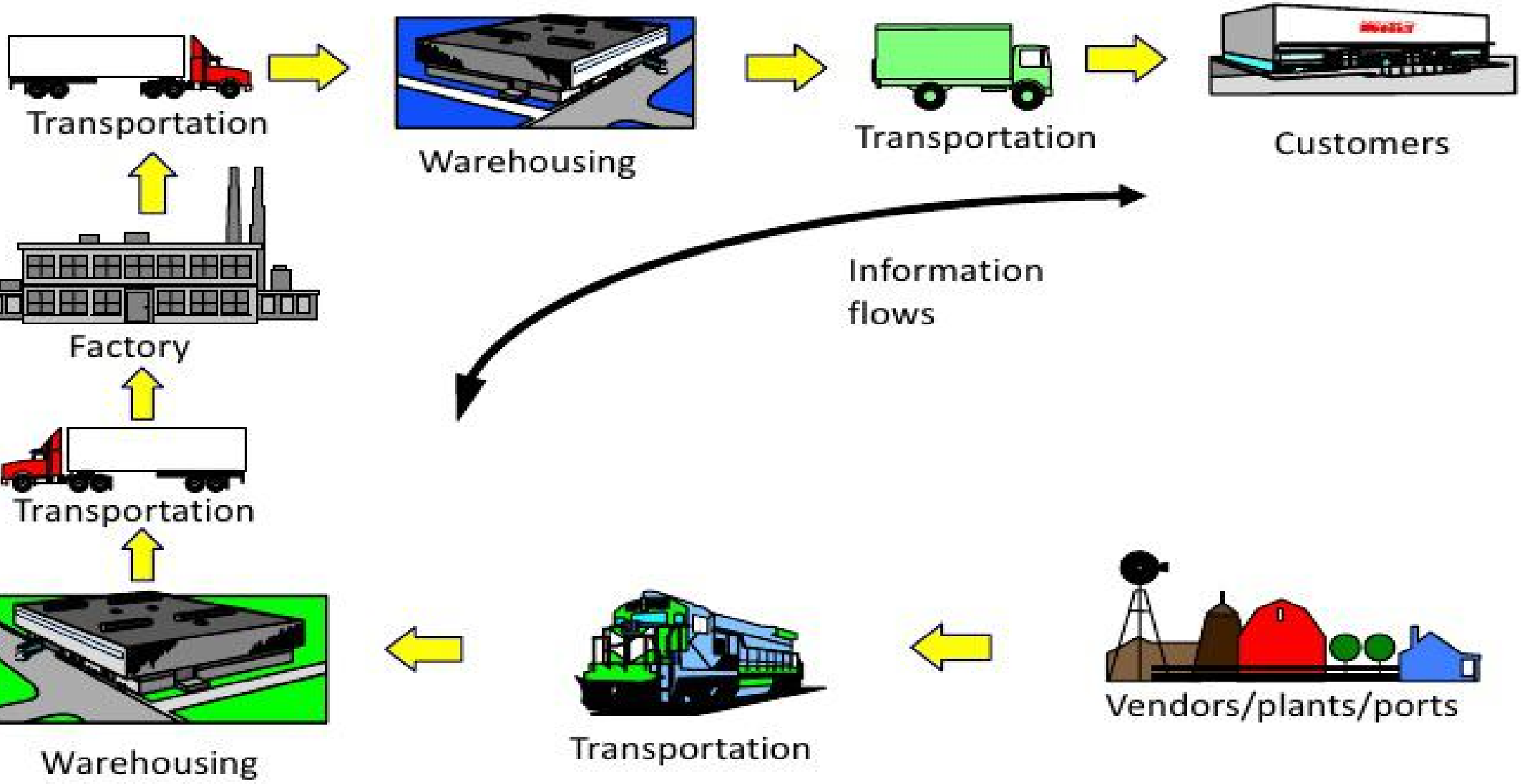
SUPPLY CHAIN MANAGEMENT & LOGISTICS

Supply Chain for an Individual Firm

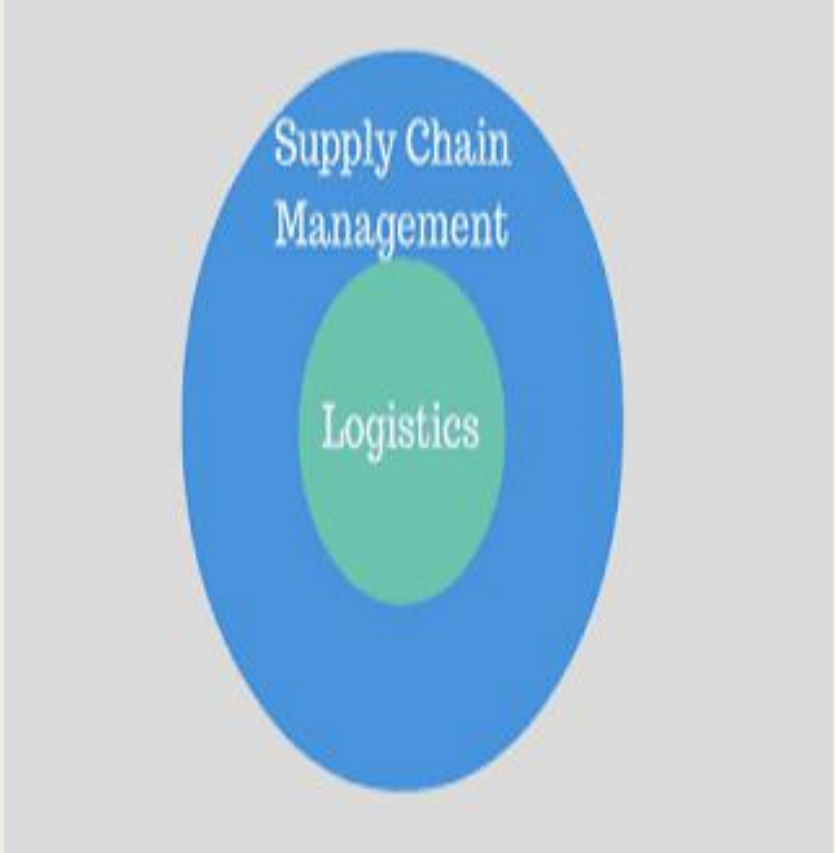


Market Logistics

- **Physical Distribution starts from the factory.**
- Managers chooses a set of (a) **Warehouses** (stocking points); and (b) **transportation carriers** that will **deliver the goods** to final destination in the **desired time** and at the **lowest total cost**.
- Physical Distribution has now expanded into a broader concept of Supply Chain Management (SCM).
- SCM starts from:
  - **strategically procuring the right inputs** (raw materials and capital equipments);
  - **converting them efficiently into finished products**; and
  - **dispatching them to the final destination**.

What is Logistics and Supply Chain Management?

- "Logistics typically refers to activities that occur within the boundaries of a single organization and Supply Chain refers to networks of companies that work together and coordinate their actions to deliver a product to market. Also, traditional logistics focuses its attention on activities such as procurement, distribution, maintenance, and inventory management. Supply Chain Management (SCM) acknowledges all of traditional logistics and also includes activities such as marketing, new product development, finance, and customer service" - Michael Hugos



Logistics Defined

Logistics is the process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from the point of origin to point of consumption for the purpose of conforming to customer requirements.

Council of Logistics Management

Supply Chain Management Defined

SCM is the integration of all activities associated with the flow and transformation of goods from raw materials through to end user, as well as information flows, through improved supply chain relationships, to achieve a sustainable competitive advantage.

Handfield and Nichols

The Logistics/Supply Chain Mission

Getting the *right goods* or *services* to the *right place*, at the *right time*, and in the *desired condition* at the lowest cost and highest return on investment.

Market Logistics Objectives

Situations where logistics planning may go wrong:

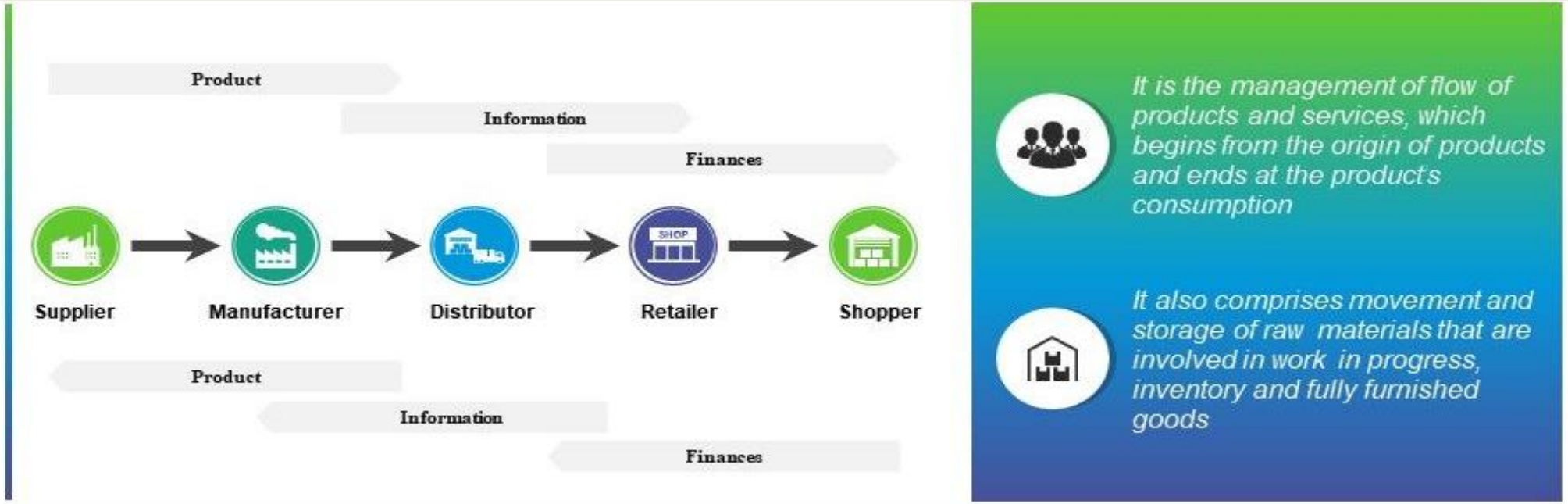
- The **Traffic/ Logistics manager** favours rail shipment over air shipment because of the less rail cost. However, because the rail transport are slower, it ties up working capital longer, delay customer payment, and might cause customers to buy from competitors who offer faster service.
- The **Shipping department** uses cheap containers to minimize shipping costs. Cheaper containers lead to a higher rate of damaged goods.
- The **Inventory manager** favours low inventory. This increases the possibility of '**stockouts**', back orders, huge paperwork etc.

Major objectives for any company logistics planning:

- **On-time delivery**
- **Effectively meet emergency needs**
- **Careful handling of merchandise**
- **Willingness to take back defective goods and resupply them quickly.**

What is Supply Chain Management ?

- Supply chain management is the management of the flow of goods and services and includes all processes that transform raw materials into final products.
- By managing the supply chain, companies are able to cut excess costs and deliver products to the consumer faster. This is done by keeping tighter control of internal inventories, internal production, distribution, sales, and the inventories of company vendors.



SCOPE OF LOGISTICS

- The important of a logistics systems lies in the fact that it leads to ultimate consummation of the sales contract. The buyer is not interested in the promises of the seller that he can supply goods at competitive price but that he actually does so. Delivery according to the contract is essential to fulfilling the commercial and legal requirements. In the event of failure to comply with the stipulated supply of period, the seller may not only get his sale amount back, but may also be legally penalized, if the sales contract so specifies. There is no doubt that better delivery schedule is a good promotional strategy when buyers are reluctant to invest in warehousing and keeping higher level of inventories. Similarly, better and/or timely delivery helps in getting repeat orders through creation of goodwill for the supplier.

SCOPE OF LOGISTICS

- Thus, as effective logistics system contributes immensely to the achievements of the business and marketing objectives of a firm. It creates time and place utilities in the products and thereby helps in maximizing the value satisfaction to consumers. By ensuring quick deliveries in minimum time and cost, it relieves the customers of 5 holding excess inventories. It also brings down the cost of carrying inventory, material handling, transportation and other related activities of distribution. In nutshell, an efficient system of physical distribution/logistics has a great potential for improving customer service and reducing costs.

Logistics has gained importance due to the following trends

- Raise in transportation cost.
- Production efficiency is reaching a peak
- Fundamental change in inventory philosophy
- Product line proliferated
- Computer technology
- Increased use of computers
- Reduction in economic regulation
- Growing power of retailers
- Globalization

ACTIVITIES OF LOGISTICS

- Network Design
- Order Processing
- Procurement
- Material Handling
- Inventory Management
- Packaging and Labeling
- Warehousing
- Transportation

Network Design:

- Network design is one of the prime responsibilities of logistics management. This network is required to determine the number and location of manufacturing plants, warehouses, material handling equipment’s etc. on which logistical efficiency depends.

Order Processing

- Customer's orders are very important in logistic management. Order processing includes activities for receiving, handling, filling, recording of orders. Herein, management has to ensure that order processing is accurate, reliable and fast.
- Further management has to minimize the time between receipt of orders and date of dispatch of the consignment to ensure speedy processing of the order. Delays in execution of orders can become serious grounds for customer dissatisfaction; which must be avoided at all costs.

Procurement:

- It is related to obtaining materials from outside suppliers. It includes supply sourcing, negotiation, order placement, inbound transportation, receiving and inspection, storage and handling etc. Its main objective is to support manufacturing, by providing timely supplies of qualitative materials, at the lowest possible cost.

Material Handling

- It involves the activities of handling raw-materials, parts, semi-finished and finished goods into and out of plant, warehouses and transportation terminals. Management has to ensure that the raw-materials, parts, semi-finished and finished goods are handled properly to minimize losses due to breakage, spoilage etc. Further, the management has to minimize the handling costs and the time involved in material handling.
- **Material handling systems, in logistics management are divided into three categories:**
- 1. Mechanized systems
- 2. Semi-automated systems
- 3. Automated systems

Inventory Management:

The basic objective of inventory management is to minimize the amount of working capital blocked in inventories; and at the same time to provide a continuous flow of materials to match production requirements; and to provide timely supplies of goods to meet customers' demands.

Management has to maintain inventories of:

1. Raw-materials and parts
2. Semi-finished goods
3. Finished goods

Management has to balance the benefits of holding inventories against costs associated with holding inventories like – storage space costs, insurance costs, risk of damage and spoilage in keeping stocks etc.

Packaging and Labeling:

- Packaging and labeling are an important aspect of logistics management. Packaging implies enclosing or encasing a product into suitable packets or containers, for easy and convenient handling of the product by both, the seller and specially the buyer.
- Packaging facilities the sale of a product. It acts as a silent salesman. For example, a fancy and decorative packaging of sweets, biscuits etc. on the eve of Diwali, makes for a good sale of such items.
- Labeling means putting identification marks on the package of the product. A label provides information about – date of packing and expiry, weight or size of product, ingredients used in the manufacture of the product, instructions for sale handling of the product, price payable by the buyer etc.
- Labeling is a strong sales promotion tool. The consumer who is persuaded to read the label may, in fact, try to buy the product; even though he/she had no such premeditation (advance idea).

Warehousing:

- Storage or warehousing is that logistical activity which creates time utility by storing goods from the time of production till the time these are needed by ultimate consumers.
- **Here, the management has to decide about:**
- 1. The number and type of warehouses needed and
- 2. The location of warehouses.
- The above two decisions depend on the desired level of customer service and the distance between the supply source and final destination i.e. markets.

Transportation:

- Transportation is that logistical activity which creates place utility.
- **Transportation is needed for:**
- 1. Movement of raw-materials from suppliers to the manufacturing unit.
- 2. Movement of work-in-progress within the plant.
- 3. Movement of finished goods from plant to the final consumers.
- **Major transportation systems include:**
- 1. Railways 2. Roadways 3. Airways 4. Waterways 5. Pipelines.
- **The choice of a particular mode of transportation is dependent on a balancing of following considerations:**
- 1. Speed of transportation system
- 2. Cost involved in transportation
- 3. Safety in transportation
- 4. Reliability of transportation time schedules
- 5. Number of locations served etc.

BUSINESS VIEW OF SUPPLY CHAIN MANAGEMENT

- Supply chain is a system of organizations, people, activities, inform ation and resources involved in moving product or service from supplier to customer. Supply chain activities involve the transformation of natural rsources, raw materials and components into a finished product that is delivered to the end customer.

- Supply chain encompasses the planning and management of all activities involved in sourcing and procurement, conversion and all logistics management of all activities involved in sourcing and procurement, conversion and all logistics management activities.

- Importantly, it also includes coordination and collaboraton with channel partners,which can be suppliers, intermediaries, third party service providers and customers.

NEED FOR SUPPLY CHAIN MANAGEMENT

- Corporations have turned increasingly to global sources for their supplies. This globalization of supply management has forced companies to look for more effective ways to coordinate the flow of materials into and out of the company.

- Companies and distribution channels compete more today on the basis of time and quality. Having a defect-free product to the customer faster and more reliably than the competition is no longer seen as competitive advantage but simply a requirement to be in the market. Customers demand products consistently delivered faster, exactly on time, and with no damage.

INTEGRATED SUPPLY CHAIN MODEL BASICS

- Integrated supply chain is a process wherein every phase from procurement of raw materials to production, quality control to packaging, distribution or supply to eventual delivery is streamlined and inseparable. It is a holistic collective of the various processes, which may be under complete control of one company or multiple partners will come together to have collective control over the integrated process. Integrated supply chain or supply chain integration has several advantages which is why most companies have switched to integrated supply chain management.
- Supply chain management (SCM) is a coordinated system of managing the transportation and logistics activities in a manufacturing, wholesale or retail business. The primary purpose of SCM is to optimize efficiency in supply chain distribution activities. With an integrated supply chain model, all chain members collaborate with the end goal of delivering the best value to consumers.

- **Advantages of Integrated SCM**
- **CONTROLLED COSTS**
- **QUALITY CONTROL**

- **Disadvantages of Integrated SCM**
- **EXCESSIVE REGULATION**
- **NEEDLESS COMPLICATIONS**


Customer Relationship Management
Customer Service Management
Supplier Relationship Management
Demand Management
Order Fulfilment
Manufacturing Flow Management
Product Development and Commercialization
Returns Management

PROCESS OF INTEGRATED SUPPLY CHAIN MANAGEMENT

- Customer Relationship Management: It plans, controls and assesses customer interaction and data, during the lifecycle, with the aim of building strong relations.

- **Supplier Relationship Management**: It guides in developing and maintaining a good relationship with the suppliers. At the time of selecting suppliers, priority is given to suppliers capability regarding quality, reliability, innovation, services and cost reductions.

- **Customer Service Management**: It assists in administering product and service contracts.

- **Manufacturing Flow Management:** It covers activities associated with the movement of products inside and outside the factories, to have flexibility in the manufacturing process.

- **Demand Management:** A comprehensive structure is provided to best understand the customer's needs.

- **Order Fulfilment:** It encompasses all the activities which identify customer needs, frames the logistics network and fulfils orders.

- **Product Development and Commercialization**: A framework is provided for developing and introducing products into the market.

- **Returns Management**: It is concerned with functions associated with returns, reverse logistics etc. It is an indispensable part of the SCM process and is required in both the upstream and downstream movement of goods for the best possible use of organizations resources.

Supply Chain Management is an improvement over the traditional logistics management which helps in the timely delivery of the products to customers. It also plays a crucial role in increasing business profits, by reducing the overall cost, which improves its competitiveness also.

DEMAND MANAGEMENT

- Demand-chain management (DCM) is the management of relationships between suppliers and customers to deliver the best value to the customer at the least cost to the demand chain as a whole.
- The function of recognizing all demands for goods and services to support the market place. Proper demand management facilitates the planning and use of resources for profitable business results.
- Demand management is a process within an organisation which enables that organisation to tailor its capacity to meet variations in demand or to manage the level of demand using marketing or supply chain management strategies.

IMPORTANCE OF DEMAND FORECASTING IN SUPPLY CHAIN

- Demand Forecasting defined as the process by which the historical sales data are used to make an estimate of the expected forecast of customer demand. Demand Forecasting gives an estimate of the goods and services that customers will purchase in the foreseeable future. Here are some major advantages of demand forecasting in supply chain management:

- **Increased customer satisfaction:**

The only way to keep your customers satisfied is by providing them with the product at the right time. Therefore, demand forecasting will help predict product demand so that enough product is available to fulfill customer orders within a short period of time.

- **Reducing inventory stock-outs:**

  It is vital for organizations to understand the importance of demand forecasting, even if they are working in a JIT System or with long lead time suppliers. When buying products from long lead time suppliers, all you have to do is to send a demand forecast so that suppliers can arrange raw materials in anticipation of actual customer orders.

- **Lowering the safety stock requirement**

  With an effective demand forecasting process, there will be a direct impact on the planning of inventory levels:

1. Development for new product launches
2. Preparation for promotional activity
3. Forecasting for seasonal variations in demand

   A company using forecasting to plan any of the above scenarios doesn't need to carry high safety stocks to manage those events.

- **Preparing the budget:**

Demand forecasting plays a major role in making budget by estimating costs and expected revenues. Therefore, demand forecasting enables organizations to prepare their budget which leads to better planning of product costs.

- **Expanding organizations:**

Demand forecasting helps to take the decision about the expansion of a business. It depends on the expected demand; if the demand for goods is higher, then the organization may plan to expand further. Then again, if the demand for products is expected to drop, the organization may cut down the investment in the business.

METHODS OF DEMAND FORECASTING

1] Survey of Buyer's Choice

- When the demand needs to be forecasted in the short run, say a year, then the most feasible method is to ask the customers directly that what are they intending to buy in the forthcoming time period. Thus, under this method, potential customers are directly interviewed. This survey can be done in any of the following ways:
- **Complete Enumeration Method:** Under this method, nearly all the potential buyers are asked about their future purchase plans.
- **Sample Survey Method**: Under this method, a sample of potential buyers are chosen and only those chosen are interviewed.
- **End-use Method**: It is especially used for forecasting the demand of the inputs. Under this method, the final users i.e. the consuming industries and other sectors are identified.

2] Collective Opinion Method

- Under this method, the salesperson of a firm predicts the estimated future sales in their region. The individual estimates are aggregated to calculate the total estimated future sales. These estimates are reviewed in the light of factors like future changes in the selling price, product designs, changes in competition, advertisement campaigns, the purchasing power of the consumers, employment opportunities, population, etc.

- The principle underlying this method is that as the salesmen are closest to the consumers they are more likely to understand the changes in their needs and demands. They can also easily find out the reasons behind the change in their tastes.

- Therefore, a firm having good sales personnel can utilize their experience to predict the demands. Hence, this method is also known as Salesforce opinion or Grassroots approach method. However, this method depends on the personal opinions of the sales personnel and is not purely scientific.

3] Barometric Method

- This method is based on the past demands of the product and tries to project the past into the future. The economic indicators are used to predict the future trends of the business. Based on future trends, the demand for the product is forecasted. An index of economic indicators is formed. There are three types of economic indicators, viz. leading indicators, lagging indicators, and coincidental indicators.
- The leading indicators are those that move up or down ahead of some other series. The lagging indicators are those that follow a change after some time lag. The coincidental indicators are those that move up and down simultaneously with the level of economic activities.

- Ecoomic indicators like inflation, GDP, GNP etc..

4] Market Experiment Method

- Another one of the methods of demand forecasting is the market experiment method. Under this method, the demand is forecasted by conducting market studies and experiments on consumer behavior under actual but controlled, market conditions.

- Certain determinants of demand that can be varied are changed and the experiments are done keeping other factors constant. However, this method is very expensive and time-consuming.

5] Expert Opinion Method

- Usually, market experts have explicit knowledge about the factors affecting demand. Their opinion can help in demand forecasting. The Delphi technique, developed by Olaf Helmer is one such method.

- Under this method, experts are given a series of carefully designed questionnaires and are asked to forecast the demand. They are also required to give the suitable reasons. The opinions are shared with the experts to arrive at a conclusion. This is a fast and cheap technique.

6] Statistical Methods

- The statistical method is one of the important methods of demand forecasting. Statistical methods are scientific, reliable and free from biases. The major statistical methods used for demand forecasting are:

- **Trend Projection Method:** This method is useful where the organization has a sufficient amount of accumulated past data of the sales. This date is arranged chronologically to obtain a time series. Thus, the time series depicts the past trend and on the basis of it, the future market trend can be predicted. It is assumed that the past trend will continue in the future. Thus, on the basis of the predicted future trend, the demand for a product or service is forecasted.

- **Regression Analysis:** This method establishes a relationship between the dependent variable and the independent variables. In our case, the quantity demanded is the dependent variable and income, the price of goods, the price of related goods, the price of substitute goods, etc. are independent variables. The regression equation is derived assuming the relationship to be linear. Regression Equation: $Y = a + bX$. Where Y is the forecasted demand for a product or service.

SUPPLY CHAIN METRICS (KPI)

1. Cash-to-cash Time Cycle

- This priceless supply chain metric will help you calculate the length of time required to transform your resources into bonafide cash flows. Working with three core ratios - the days of inventory (DOI), the days of payables (DOP), and the days of receivables (DOR) - the cash-to-cash time cycle KPI visualizes the period required between the moment a business pays cash to its suppliers and the moment it receives cash from its customers. The shorter the conversion cycle the better, and this invaluable supply chain metric will help you take the right measures to ensure that you can run your business with less money tied up in operations.

2. Freight Bill Accuracy

- Shipping and freighting your items from supplier to warehouse or warehouse to the consumer is vital to the success of your entire operation, and any issue or error can prove harmful with time and investments being wasted.
- Here is how freight bill accuracy is calculated:
- (error-free freight bills / total freight bills) * 100

3. Perfect Order Rate

- This particular insight is one of the most critical supply chain KPIs for businesses operating in a multitude of sectors. The perfect order rate measures the success of your ability to deliver orders incident-free, which will ultimately help you iron out issues such as inaccuracies, damages, delays, and inventory losses. The higher the perfect order rate, the better, because this KPI has a direct impact on your customer retention and loyalty levels.

4. Days Sales Outstanding (DSO)

- The days sales outstanding (DSO) KPI measures how swiftly you are able to collect or generate revenue from your customers.

- Essentially, a low, or healthy, DSO number means that it takes a business fewer days to collect its accounts receivable. A higher DSO level demonstrates that a company is selling its product to customers on credit and taking longer to collect revenue in a tangible sense, which can stunt cash flow and minimize profits in the grand scheme of things. By calculating this often, you'll be able to collect revenue faster and more efficiently, which will help boost your bottom line in the long run.

5. Inventory Turnover

- One of the most superbly helpful supply chain KPI available today focuses on logistics KPIs and helps a business understand the number of times its entire inventory has been sold over a certain time frame: an incredible indicator of efficient production planning, process strategy, fulfillment abilities, and marketing and sales management. By calculating your on-time shipping rate and comparing it to other competitors within your industry, you will be able to create a clear management reporting practice, see where you stand and take the appropriate action to improve it over time - this will result in a boost in brand authority as well as an increased bottom line - so it’s important.

6. Gross Margin Return On Investment (GMROI)

Every business, regardless of service, product, or sector strives to achieve the best return on investment (ROI) for each and every commercial activity it undertakes. Maintaining a consistently solid ROI is the bread and butter of ongoing eCommerce success.

7. On-time Shipping

- An excellent indicator of how long you may need to ship a particular type of order to a client, customer, or partner, this KPI will allow you to set a benchmark shipping time relative to each product which, in turn, will allow you to optimize your shipping and delivery processes, reducing turnover time, and boosting customer satisfaction levels.

8. Return Reason

- The return reason supply chain metric offers an astute insight into the various motives causing your customers and clients to return their orders – an information that is priceless to the ongoing success of an eCommerce business. Presented in a digestible pie chart-style format with a key showcasing the primary reasons for return, you will be able to assess your areas of weakness, analyze the quality of critical areas of your supply chain process, and make the kind of improvements that will enhance not only your reputation but your overall level of service significantly. By gaining this level of insight, you stand an excellent chance at decreasing returns, boosting profits, and improving cash flow as a result.

9. Inventory Velocity (IV)

- A pivotal supply chain KPI, the inventory velocity, or IV, provides a visual snapshot of the percentage of inventory that's projected for consumption within the next period or quarter.

- Calculated by dividing the opening stock by the sales forecast for the following period, the IV is a KPI that will help you optimize your inventory levels, give you a greater chance of meeting consumer demand, and prevent you from wasting money on excess levels of stock.

10. Inventory Days Of Supply

- While this may not be the most panoramic or all-encompassing of supply chain metrics, inventory days of supply is particularly useful as it will give you a fairly accurate calculation of the number of days it would take you to run out of stock if it wasn’t replenished.

- By tracking, analyzing, and understanding this stream data on a regular basis, you will be able to prepare for, and avoid, any stock-based calamities in an emergency situation, saving your reputation and cash flow in the process.

Explain the relation ship between product development and SCM.

- All manufactured products move through a cycle of creation to maturity to decline. There are exceptions—a dairy product such as milk, for example—but the general rule is that product evolution is a stark reality within the manufacturing enterprise. Product Lifecycle Management (PLM) software recognizes this.

- Let us look at the process of product lifecycle management in the context of supply chain management. A product's lifecycle moves through five definitive stages. They are:

- **1.The new product development stage**. This stage is very expensive for the enterprise. The company experiences a lack of sales revenue and sustains considerable losses that are commensurate with the scale and complexity of the product to be launched.

- **2.The introduction to the market stage.** This period in the product lifecycle is very costly, with relatively low volume and continued losses again within the scale of the effort.

- **3.The stage of growth**. This stage is marked by a gradual reduction of economies of scale, with a step-by-step increase in sales (assuming a successful product), and the emergence and increase of profit.

- **4.The mature stage**. The mature stage is defined by very low costs. Sales of the product are at a peak. A reduction in the product's price—possibly through competitive pressures—and significant profitability can be seen.

- **5.The stage of decline.** This stage shows a reduction in sales, a continued drop in prices, and a subsequent reduction in profit. Now let's review the basic elements of the supply chain as defined by the Supply-Chain Council's SCOR model: plan, source, make, deliver, and deal with many forms of returns.

- At each stage of a product's lifecycle, its usefulness to the supply chain varies considerably. Here's a look at each stage of product lifecycle management:

1.During the new product stage, supply chain planning is critical.

- The company must approach the needs of the product strategically in regard to integrating all the supply chain elements and eventually progressing to a collaborative supply chain. Switching from a metal casting to plastic, for example, may change the nature of supply 180 degrees. Mapping out how a product will be manufactured affects not just the function of the product, but its sources, required tooling, appearance, marketability, and place in the customer's heart. In addition, it's never too early to plan the nature of the distribution process.

2.During the market introduction stage, the supply chain is presumably up and running, and continually tuned.

- By closely examining the supply chain, a company can eventually bring a product's start-up cost into line. One advantage of low sales volume at this point is that it gives those controlling the supply chain a manageable scale of sources, products, and reactions to track. The growth stage occurs when the supply chain kicks into gear in a big way. The cost reductions gained from economies of scale are the result of a lean or agile look at sourcing, manufacturing and distribution, as well as a deeper understanding of customers' reactions and feedback about the product.

3.Growth is maintained to a great extent by using customer feedback, as well as feedback from the customer's customer on how the enterprise delivers and maintains the product.

A company achieves greater sales volume over the long haul by using the right logistics and by assessing the value of the product to its customers. The right product, at the right time, with the right features, and with the right continuous support from the enterprise will achieve success.

4.The mature stage is where the difference between real success and a good try will divide the company.

Sustaining good resources, good inbound logistics, good warehousing, good manufacturing practice, good design and marketable changes, good distribution and continued evaluation of customer feedback ensures low cost and high sales volumes. The enterprise that uses the supply chain to position itself favorably as compared to its competitors will have the edge.

5.The decline stage should not be seen as the point where the company gives up.

- If profit is still to be realized the product can be extended through careful practice and a highly oiled supply chain. It takes a great balancing act to deal both with reduced prices and lagging sales within the framework of reduced profits. It is only through intelligent use of a supply chain strategy that any balance can be reached. This stage is also the point where a product has a chance of rejuvenation. Miracles never cease.

Strategic Role of purchasing in SCM

- Purchasing departments are responsible for pocuring supplies.Until the 1960s, this largely invilved order-placing and was primarily a clerical position.
- However, as the development of of strategic planning and the advent of just-in-time system mde purchasing a more crucial business function.

(1) Supply Sourcing

- One of the main roes of the purchasing is to source supplies and parts, and then purchase them. In large companies, this may also include deciding whether to make the item in-house, Purchasing department often work alongside product devlopment teams to source materials and determine cost of the finished product. Finding the correct item at the correct price can be difficult, and purchasing departments may also work to assist suppliers in manufacturing the item needed. This can involve providing considerable assistance to the supplier.

(2) Bidding

For items needed in bulk, or specialist items, purchasing departments often use competitive bidding to chose a supplier. The department will then be responsible for all aspects of the bidding process.

(3) Supplier Management

Purchasing departments are also responsible for monitoring the supplier's performance. Purchasing departments must evaluate the supplier's performance and qualit control. This can include monitoring delivery times, quality, cost and performances.

(4) Cost Control

Purchasing departments, especially in government agencies, may also responsible for maintaining strict cost control.

For example,in a 2010 article on hotel purchasing speciast site Food Buyers Network, John schalow suggests that to get the best price, purchasing departments need to ensure supplier's themselves get a lower cost from distributors and manufacturers.This can be done by increasing delivery size, paying on time, ordering online and making sure suppliers use the best practice.

(5) Legal Controls

Purchasing departments must also be aware of the laws applying to purchasing. For private companies, this is primarily contract law, but for government bodies, there may be state and federal laws regulating purchasing.

Total Customer Satisfaction

- Total customer satisfaction is a business strategy aimed toward ensuring that the overall customer experience is good, in addition to providing a quality product or service. This is particularly important when competitors offer similar or identical products or services for similar prices. The business that can provide the best overall experience will likely be more successful than the others simply because customers find conducting business there more satisfying overall. Adopting customer satisfaction as a primary business goal can sometimes be costly and difficult, but doing so is likely to pay off over time.
- A business must, first of all, offer a good product or service if total customer satisfaction is to be achieved. Even if the customer is treated well and has an overall positive experience purchasing the product or service, he will probably not recommend or return to the business if the product is not satisfactory. A business must, quite simply, be good at providing the product or service that it offers or customers will not be satisfied overall.

Types of Purchase Orders

- A purchase order (PO) is an official document generated by a buyer of goods/services as an offer for the seller. It becomes a “legal document of contract” once the seller accepts the purchase order. There are mainly 4 different types of purchase orders;

- Standard PO
- Contract PO
- Blanket PO
- Planned PO

Standard Purchase Order

- It is the most basic and widely used among different types of purchase orders, it is created when a buyer is sure about the order details such as the item, price, delivery schedule, payment terms etc.
- Example – Unreal corp. decides to buy 50,000 x 9W led bulbs from GE for a unit price of 10 each to be delivered within 60 days of the order date. In such case, Unreal corp. will raise a standard PO and send it to GE for acceptance.

Contract Purchase Order

- It is created for a set period of time (often for a year) the item, pricing, quantity etc. can’t be anticipated precisely. In this case, a contract purchase order can be raised by the buyer, which upon acceptance becomes a legal contract.
- During the contract period, the buyer can raise a standard PO with specifications of requirements and request for goods.

- Example – Unreal Corp. analyzes and concludes that it often requires led bulbs of different wattage around different times of the year, however, the requirement is irregular and can’t be anticipated. In this case Unreal corp. can raise a contract purchase order.

Blanket Purchase Order

- It is used in cases where the item is known, but the quantity and required delivery schedules are unknown. There can be numerous delivery dates against a blanket PO, they are often used in case of large quantities with exceptional discounts.

- Example – Unreal corp. decides to buy 5,00,000 x 9W led bulbs each year but they are not sure about the delivery schedule & quantity of each release. In such a situation Unreal corp. will raise a blanket purchase order.

Planned Purchase Order

- It is used for a planned purchase anticipated for long-term where the delivery schedule is not known in advance. The dates of delivery can only be anticipated therefore only tentative dates are provided to the seller. Item, pricing and quantity are however known in advance.

- Example – Unreal Corp. has evaluated that it will have a long-term need for the next 5 years to buy 25,000 x 11W led bulbs each year. Instead of raising a standard PO each time Unreal Corp. can create a planned purchase order.

Purchasing Cycle

- The Purchasing Cycle can be defined as the cyclical process of key steps when procuring goods or services for the organization. This interactive tool is strategically developed to guide and enlighten the members of the company through the procurement process with links to relevant knowledge to support each and every step through the procurement journey.

1) Need Recognition

- The purchasing department and the management of the company must understand and figure out the needs a new product development from the internal or external sources. The product required is the one that needs to be reordered from the vendors, or it is the new item for the company.

2) Specific Need

- The right product is quite important and crucial for the company. Some industries have standards to help determine specifications of the products required whilst some of the industries domains have no point of reference whilst ordering the products such as the management might have ordered the product in the past for some other requirements. If not, then the business must specify the necessary product by using identifiers such as color, weight, and other such vital specifications.

3) Source Options

- The next step involves that the company needs to determine the sources from where to obtain the product. Many companies have the approved vendor lists who are the regular suppliers. If this is not the case, the company will need to search for a supplier using purchase orders or research a variety of other sources such as such as social media, internet portals, and other lucrative sources and reference points. The company will qualify various suppliers shortlisted to determine the best product suited for the business operations.

4) Price and Terms

- Next step in the line is that the company has to investigate all relevant and vital information to determine the best price and terms for the product required. This will depend on if the company needs ready products or specialized materials that are made to order. As per the thumb rule of the market, the company will have short list three suppliers before arriving at the final decision.

5) Purchase Order

- The purchase order is the formal document and is used to buy materials between a buyer and seller. It defines the aspects of price, specifications of the product, and the terms and conditions of the product and all other mandatory terms as per the requirements of the industry.

6) Delivery

- The purchase order must be delivered, usually by the means of e-mail or personal delivery. Many a time, the specific delivery method is specified in the purchase order. The recipient then acknowledges receipt of the purchase order and both parties involved keep a copy in their records as a proof and for future reference.

7) Expediting

- The expedition stage of the purchase order addresses the timelines of the materials delivered. It becomes quite important if there are any delays in the entire procedure. The issues that arise in the process most include payment dates, delivery times, and the final completion of the order.

8) Final Receipt and Inspection of Purchases

- Once the vendor delivers the product, the recipient company accepts or rejects the items as per the specifications and terms noted in the purchase order. Acceptance of the items receives obligates the company to pay for them to the vendor.

9) Invoice Approval and Final Payment

- Three vital documents are required for the final payment method – the invoice itself, the receiving document or the proof of delivery, and the original purchase order signed by both the parties. The agreement of these documents provides confirmation from both the parties involved and any sort of discrepancies must be resolved before the recipient makes the final payment. The payments are made in the form of cash, cheque, bank transfers, or other types of electronic transfers depending on the terms and conditions agreed upon.

10) Record Maintenance

- In the case of audits and other accounting procedures, the company must maintain proper records for the proper evaluation. These include purchase records to verify any sort of tax-related information and the document of purchase order confirms warranty of the required information.

THANK YOU