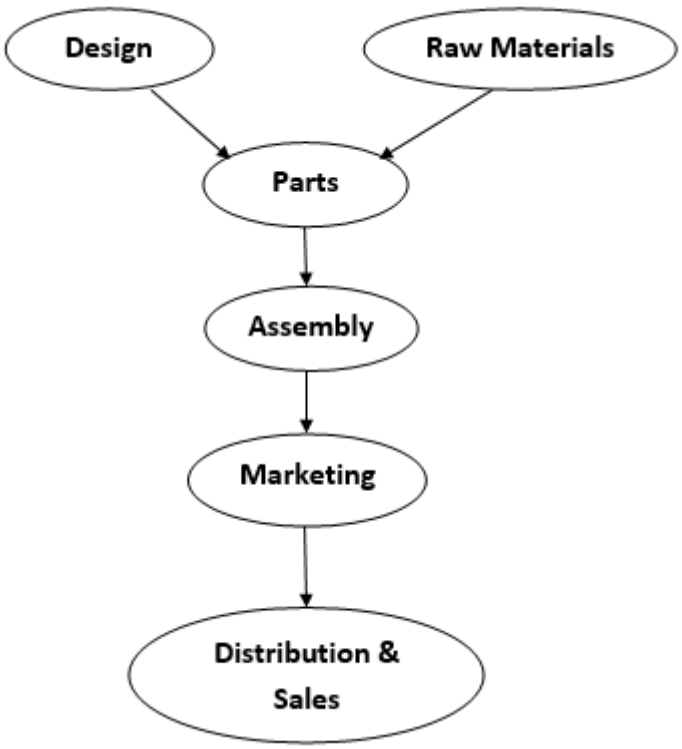
VALUE CHAIN

The value chain is a concept from business management that was first described and popularized by Michael Porter in his 1985 best seller, Competitive Advantage: Creating and Sustaining Superior Performance.

A Value Chain is a chain of activities for a firm operating in a specific industry. Products pass through all activities of the chain in order and at each activity the product gains some value. The chain of activities gives the products more added value than the sum of the independent activities value.

All companies undertake series of activities in order to deliver a product to the customers. These series of activities like procurement of raw material, storage, production, distribution, etc. are referred as value chain activities. ***The function of value chain activities is to add value to product at every stage before it is delivered to the customers***. There are two components, which make value chain - primary activities and secondary activities. *The primary activities are directly associated with the manufacturing of products like supply management, plant operations, etc. The secondary activities are referred to as support functions such as finance, HR, information technology, etc.*

Here we have shown just a basic value chain flow of an Automobile Industry.



A diamond cutter, as a profession, can be used to illustrate the difference of cost and the value chain. The cutting activity may have a low cost, but the activity adds much of the value to the end product, since a rough diamond is significantly less valuable than a cut diamond.

The value chain framework quickly made its way to the forefront of management thought as a powerful analysis tool for strategic planning. Value chain analysis has also been successfully used in large Petrochemical Plant Maintenance Organizations to show how Work Selection, Work Planning, Work Scheduling and finally Work Execution can (when considered as elements of chains) help drive Lean approaches to Maintenance.

In the era of advanced information and communication technology, many businesses have started operations on the internet as its medium. Through the internet, many commercial activities like buying, selling, auctioning is taking place. This online commercial activity is known as e-commerce. E-commerce value chain has series of activities like electronic fund transfer, internet marketing, distribution channel, supply chain etc.

Value Chain and E-Strategy

Every activity within a physical value chain has an inherent information component. The amount of information that is present in activities determines, company's orientation towards e-commerce. It has been observed that companies with high information presence will adopt e-commerce faster rather than companies with lower information presence.

For example, a computer manufacturer has high information presence, i.e. they can provide a great deal of product information through their website. Consumers also have flexibility to determine the product configuration using the website. Such computer manufacturers and companies with comparative business model are also likely to adopt e-commerce.

Activities which comprise of the value chain are undertaken by companies to produce and sell product and services. Some of the activities done within the value chain are understanding customer needs, designing products, procuring materials for production, production, storage of products, distribution of products, after sale services of products and customer care.

Understanding Information Presence

There are two ways to assess information presence. The first way is by looking at the industry, and second way is by looking at the product. In an industry with high information presence, it has been observed that:

- Industry will have large number customer base.
- Production process is complex.
- Order turnaround cycle is long.

For a product with high information presence following is observed:

- Product is simple to manufacture.
- Product has multiple functionalities.
- Product requires in dept end user training.

Industry and product which satisfy above conditions are likely to adapt e-commerce.

E-Strategy

Companies with high information presence were the first to look at e-commerce as an alternate way of conducting business. For example, software companies, much of there is business is done through the internet. Their website provides in-depth product information through e-brochure, video, client opinion, etc. Sales leads are generated online; purchase and fund transfer is done, and also after-sales service is done online.

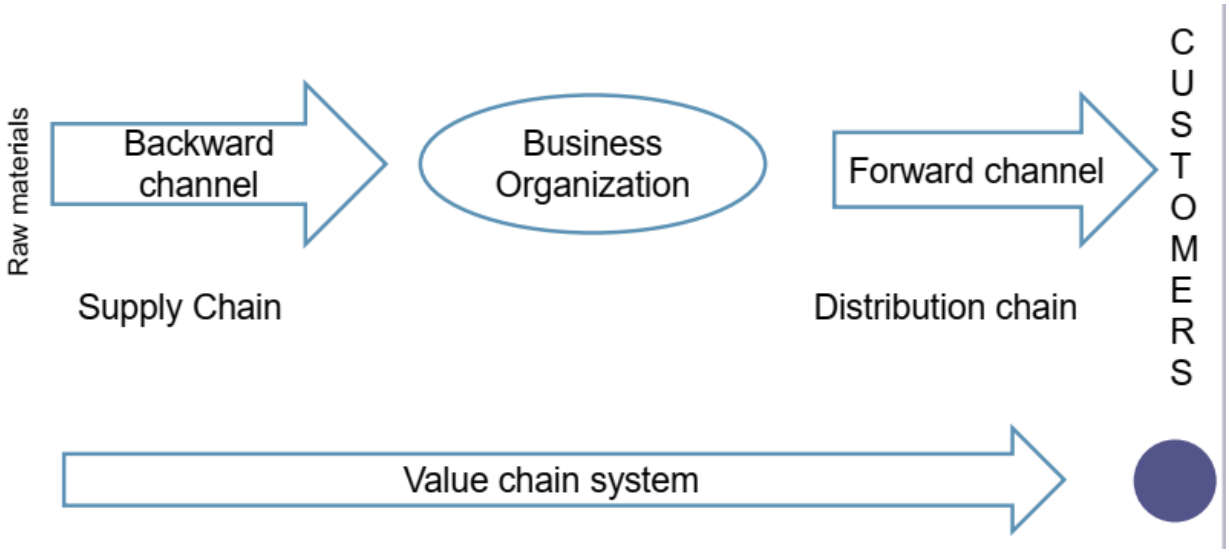
These high information companies have made substantial investment in human resources and information/communication technology.

Value Creation

Necessarily processing, converting, improving or¬ adding value to a particular product (from its original state) thereby giving more appeal, utility or value to a new product that promises a level of satisfaction to prospective clients or customers. Service of value - kind of service rendered by the firm that is being paid for by the clients. Value creation process – doing or rendering the service itself.

Value Chain System

The series of activities and process as well as the¬ supply of raw materials or needed inputs involved in producing a product or delivering a service.



Importance Of Value Chain

Backward channel

- Composed of the companies or organization providing raw materials or other forms of inputs for the company to undertake its value creation process.
- Suppliers of the business concern

Forward channel

- Distribution side of the business or parties involved beyond the production and storage line.
- This group includes organizations acting as distributors, dealers, agents, inventors, importers, transport/delivery firms and other organizations closing in to the ultimate users

Components of Commercial Value Chain

The value chain is series of activities undertaken by organization to deliver a product to end users. Here the concept does not apply to one single manufacturing organization, but it also applies to the players in the value chain.

Primary Activities

Primary activities in the value chain are directly related with the production and delivery of the final product. The objective of these activities is adding value to product that is more than the cost of product. This will ensure that company can generate healthy margin and stay in business. Primary activities mainly consist of inbound supply chain, operations, dispatch, sales and marketing and service.

- ✧ **Inbound logistics**
  - ➢ Activities associated with raw materials or inputs procurement activities covering vendor selection, comparative shopping, negotiating supply contracts, and just-in-time arrival of goods.
  - ➢ They form part of the backward channel or supply side of the business.

- ✧ **Operations**
  - ➢ Activities involve the actual conversion of raw materials into a finished product.

- ✧ **Outbound logistics**
  - ➢ Activity sequel to the inbound and processing activities particularly such aspects as storage, distribution and shipping of the finished product.

- ✧ **Marketing and sales**
  - ➢ Activity deals with prospective clients including the ultimate customers or end-users.

- ✧ **Services**
  - ➢ Activity focuses on after-sales services to the customer whether end-user, a processor or secondary producer.

Secondary activities

Support activities that are undertaken to support the value creation activities both at the level of supply and distribution chain or the entire value chain system.

- ✧ **Corporate infrastructure**
  - ➢ The support backbone activities of the business operation.

- ✧ **Human resources**
  - ➢ Unique activity of matching the right people to the job expected.

- ✧ **Research and technology development**
  - ➢ Adds value in a way it improves the product and the business processes in the primary activities.

Commercial Value Chain

→ **Commercial value chain is defined as any value chain used to achieve its organizational goal**. Every company in any given industry will have its own value. However objective all the different value chain is to add value chain at every stage till product is delivered. The value chain of business includes activities:

→ **Potential Customer Attraction and Existing Customer Repeat:** For online business it is very important that they are able to generate visitors for their website. This will ensure customers are aware of available products and pricing. Companies also want to ensure that website is able repeat customers also.

→ **Customer Interaction:** Website design and navigation should ensure that potential buyers are able to reach the required web page. Another option available is customers entering their requirement and website displaying potential products.

→ **Order Processing and Payment:** Once a potential buyer has selected the product, website should be equipped to display other product similar to purchase or pop a question whether customer would be interested in making another purchase. Purchase order should also highlight possible shipping date and number of days before product will arrive. After purchase transaction, the next important step is payment through secured fund transfer.

→ **Order Delivery and Customer Care:** Website should be able to provide online tracking of the product; it should also provide details about possible delays. Website should be equipped to solve any queries online through frequently asked question, email support etc.

SUPPLY CHAIN

A supply chain is a system of organizations, people, technology, activities, information and resources involved in moving a product or service from supplier to customer. Supply chain activities transform natural resources, raw materials and components into a finished product that is delivered to the end customer. In sophisticated supply chain systems, used products may re-enter the supply chain at any point where residual value is recyclable.

Supply Chain Management (SCM)

→ Supply Chain Management is the oversight of materials, information & finances as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer.

→ SCM involves coordinating & integrating these flows both within & among companies.

→ SCM enables collaboration, planning, execution & coordination of the entire supply chain, empowering companies to adopt their supply chain processes to an ever changing competitive environment.

With better synchronization across the entire supply chain, the business partners achieve the following major benefits:-

- Lower Inventories & therefore lower financing costs
- Shorter receivable cycles
- Optimal use of production resources & costly workforces
- Faster response to market changes
- Greater satisfaction & loyalty among customers
- Greater profitability

→ The military was one of the first organizations to recognize supply chains & to manage them during World War II.

→ The SCM systems have become more efficient & intelligent with the use of computers, artificial intelligence & other advancements in the field of information technology.

→ SCM solution transform traditional supply chains from linear, sequential steps into an adaptive supply chain network in which communities of customer-centric, demand driven companies share knowledge, intelligently adapt to changing market conditions & proactively respond to shorter, less predictable life cycles.

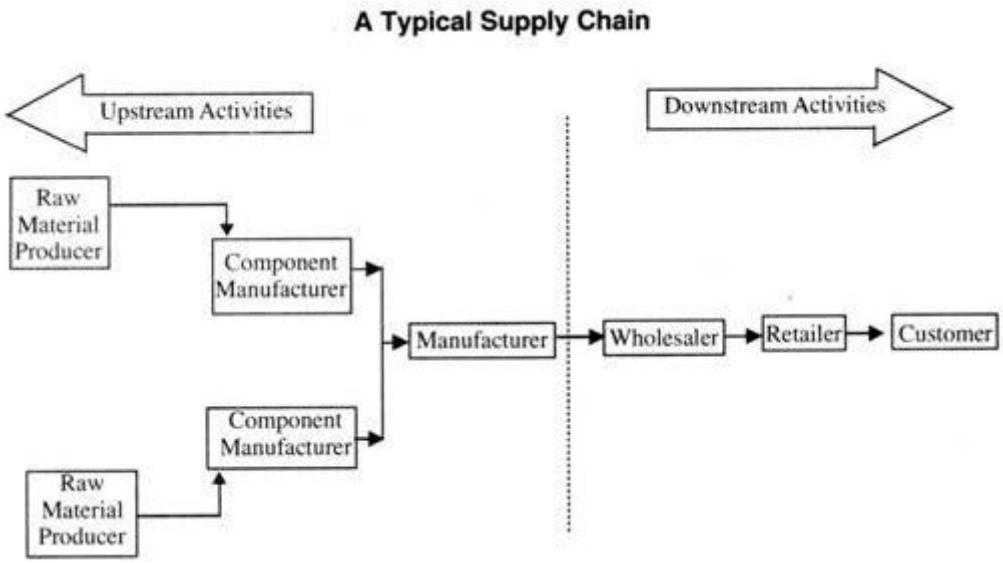
→ Today almost all organizations-military, manufacturing, service industries, retailers & so on use SCM systems to improve their efficiency & effectiveness.

Series of activities involved in the production or processing of a product or of a service

→ Set of activities involved before the creation or production of a product or the kind of services to be rendered by the business firm to the public at large, or the specific market it wants to serve.

→ According to Chase, Jacobs and Aquila no, et al it is how organizations (suppliers, manufacturers, distributors, and customers) are linked together.

→ Evolving supply process



A supply chain basically has three key parts:

i. Supply:
It focuses on the raw materials supplied to manufacturing, including how, when, and from what location.

ii. Manufacturing:
It focuses on converting these raw materials into finished products.

iii. Distribution:
It focuses on ensuring that these products reach the consumers through an organized network of distributors, warehouses, and retailers.

Components of SCM

- Planning
- Sourcing
- Making
- Delivering
- Returning
- Enabling

→ **Planning**—Enterprises need to plan and manage all resources required to meet customer demand for their product or service. They also need to design their supply chain and then determine which

metrics to use in order to ensure the supply chain is efficient, effective, delivers value to customers, and meets enterprise goals.

→ **Sourcing**—Companies must choose suppliers to provide the goods and services needed to create their product. After suppliers are under contract, supply chain managers use a variety of processes to monitor and manage supplier relationships. Key processes include ordering, receiving, managing inventory, and authorizing supplier payments.

→ **Making**—Supply chain managers coordinate the activities required to accept raw materials, manufacture the product, test for quality, package for shipping, and schedule for delivery. Most enterprises measure quality, production output, and worker productivity to ensure the enterprise creates products that meet quality standards.

→ **Delivering**—Often called logistics, this involves coordinating customer orders, scheduling delivery, dispatching loads, invoicing customers, and receiving payments. It relies on a fleet of vehicles to ship product to customers. Many organizations outsource large parts of the delivery process to specialist organizations, particularly if the product requires special handling or is to be delivered to a consumer's home.

→ **Returning**—The supplier needs a responsive and flexible network to take back defective, excess, or unwanted products. If the produce is defective it needs to be reworked or scrapped. If the product is simply unwanted or excess it needs to be returned to the warehouse for sale.

→ **Enabling**—To operate efficiently, the supply chain requires a number of support processes to monitor information throughout the supply chain and assure compliance with all regulations. Enabling processes include finance, HR, IT, facilities, portfolio management, product design, sales, and quality assurance.

Important of supply chain management

Over the last twenty years, the supply chains of manufacturers and retailers have become ever more tightly linked. In many industries, retail sales trigger replenishment orders to manufacturers. Manufacturers with a well-tuned, just-in-time supply chain can automatically restock retail shelves as products are sold. As collaboration has increased, additional data from supply chain partners has allowed companies to use advanced analytic tool to further improve results. Examples include:

→ **Identifying potential problems before they occur**. When a customer orders more product than the manufacturer can deliver, the traditional response has been to short the order. This leaves the buyer feeling unimportant and convinced the manufacturer's service is poor. Manufacturers who anticipate the shortage before the buyer is disappointed may be able to offer a substitute product or other incentive to keep the buyer happy.

→ **Optimizing price dynamically.** Seasonal products, particularly fashion products, have a limited shelf life. Any that don't sell by the end of the season are scrapped or sold at deep discounts to empty the warehouse. Airlines, hotels, and other companies with a limited, but perishable product, adjust prices dynamically to meet demand. While this is more difficult with clothing and other products where the supply can vary widely, similar forecasting techniques can improve margins.

→ **Improving the allocation of available to promise inventory.** Today's tools dynamically allocate resources and schedule work based on the sales forecast, actual orders, and promised delivery of raw materials. Manufacturers are able to confirm a product delivery date when the order is placed, significantly reducing incorrectly filled orders.

Advantages of Supply Chain Management

- **Supply Chain Planning & Collaboration**: Supply chain planning functionality enables you to maximize return on assets & ensures a profitable match of supply & demand.
- **Supply Chain Execution**: SCM enables you to carry out supply chain planning & generate high efficiency at the lowest possible cost.
- **Supply Chain Visibility Design & Analytics**: SCM gives you network-wide visibility across your extended supply chain to perform strategic as well as day-to-day planning.
- **Business Benefits**: SCM can help you transform linear supply chain into an adaptive network with the following benefits:-
  - → Faster response to changes in supply & demand.
  - → Increased customer satisfaction.
  - → Compliance with regulatory requirements
  - → Improved Cash flow
  - → High margins
  - → Greater synchronization with business priorities
- It bridges the gaps between the suppliers and the customers.
- It helps manufacturers in reducing inventories as finished goods are stored nearer to the customers.
- It allows firms to conduct operations at an appropriate time and place for the benefits of suppliers and customers.
- Effective supply chains results in enhanced customer service as retailers get a choice of goods and also carry less stock.
- Supply chains make movements simple, cost-effective and efficient as transport is simpler.
- Expertise can be developed in a particular type of operation.
- It allows firms to conduct operations at an appropriate time and place for the benefits of suppliers and customers.

Disadvantages of SCM or Supply Management Chain

- **Departmental wars-** Supply chain projects involve multiple departments, such as purchasing, planning, manufacturing, distribution and Information Technology.
- **Weak leadership** -When intervening multiple departments, supply chain projects need a strong senior executive and that is capable of acting to eliminate those points of interdepartmental disunity because there will be numerous challenges to be solved.

- **Slowness of reach**-It is often observed how projects become complicated over time, due to the addition of new functions and features. In the end you end up with an inflated project that is so extensive that it will never be completed or that, if completed, you will not get a profit on solid investment.
- **More attention is paid to Information Technology-** than to the quality of the data and the security of the same.
- The benefit on investment is difficult to measure.
- The bad habits take time to disappear.
- The costs are difficult to quantify.
- The time and planning required for its implementation.