

Operational and Supply Chain Management

POOJA BALAN MORE

Student, Dept. of B.Sc. I.T, Model College, Dombivli, Mumbai, Maharashtra, India

Abstract---The study involves overall study of supply chain management in industry and the overall purpose and objective of it. The purpose of this paper is to define how supply chain and logistics activities are essential in an industry along with balancing of finance and providing best output to organization. The purpose of this paper is to define how supply chain and logistics activities are essential in an industry along with balancing of finance, marketing and various strategies implement at organizational level to provide best output performance.

There area unit several things involves in provide chain management as management of flow of products and services, involving movement, storage of raw materials. It may be aforementioned because it is network of suppliers , makers, assembly of products, distribution and provision facilities that performs perform of acquisition of materials , transformation of materials into intermediate and end merchandise and distribution of materials to customers. provide chain involves dependent steps to accomplish sure goals for examples accomplishing client necessities.

producing aggressiveness is decided by the productivity (value per unit of input) with that the producing sector uses its human, capital and resources.

Keywords -Planning and Scheduling,JIT, Kaizen,Inventory Management, FIFO LIFO

1.INTRODUCTION

Manufacturing fight is decided by the productivity (value per unit of input) with that the manufacturing sector uses its human, capital and resources.Competitiveness of producing are often measured at different levels . producing fight of an area is dependent on varied factors and sub-factors as well as regulatory structure, business setting, technology sophistication & skills of the manpower. Producing sector is that the backbone of Indian economy that has the potential of creating several job opportunities and serving to in status reduction among the country.

1.1 OVERVIEW Of OPERATIONS And SUPPLY CHAIN MANAGEMENT

Let’s look at an example of plastic bucket manufacturing factory, where raw materials is plastics granules. The supplier sends plastics granules to factory. Upon receiving the order , unit start production. Granules are melted under high temperature and put in modules and the cool down. The finish product is bucket ,these buckets are then sealed and the packet and store in warehouse or Distribution center (DC). If the supply

across a large area , a Regional Distribution Center (RDC) is also setup for reaching out to nearby retailers. The buckets are distributed via logistics and transport companies to the retailer or to local shops from the warehouse customers then buy this product from local stores.

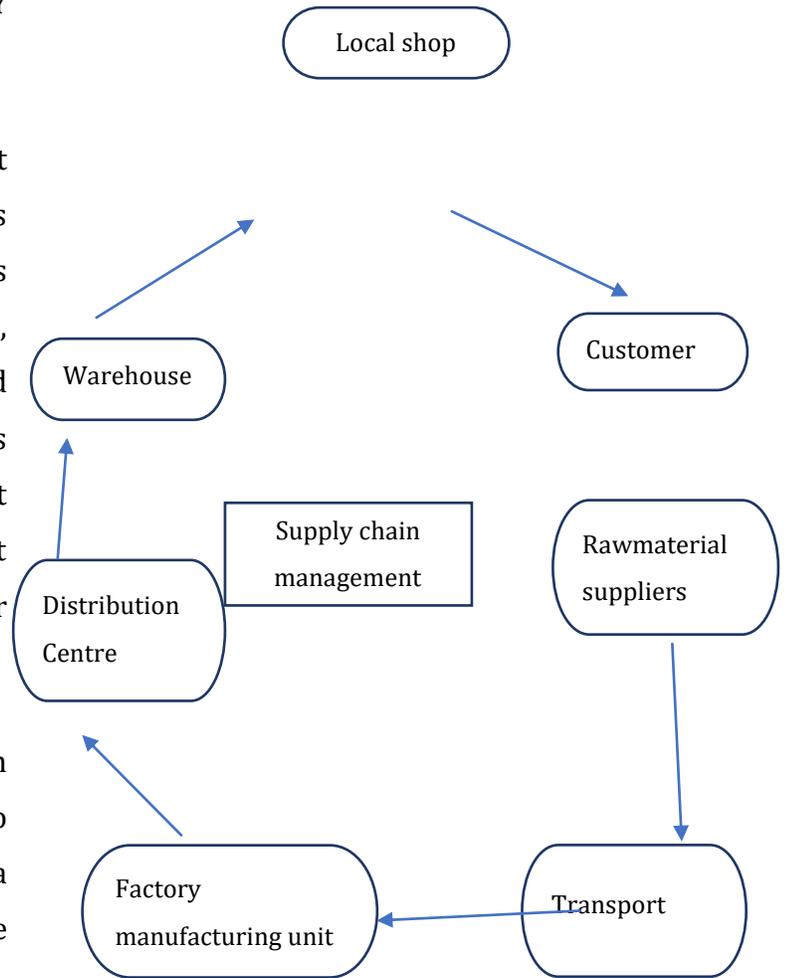


Fig 1: overview of supply chain management

1.2 PLANNING

Planning is also called MP (master planning) is process of establishing in the main training in scope of project. The project is performed and procedure task and role and the responsibilities, time and cost estimate sales and operational planning (SOP), manufacturing Resources planning (MRP) material requirement planning. MRP is defined as method for effective planning of all resources of Manufacturing company.

1.3 Scheduling

Scheduling is an important tool for manufacturing and engineering, that can have a major impact on Productivity of a process.

In manufacturing, the process of scheduling is to minimize the production time and cost by telling a production facility when to make with which staff and on which equipment.

denial of service (DDoS) attack.

1.3 FIFO

FIFO "First-In, First-Out" it means that the goods first added to inventory are assumed to be first goods removed from inventory for sale. Oldest stock is issued first. This method is helpful for items subjected to deterioration and obsolescence. Item valued at purchase price. In most business, the most flow of materials follow FIFO, which makes this logical choice. If cost are increasing, the item sold are less expensive, so cost of goods sold decreases reports more profits. This in turn results in large amount of income taxes in the near team. These are usually fewer inventory layers to track in FIFO system, since the oldest layers are continuously setup. This reduce records.

1.3.1 LIFO

The LIFO "Last-In, First-Out" it means that goods last added to inventory are assumed to be first goods removed from inventory for sale. Latest Stock is issued first. Useful when in powder form stored in heaps powder from top of the heap is used first. Even a reconditioned item is used before. Cost available and issues are valued at the latest cost available. There are few business where the oldest items are kept in-stock while newest items are sold first. If cost are increasing, the expensive so cost of goods sold increases. This in turn results in small amount of income taxes in the near team. There usually more inventory layers to track in a LIFO system, since the oldest layers can potentially remain in the system for years. This increases record keeping.

1.4 INVENTORY MANAGEMENT

Why is inventory management in business important? Inventory management can make or break a business. Inventory is often the largest item in the current assets category on balance sheet. Issues with inventory can contribute to business losses, even failure. Proper management of supply chain, on the other hand can allow a business to thrive. Good inventory management strikes a balance between the amount of inventory

coming in and going out. It controls the timing and costs of non-capitalized assets and stock items, allowing business to optimal profitability.

1.4.1 GOALS OF INVENTORY MANAGEMENT

- Maximize customer service.
- Maximize inventory investment
- Customer service takes absolute precedence.

1.5 KAIZEN

Kaizen could be a Japanese term which means “change for the better” or “continuous improvement.” it's a Japanese business philosophy concerning the processes that unendingly improve operations and involve all workers. Kaizen sees improvement in productivity as a gradual and organized method.

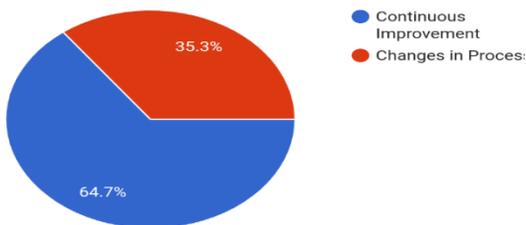


Fig 2 percentage of people familiar with Kaizen

2. JIT

JIT may be a thought supported the very fact that the activity mustn't occur unless there's want for it. In short, the just-in-time inventory system is all concerning having “the right material, at right time, at right place and within the right quantity” while not the security web of inventory implications of that area unit board of implementation.

2.1 PERQUISITES OF JIT

- Buyer-sellers partnership.
- Online communication and data sharing.
- Commitment zero defects from each aspect

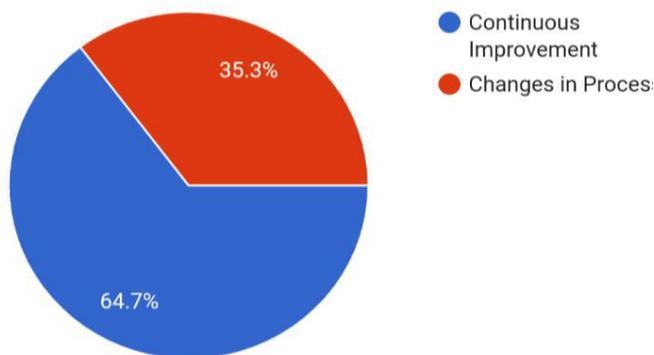
2.2 ADVANTAGES OF JIT

- Lower stock holding means that a discount in space for storing, saving rent and insurance price.
- As stock is just obtained once it's required, less capital is affianced available.
- There is a smaller amount likelihood of stock perishing, becoming obsolete or out of date.

- Avoids the build-ups of unsold finished product which will occur with sharp changes in demands.
- Less time is pay on checking and transforming the merchandise of others because the stress is on obtaining the work 1st time.

3.WHATIS LEAN MANUFACTURING?

Lean technique are systematic identification elimination of waste.Waste is anything that does not add value from the customer point of viewStorage, inspection, delay, waiting in queues, and defective products do not add



value and are 100% waste.

Fig 3 percentage of people familiar with Kaizen

➤ The Lean operations in services are

- The JIT techniques used in manufacturing are used in services
- Suppliers
- Layout
- Inventory
- Scheduling

3.1 OHNO’SSEVEN WASTE

- Queues
- Transportation
- Inventory
- Motion
- Overprocessing
- Defective merchandise

3.2 ELIMINATIONOF WASTE 5’s

- Other resources like energy, water, and air are usually wasted
- Efficient, property production minimizes inputs, reduces waste
- Traditional “housekeeping” has been enlarged to the 5s

4.3 The 5's

- Sort/segregate – once unsure, throw it out
- Simplify/straighten – ways analysis tools
- Shine/sweep – clean daily
- Standardize – take away variations from processes
- Sustain/self-discipline – review work and acknowledge progress

4.CONCULSION

The purpose of the research topic was to understand each and every aspect of supply chain management and why it is important to run a industry. From this study we understood the different dimensions of SCM like inventory management. After reviewing the papers pertaining to SCM and Operations Management.I was able to map the Operations and Supply Chain Management as a concept. I was able to identify the most important dimensions of SCM.I was able to identify a thin line that separates various technologies such as Fifo,Lifo,Kaizen,Lean Management,Jit.

After reviewing many books and appears on these topic.I was able to delineate Operations and Supply Chain Management from other related areas.

During the passage of time, various theories of SCM have grown widely and accepted in the industry.

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