supply Chain Model of BTM
**Production Planning Control**
- Receiving MMF from MPM cell
- Issuing programme for yarn production
- Ensuring timely availability of fibre
- Issuing programme for fabric production
- Ensuring timely availability of yarn for fabric production
- Coordination and follow up with weaving, mending, processing and folding for scheduled delivery to warehouse
- Informing MPM cell for the availability of the fabric at warehouse for dispatch

**Sourcing of Yarn**
- Getting requirement form PPC
- Identify suppliers
- Negotiating with the supplier for price, delivery & quality
- Ensure timely delivery & payments

**Fabric Purchase**
- As per requirement identify suppliers
- Negotiate for cost, quality & delivery
- Ensure timely delivery & payments

**Logistics**
- Receiving finished fabric from folding department
- Stacking it on the basis of domestic Grasim & Graviera
- Invoicing and excise documentation
- Stocking in godown for dispatch
- Transportation ensuring timely delivery of fabric at buyers location

**Outside Weaving (Logistics)**
- Identification of weavers as per organisational needs
- Getting programme from PPC
- Arranging yarn for weaving
- Follow up for quality & timely delivery
- Ensuring delivery as per the schedule & informing PPC about the delivery

Fig. 5.6 b – Detailed Supply Chain Practices in BTM
Fig. No. 5.7 - Order Cycle Time (No. of Days)

<table>
<thead>
<tr>
<th>Activity</th>
<th>No. of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipt of Design</td>
<td>4</td>
</tr>
<tr>
<td>Development</td>
<td>10</td>
</tr>
<tr>
<td>Customer's Approval</td>
<td>7</td>
</tr>
<tr>
<td>Sort Book Writing</td>
<td>2</td>
</tr>
<tr>
<td>MMF Issue</td>
<td>1</td>
</tr>
<tr>
<td>Production</td>
<td>90</td>
</tr>
<tr>
<td>Transit to Mumbai</td>
<td>7</td>
</tr>
<tr>
<td>Shipment Procedures</td>
<td>7</td>
</tr>
<tr>
<td>Average Sailing Time</td>
<td>15</td>
</tr>
<tr>
<td>Clearance at Destination</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>140</strong></td>
</tr>
</tbody>
</table>

Fig. No. 5.7 shows the order cycle time for exports in BTM. It shows that the total time taken in order cycle is 140 days, which is more than the worldwide practice.
In exports one of the basic problem that BTM is facing is cycle time. From the global market, there is pressure to deliver the goods in a shorter time period, approximately 45 days, which is little difficult task for BTM. The people of BTM are not keeping their eye on their customer's customer, which could give a better insight of what their customer may require. It has been also found that around 3% of goods in exports are returned. One another problem BTM is facing is that it takes a considerable longer time period in getting the samples confirmed. Some time it takes around 30 to 35 days. The other interesting thing, which was found, is that those people who are responsible for marketing are also taking care of the logistics for their concerned area and diverting a part of their main job. Few months back the export consignment was send by truck to Mumbai Port and a staff was placed at that place would take over the other formalities from there and send the consignment by ship. Now they are sending the goods to Delhi and from there all the clearance is taken by an agent who is a third party and the goods are send by train to Mumbai Port. In the mean time a place is booked in the ship, thereby saving around six days.
5.3 Supply Chain in Selected Textile Companies

a. Decision Making System

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Type of Organisation</th>
<th>Decision Making System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Traditional</td>
</tr>
<tr>
<td>1.</td>
<td>Public Limited</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>Private Limited</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>MNC</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>PSU</td>
<td>-</td>
</tr>
</tbody>
</table>

Table No. 5.1 – Categories of Companies

The units whose responses were collected were either Public Limited or Private Limited companies. No response so far has been collected from MNC or PSU. It has been found that all the companies are following professional management approach. Although the personal talk with the executive of the companies reveals that transition from traditional to professional has taken for the few years back. Management of these companies has felt that they have to be professional if they want to compete in the corporate world. It is evident from that many textile units have been closed or at the verge of closure. Many of these units are traditionally managed. The state of professionalism in many of the companies is very low and they still need to increase the intensity of professionalism.
b. Strength of Employees

It has been found that majority of the organisations i.e. 70% are having employees strength more that 750. 30% of the organisations, especially exports units are having employees less than 250.

c. Main Areas of Business

The present study provides picture of the practices of 10 organisations in the management of their supply chain. Out of the 10 organisations 50%
of them are manufacturing garments, 30% of them are fabric manufacturer and 20% are yarn manufacturer. (Fig. No. 5.9)

Fig. No. 5.9 - Main Areas of Business

d. Types of Organisation

The researcher has sent 100 questionnaires out of which only 10 responses were received. 7 from Public Limited and 3 from Private Limited companies (Fig. No. 5.10). So far no responses were received from Multinationals as well State or Cooperative organisations. The researcher has received the responses from well known Public Limited Companies such as Maral Overseas Ltd., Rajasthan Spinning & Weaving
Mills Ltd., Chinar Syntex Ltd., DCM Textiles Ltd., Vardhman Spinning & General Mills Ltd, Bhiwani Textile Mills (Grasim Industries Ltd.), Orient Craft Ltd. The researcher has got responses from Private Ltd. Companies also such as Sonar International, Shahi Exports, Orient Fashions.

![Pie chart showing Private Limited 30% and Public Limited 70%](image)

**Fig. No. 5.10 – Types of Organisations**

e. Departments

From the responses it has been found that none of the companies have specifically Supply Chain Management Department. 3 of the units have Logistics Department. 1 has Distribution. 3 of the units have consolidated to SCM and Logistics Departments and 3 have Logistics and Distribution (Fig. No. 5.11 a). The role of Logistics and Supply
Chain has been realized by the garment manufacturer as these units are mostly export units. Out of the 5-garment manufacturing units 3 have Supply Chain and Logistics Department (Fig. No. 5.11 b). Out of the 3 fabrics manufacturing units 1 has Logistics and 1 Distribution Departments respectively and 1 have Logistics & Distribution (Fig. No. 5.11 c). Out of the 2-yarn manufacturer one has logistics department and the other has logistics & distribution (Fig. No. 5.11 d). This signifies that the concept of SCM is not very clear and SCM has not been so far have received a strategic importance.

Fig. No. 5.11 a –Supply Chain, Logistics & Distribution Departments
Fig. No. 5.11 b – Supply Chain, Logistics and Distribution Departments

Fig. No. 5.11 c – Supply Chain, Logistics and Distribution Departments
f. Strategic fit between Functional Area and Organisational Objective

The responses from the units reveal that in 90% of the organisations each functional area has their own strategy (Fig. No. 5.12 a). In 7 of the units, it has been found that there exists strategic fit among the functional area as well with organisational objective (Fig. No. 5.12 b). 30% of the organisations, which lacks strategic fit, are fabric manufacturing. The comparative complexity in the fabric manufacturing adds upto the non-
strategic fit. Each functional department is concentrating on optimization of their own productivity and lack-integrated approach.

Fig. No. 5.12 a – Organisation’s having Functional Areas with their Own Strategy
Fig. No. 5.12 b – Strategic fit between Functional Area and Organisational Objectives

It has been found that 9 organisations have simulation in the operation area and one organisation lacks simulation. This is a garment-manufacturing unit. (Fig. No. 5.12 c)

Fig. No. 5.12 c - Simulation in Operational Area
g. Product

From the responses it has been found that 50% of the respondents deal in functional products, 30% are dealing in innovative products and 20% deal in both functional and innovative product (Fig. No. 5.13 a). Category wise inspection reveals that 60% garment manufacturers have functional and 40% have innovative products (Fig. No. 5.13 b). 33.33% of fabric manufacturer deal in functional products and 33.33% deals in innovative products and 33.33% deal in functional and innovative both (Fig. No. 5.13 c). 50% yarn manufacturer are in functional products and 50% have innovative and functional both (Fig. No. 5.13 d). The textile industry has less focused on Research & Development. The companies are concentrating on functional products with low margins, with focus on volume with predictable demand. Organisations, which are dealing in innovative products, enjoy high profit margins at a higher risk since the demand for innovative product is highly uncertain. The supply chain for these two products will differ on the basis of relative dominance of the distinction function of the supply chain and their distinct cost.
The functional products have predictable demand, which makes market mediation easy because a nearby perfect match between supply and demand can be achieved. Companies dealing in such products are free to focus almost exclusively on minimizing physical cost. The uncertain demand for innovative product increases the risk of shortage or excess of supplies. High profit margins and the importance of early sales in establishing market share for new products increases the cost of shortage. Short life cycle increases the risk of obsolescence and cost of excess supply. So the market mediation cost predominates the physical cost.

Fig. No. 5.13 a – Organisations dealing in Functional and Innovative Products in the Selected Textile Units
Fig. No. 5.13 b - Relative % of Functional & Innovative Products in Garment Manufacturer

Fig. No. 5.13 c - Relative % of Functional & Innovative Products in Fabric Manufacturing
Fig. No. 5.13 d - Relative % of Functional & innovative Products in Yarn Manufacturing

h. Supply Chain Practice

From the responses of unit it has been found that 80% of the companies have market responsive supply chain and 20% of the companies have market efficient supply chain (Fig. No. 5.14 a). The majority of the units are deploying excess buffer stock with focus on speed, flexibility, quality and respond quickly to the unpredictable demand in order to minimize stock out. Some of the companies attain lowest possible cost, high return, minimum inventory throughout the supply chain by adopting the market efficient supply chain.
Fig. No. 5.14 a - Supply Chain Practices in Selected Units

The type of supply chain selected must match with the product category of the company. Marshal Fisher’s matrix helps in finding out whether there exists a strategic fit among the two.

<table>
<thead>
<tr>
<th></th>
<th>Functional Product</th>
<th>Innovative Product</th>
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</thead>
<tbody>
<tr>
<td>Market Efficient Supply Chain</td>
<td>(1) Match</td>
<td>(1) Match</td>
</tr>
<tr>
<td>Market Responsive Supply Chain</td>
<td>(6) Mismatch</td>
<td>(2) Match</td>
</tr>
</tbody>
</table>

Fig. No. 5.14 b – Fit between Product and Supply Chain

148
From the (Fig. No. 5.14 b) it is evident that majority of the textile companies does not exist a fit between supply chain and the product category i.e. 70%. Only 30% of the respondents have match with product category and supply chain.

i. Postponement

It has been found that all the respondents are manufacturing the products in full at their plant (Fig. No. 5.15). Specifically in textile industry it is quite difficult to postpone the manufacturing. In postponement the firm designs the product and the manufacturing process so that the actual product differentiation can be differed as much as possible down to the pipeline when the actual demand is known. The first part of the supply chain is based on push strategy. The position after the differentiation point is based on pull strategy. The postponement can be achieved by differing time, place or form. Some of the companies in readymade garments like Beneton is practicing postponement strategy. Earlier Beneton could dye the yarn and then get it knitted. The forecasting of colour demand was very high error prone. It was realized that it could reduce the inventory by reversing the
dyeing knitting sequence. Presently Benetton stocks undyed garments, which are dyed after the start of the selling season when more information on customer preference is available.

![Postponement Strategy Chart]

Fig. No. 5.15 – Organisations Practicing Postponement Strategy

j. Customisation of Product

The responses of the units have revealed that 70% of the units are manufacturing customized products. (Fig. No. 5.16 a) 30% have not customized it. The percentage of customized product is high because the entire garment manufacturers who have responded are exporters. 33.33% of the fabric manufacturers are still in non-customized products.
(Fig. No. 5.16 b). 50% of the yarn manufacturers have customized yarn and 50% have standardized yarns (Fig. No. 5.16c). The supply chain approach in the customized will be pull. In case of standardized products it may be a push system depending upon its functionality and innovativeness.

Fig. No. 5.16 a – Organisations Practicing Customisation of Product
Fig. No. 5.16 b – Fabric Manufacturer Practicing Customisation.

Fig. No. 5.16 c – Yarn Manufacturing Practicing Customisation.
k. Product Demand

From the responses of the units it has been found that for 60% of the products in the textile units, the demand is certain. For 40% of the product the demand is uncertain. (Fig. No. 5.17). The demand certainty and uncertainty will effect the preference to be given to various elements of the supply chain. Critical decisions are to be taken about inventory and capacity utilisation for the uncertain demand. The certain demand drags attention decision towards minimization of cost and where to locate the inventory.

![Demand Pattern in Selected Units](image)

Fig. No. 5.17 - Demand Pattern in Selected Units
I. Transportation and Value Addition

The transportation of the goods adds value in 50% of the cases and does not add value in 50% of the cases (Fig. No.5.18). The product which is available at the customer end has relatively more value. For the fabric manufacturer the customers i.e. retailers or distributors pick up the goods from the warehouse or they pay the transportation cost. The same is applicable to the yarn manufacturers. In case of garment manufacturer they have to generally make the product available to the customer at their end.

Fig. No. 5.18 - Transportation and Value Addition
m. Organisation

In the present study 50% respondents said that their organisation is lean. 30% say that their organisation is agile and 20% say that their organisation is slow reactive (Fig. No.5.19 a). The organisations which are lean are generally dealing in high volume and low variety and the demand is relatively predictable. The organisations which are in products with high variety and the demand is less predictable are having agile practice.

Fig. No. 5.19 a – Percentage of Organisations Practicing Leaness Agility and Slow Reactivity
The organisations which are slow reactive they are fatty organisations and are not focusing on the core competencies. It has been also found that there are 20% textile organisations, which react very slowly to market movement (Fig. No.5.19 b).

![Pie chart showing response rates]

**Fig. No. 5.19 b – Organisations Response**

n. Decoupling Point

The decoupling point separates that part of the supply chain geared toward satisfying customer's orders from that part of the supply chain, which is based on planning. From the responses it has been found that in textile units 60% of the organisations have decoupling point near to
the customer end, 40% of the organisations have their decoupling point away the customer end (Fig. No.5.20). In case the decoupling point will be near to the customer end the production planning and strategic inventory will be driven by demand. When the decoupling point is away from the customer end forecasting will drive the production planning and strategic inventory.

Fig. No. 5.20 – Position of Decoupling Point in Textile Units
o. Sales Force and Supply Chain

From the responses of the units it has been found that the sales force of all the units knows about the supply chain. This adds up to the effectiveness of the sales force in negotiating and getting the orders and making reasonable commitment to the customers adding to achievement of higher degree of customer satisfaction.

It has been also found that majority of the sales force knows about the operation capability of the companies, order cycle lead-time (Fig. No. 5.21). It has been also found that sales forces of few companies are aware about supply chain partners, logistic, objectives and EDI capabilities. In textile industry the sales force expertise in the mentioned areas in the Fig. No. 5.21 will help them to maintain good relationship with the customers by delivering superior value to the customer.
Fig. No. 5.21- Sales Force's Supply Chain Expertise

a: Operation Capability
b: Current Logistics Competencies
c: SCM partners logistics goals & objectives
d: SCM strategic goals & objectives
e: Order cycle lead time
f: Order processing system
g: On time service rate
h: Logistical strategic capabilities & limitations
i: Inventory Level
j: EDI capabilities
p. Outsourcing

It has been found that by outsourcing some of the textile organisations are saving 1-2% in terms of the cost. Fig. No. 5.22 shows that 60% of the respondents practice outsourcing. Only 40% of them do not outsource. The outsourcing is done for support work rather than routine producing. In some of the cases the companies has to offer a combination of products but they do not produce it. In order to make a complete set outsourcing may also be undertaken. Those areas, which are not the core areas of the organization, are also outsourced. The organisations have taken outsourcing as a strategic decision. The areas in which these organisations are outsourcing are:

1. Job weaving
2. Job processing
3. Finished goods
4. Spiral Yarn
5. Fabric
6. Garments
7. Maintenance of equipments
8. Accessories
9. Human Resource
10. Dying

![Pie chart showing 60% Outsource and 40% Do not Outsource.]

**Fig. No. 5.22 – Outsourcing Practices by Selected Units**

q. Channel Partners

Channel partners and relationship with them is strategic aspect of the supply chain. It has been found that majority of the companies have many channel partners (Fig. No.5.23 a). The less reliability on one supplier compels them to have too many channel partners. It has been
found that many of the organisations are sharing their loss and profits with their channel partners. This is a forward step towards high degree integrated supply chain management. (Fig. No. 5.23 b) shows that majority of the companies practice joint improvement driven by mutual interdependence. Enhancing cooperative inter firm relationships is essential when the competition is not between companies against companies but between supply chain against supply chain.

![Pie Chart: Channel Partnership in Selected Units]

*Fig. No. 5.23 a - Channel Partnership in Selected Units*
Fig. No. 5.23 b - Approach towards Channel Partners

a: Do not practice joint improvement driven mutual interdependence

b: Conflict resolution mechanism exists

c: Exists standardization for each function

d: Exists standardization for corporative arrangement

r. Suppliers

Suppliers are unavoidable elements of the supply chain. The selection of suppliers and maintaining them is a challenging task. If the suppliers of a business house are excellent the worries of the organisation are reduced to a greater extent. Table No. 5.2 shows those factors which
<table>
<thead>
<tr>
<th>Factors/ Rank</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Supplier Interest in developing relations</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>27 6th</td>
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<td>b. The delivery Performance of Supplier</td>
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<td>1</td>
<td>6</td>
<td>18</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>51 3rd</td>
</tr>
<tr>
<td>c. Suppliers Initiative</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>28 5th</td>
</tr>
<tr>
<td>d. Pricing against market</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>66 1st</td>
</tr>
<tr>
<td>e. Suppliers achievement of defect free deliveries</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>56 2nd</td>
</tr>
<tr>
<td>f. Suppliers response to problems</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>33 4th</td>
</tr>
<tr>
<td>g. Ability of Suppliers</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19 7th</td>
</tr>
</tbody>
</table>

Table No. 5.2 – Factors and Relative Preferences while Selecting Channel Partners

Companies consider while selecting a supplier. It has been found that in Indian Textile Industry the companies are giving preference to pricing.

The second preference area is supplier's achievement of defect free
deliveries. Least preference is given to the activity of supplier representative, the supplier's initiative towards the developing relations and supplier's initiative. The competitive advantage from the supply chain depends upon the extent of collaboration at all levels, between suppliers and customers. To achieve it organisations need to look for vendor who are able to accept the concept of co-makership. This approach is missing in Indian Textile Industry. In order to improve the feedback must be presented to both the parties. It has been found that all the companies are evaluating the performance of the supplier.

s. Logistics

In logistics we coordinate all those activities necessary to achieve desired service and quality at lowest possible cost. To achieve this a quite different orientation is required in strategic perspective. We have found that majority of the textile organisations are considering it as a strategic issue. An insight to the logistics environment revels that company's emphasis on the performance parameter of the logistic system but lesser emphasis is on the system reliability, storage and storage environment and mode of transportation. (Fig. No.5.24 a). Majority of the
organisations have their in house logistics systems. Very few of them are hiring the services of third party logistics. The role of fourth party logistics is negligible (Fig. No.5.24 b). Majority of organisations are using a combination of Road, Rail and Ship. Very few organisations prefer airways.

Fig. No. 5.24 a – Logistic Strategic Perspective in Selected Units

a: Performance parameter
b: Strong environment
c: Reliability
d: Transportation handling equipment
e: Storage
f: Mode of transportation
Fig. No. 5.24 b – Logistic Systems in Selected Units

t. Inventory Practice

Inventory management practice is an important issue in the supply chain. The level of inventory, the organisation manages has impact on the cost of manufacturing and customer service. It has been found that majority of organisations have a practice of adequate inventory. Very few are keeping very high inventory to enjoy the low price benefit of raw material. The infrastructure restricts to practice zero inventory and vendor managed inventory. Fig. No 5.25 a shows the level of inventory in the selected units.
Fig. No. 5.25 a – Level of Inventory in Selected Units

u. Materials Requirement Planning

It has been found that only 20% of the units adopt materials requirement planning (Fig. No. 5.25 b)

Fig. No. 5.25 b - Material Requirement Planning in Selected Units
v. Performance Measurement of the Supply Chain

It has been found that 80% of the organisations are measuring the performance of the supply chain.

Fig. No. 5.26 - Performance Measurement of Supply Chain
w. Role of IT in Decision Making

From the responses it has been found that 90% of the respondents consider IT to support their decision-making.

![Pie chart showing 90% Yes, 10% No]

**Fig. No. 5.27 - Use IT to Support Decision Making**

The IT support leverages by synchronizing the activities along the supply chain and reduces cost and increases accuracy in the decision-making. IT can be used in the following areas in the textile industry:

- Synchronizing the operation
- Outsourcing
- Operating globally
- Cutting down transaction cost
- Postponing part of the process to customer vicinity
• Practicing the collaboration
• Information sharing
• Tracing the movement of goods
• Estimating the stock in warehouses
• Control over ageing of the produces etc.

IT Support

The responses of the respondent’s reveals that majority of the companies who use IT as a support system have Internet connectivity, Intranet systems. Very few are using ERP and none has focused on EDI.

Fig. No. 5.28 - IT Support Systems in Use
Quality of Information

The response from the respondents reveals that for 80% of the companies the information is accessible in time. In 60% of the cases people get accurate information, in 40% of the cases the information is of right kind.

![Bar chart showing percentages of accuracy, timely availability, and right kind of information](image)

**Fig. No. 5.29 – Quality of Information**

Effect of IT

The responses of all those companies who are using IT as a tool, reveals that there has been improvement in the performance.
The pace by which you get information has reduced the chance of being ineffective in attempts.

x. Integration in Supply Chain and Value

The value of a product is viewed from two different angles, first the use value and secondly the exchange value. Use value of a product is the material support. When a product is exchanged with money, the use value is transformed into exchange value. Therefore, the product price becomes its exchange value. In order to provide high use value to the customers, organisations need to consider the following factors associated with the product:
• Usefulness
• Durability
• Reliability
• Services
• Quality
• Timely availability

The customer will be paying in terms of price, time and energy. The difference of the two will be the total customer delivered value on which organisations need to focus. The integration in the supply chain will enhance the use value as well may reduce the customer cost and thereby increase the customer delivered value. Supply chain integration can increase the use value of the product. The utility of the product depends upon the features of the product, which in turn depends upon the information inflow. Therefore the quality of the information is a major matter of concern for the corporate. Highly the customer and will be integrated high will be the quality of information and hence can increase
the value of the product. It has been found that integration creates the feeling of responsibility among the entities in the supply chain. Thereby, each and every entity starts thinking in terms of delivering increased value to the customer. When the system is integrated, there is no scope of working as isolated entities. Integration entails global optimization through immediate feasibility of effects of local planning decision throughout the supply chain. The delivery performance improvement occurs through better-coordinated approach towards customer demand facilitating improved assortment of merchandise at store level. Integrated supply chain ensures faster inventory turnover, reduction in distribution and lead-time. The physical network translates into better order commitment. Forecast accuracy improves through joint planning with customer and faster propagation of planning decision across the supply chain in an integrated environment. Decreasing the supply chain cost by integration reduces the customer cost. Also reduces the physical cost and time cost of the customer, thereby increasing the value.
Supply Chain and Change in Textile Industry

For the last few years textile industry has undergone through various changes. The following are the factors which has impact on the industry:

- Opening of global quota free market
- Global pressure to reduce cycle time
- Variety of goods required
- Quality consciousness
- Coming up of logistical companies
- New and better information system
- New and effective software packages

Because of the effect of the above factors, the textile industry has gone changes through its supply chain systems. It has been seen that organisations are now using the services of third party logistic instead earlier they were having their own fleet or people to take care of all logistical formalities. Organisations are now becoming lean and focusing on their core competencies. These have given arise in the outsourcing. They have reduced inventory levels. There has been reduction in cycle time, more customer orientation, and integrated approach.