Concept of Supply Chain Management

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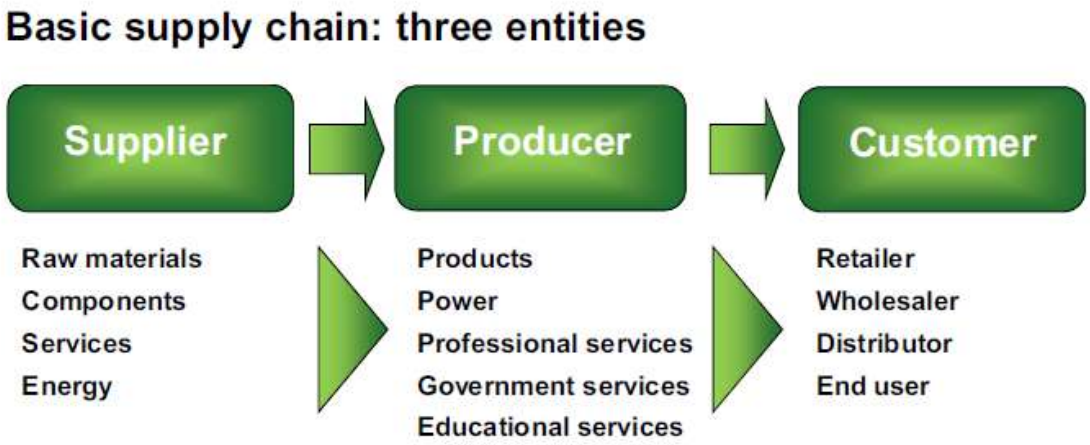
Introduction to Supply Chain Management

- Supply chain activities transform natural resources, raw material and components into a finished product that is delivered to end customer
- In SCM companies and corporations involve themselves in supply chain by exchanging information regarding market fluctuations, production capabilities.
- Supply chain, logistic network is System of organizations, People, Technology, Activities and Information and resources in moving a product or service from supplier to customer.

Definition of Supply Chain Management

Supply chain can be defined as a systematic process which aims to establish the strategic coordination between the traditional business functions and process with the aim of improving the long term performance of the company in terms of customer relationship, market share and other related attributes. It can also be described as a sequence of processes and flows that take place within and between different stages or intermediaries and combine to fill a customer need for a product or service.

According to the council of supply chain management professionals, Supply chain management or SCM encompasses the planning and management of all the activities involved in **sourcing, procurement, conversion and logistics management**. It also include establishment of **coordination and collaboration** with channel partners, which can be suppliers, other intermediaries, third party service providers and customers.



The objective of any supply chain process is to maximise the overall value generated – which can be calculated as the difference between what the final product is worth to the customer and the effort the supply chains expends in filling the request of the customer. Supply chain success is measured in terms of supply chain profitability and not in terms of the profits at an individual stage.

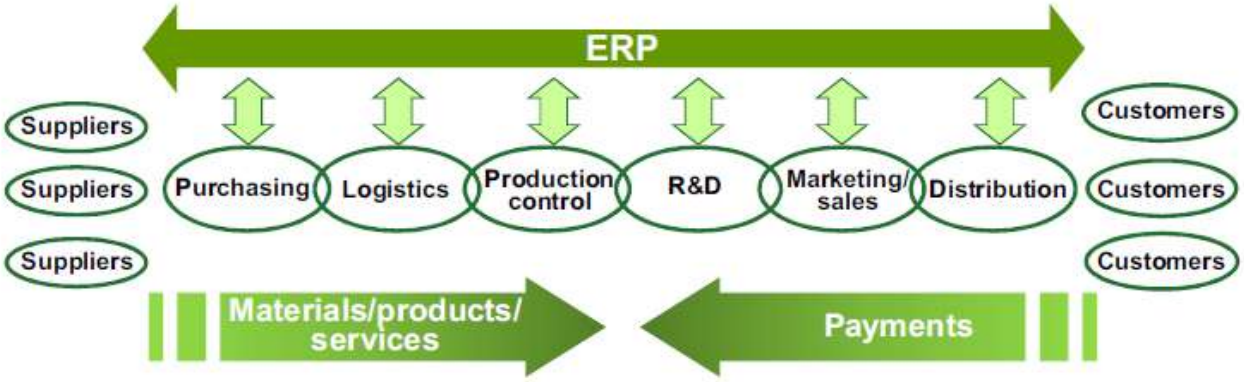
Evolution of Supply Chain Management

The evolution of Supply chain management can be effectively understood by the chart given below:

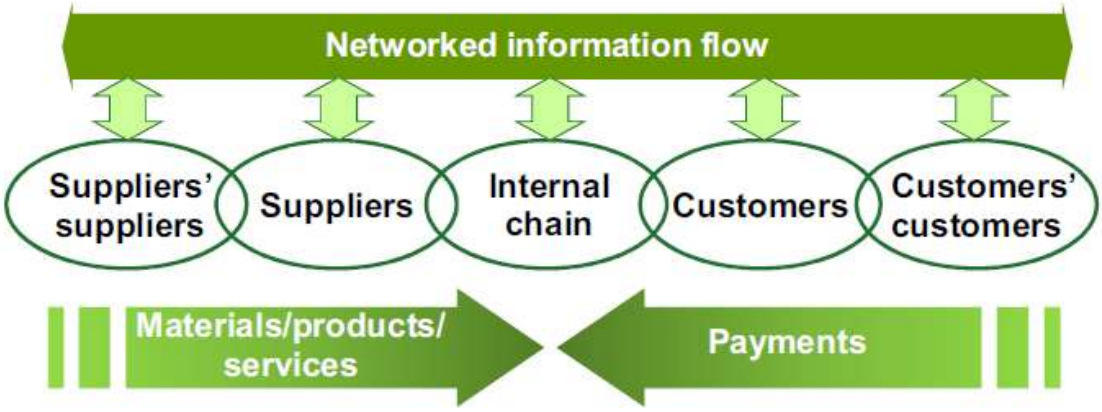
Stages of SCM Evolution

1: Multiple Dysfunction	2: Semifunctional Enterprise	3: Integrated Enterprise	4: Extended Enterprise
▪ Impulsive activity ▪ Pep talks, threats ▪ No teamwork ▪ Little information exchange	▪ Mostly manual ops ▪ Inventory reduction in owned facilities ▪ New low-price purchasing strategies ▪ Some hard-skills training, job enhancement ▪ Enhanced marketing and forecasting ▪ No coordination of initiatives	▪ New focus on process ▪ Internal process integration ▪ MRP/ERP ▪ Intranets, etc., across functions ▪ Design teams ▪ Enhanced warehousing, logistics, forecasting, etc.	▪ Process integration across entity boundaries ▪ Eventual electronic information connections among multiple partners ▪ ERP-to-ERP links ▪ E-commerce ▪ Supply chain vs. supply chain competition

Stage 3: Integrated Enterprise

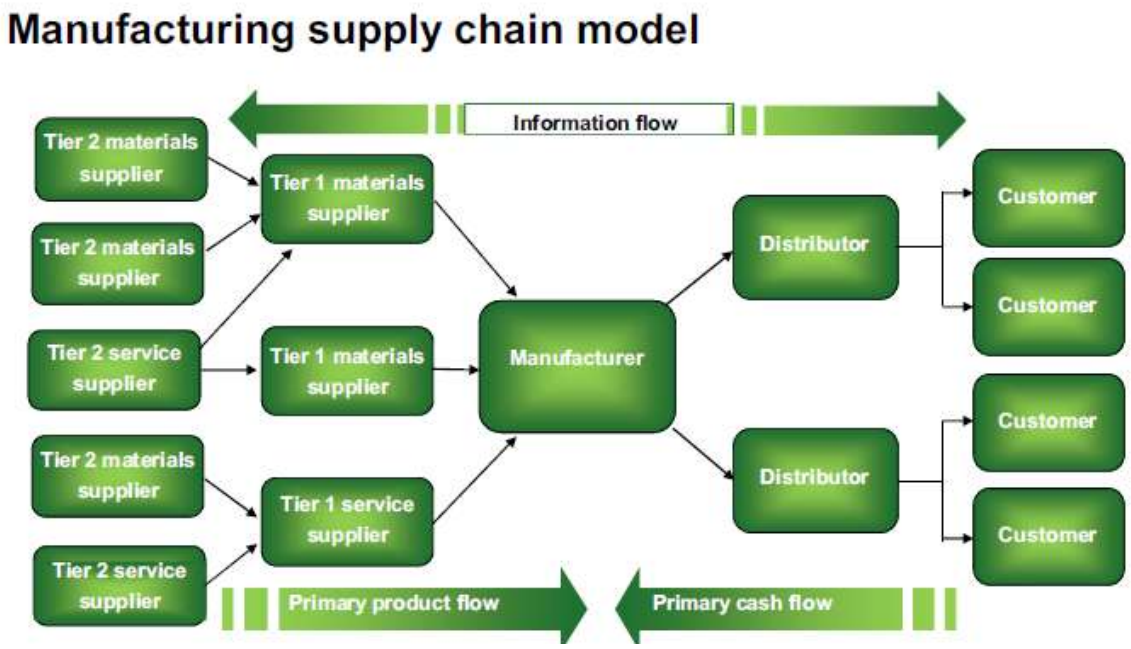


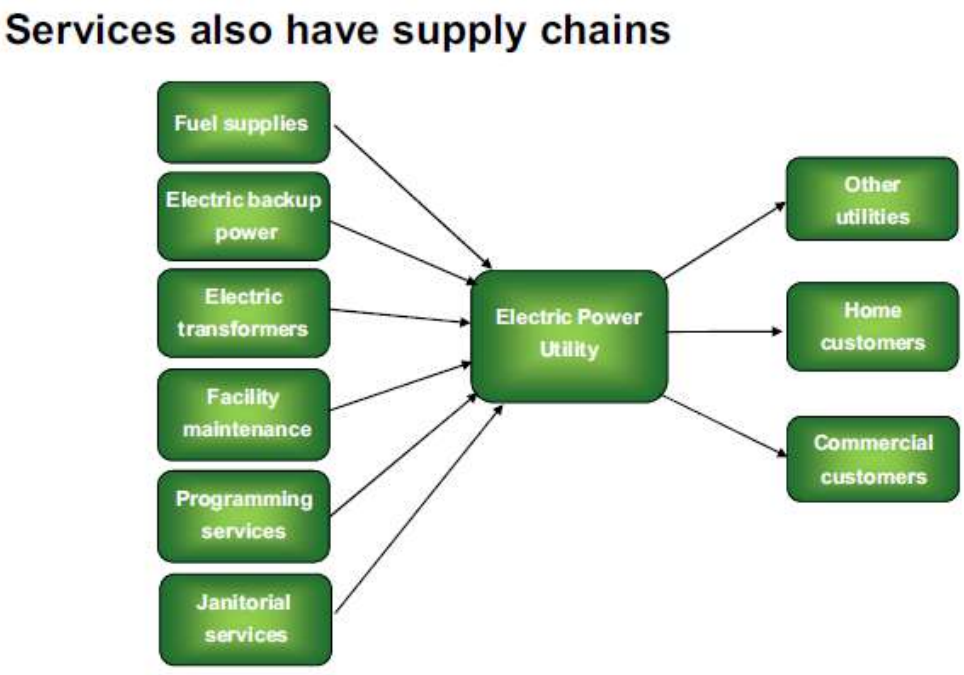
Stage 4: Extended Enterprise



Conceptual Supply Chain Model

A Supply Chain model can be effectively classified into the following two categories:





Drivers of Supply Chain Performance

Following are the list of some of important factors or drivers which directly control the performance of any supply chain process: -

1. **Facilities** which includes places where inventory is stored, assembled, or fabricated. It also includes production sites and storage sites

2. **Inventory** which include raw materials, Work-in-progress, finished goods within a supply chain and also includes inventory policies

3. **Transportation** which is concerned with movement of inventory from point to point in a supply chain and may consist of combinations of transportation modes and routes

4. **Information** which includes data and analysis regarding inventory, transportation, facilities throughout the supply chain and is considered as potentially the biggest driver of supply chain performance.

5. **Sourcing** which defines the functions a firm performs and functions that are outsourced

6. **Pricing** which include price associated with goods and services provided by a firm to the supply chain

Process Views in Supply Chain Management

Two ways to view the processes performed in a supply chain

- Cycles view and
- Push/pull view

Cycle view

It defines the processes involved and the owners of each process. In this view all the process in a supply chain are divided into a series of cycles which are performed at the interface between two successive stages of a supply chain

Under this view, the supply chain process can be broken down into four process cycles such as

– Customer order cycle

– Replenishment cycle

– Manufacturing cycle

– Procurement cycle

A cycle view of the supply chain is very useful when considering operational decisions. It clearly specifies the roles and responsibilities of each member of the supply chain. It helps the designer to consider the infrastructure required to support the processes

Push/Pull View

According to it, the categorises processes in a supply chain is based on whether they are initiated in response to a customer order (pull) or in anticipation of a customer order (push).

Categorisation is based on the timing of process execution relative to end customer demand. At the time of execution of a pull process also called as reactive process, the customer demand is known with certainty where as in case of push process also called as speculative process, at the time of execution of a process demand is not known and must be forecasted.

This view is very useful when considering strategic decisions relating to supply chain.