

# Operations management: product-based and service-based supply chain

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Supply Chain Supply chain indicates the flow of material in order to be converted into something useful (finished goods) to meet the needs of the customers (Harland, 1996).

The types of Supply chain include:

Product-based supply chain

Service-based supply chain

Each of the mentioned type of supply chain is explained below with an example:

Product Supply Chain

The product selected to show the simple supply chain is Coca Cola. Following is the supply chain of Coca Cola:

Service Supply Chain

The simple supply chain shows the flow of service from Internet Service Providers (ISP's) to the clients.

Difference between the Traditional Product and Service Supply Chain

The ultimate goal of both the product and service supply chain is eventually the satisfaction of the consumer but both the supply chains are different from one another to great extent. Following are the differences between the service supply chain and traditional product-based supply chain.

Input:

In a traditional product-based supply chain high inputs are required such as capital, machinery and labour. As the Coca Cola supply chain deals with the tangible goods, the manufacturing costs are high and extensive manpower is required. The availability of suppliers is greater and as the raw material is

provided by the suppliers, the company heavily relies on them.

On the other hand, a service supply chain deals with the intangibles due to which little physical inputs are required. Even the number of suppliers in a service-based supply chains are limited to an extent. Raw materials required by the internet service providers are limited to only offices and servers. The costs incurred by the service supply chain are less as compared to the product supply chain (Veronneau and Roy, 2009).

Logistic:

Logistics is essential in product-base supply chain as the manufacturing industry highly depends on the transportation of physical goods from one destination to another. If the raw materials are not transferred from one place to another, the supply chain will be broken which halts the operations of the company and the company is forced to use different modes of transportation; land, sea or air. Furthermore, the cost of logistics is quite high depending on the size and weight of the raw material that is being moved (Min and Zhou, 2002).

On the other hand, for a service industry logistics is irrelevant as the industry directly deals with the intangibles. The cost incurred by the product-based industry for logistics are utilised by the service-based industry for upgrading servers and for maintenance (Veronneau and Roy, 2009). This upgrade and maintenance allows enhancement in the speed and communication between the clients and the internet service providers.

Finished goods:

In a traditional product-based supply chain, finished goods are those products that have been completely transformed from raw material to

products that are ready to be sold (Simatupang and Sidharan, 2002). For Coca Cola Company, a finished good represents a chilled bottle of coke ready to be served to the customers to meet their demand.

In a service industry, a finished good represents quality service to the clients. This means that the customer should be satisfied with the internet service that is being provided to him/her. Furthermore, the service being provided to the clients is the final product of the service supply chain (Veronneau and Roy, 2009).

Optimisation:

In a product-base supply chain, optimisation could lead to cost reduction and increase in efficiency. For Coca Cola Company, it is essential to reduce the waste of raw-material and inventory to increase the number of finished goods. To increase the speed of production, the company would have to improve the relationship between the suppliers and company (Stadtler, 2005).

On the other hand, optimisation in a service supply chain means to increase the quality of service being offered to the client. For this enhancement, the supply chain must promptly update their servers and install new software which would help to meet the changing technology (Veronneau and Roy, 2009).

Customisation vs. Standardisation

The products that are being offered by the product-based supply chain are standardised. This means that all the finished products are similar to one another without any distinction. This means that the products are homogeneous (Stadtler, 2005).

In contrast, service supply chain can be customised according to the needs and requirements of the clients and customers (Veronneau and Roy, 2009). An internet service provider may provide high or low speed; depending on the customer's requirement.

From the above mentioned differences, it can be understood that both the service and product supply chain are different from one another. Product supply chain depends heavily on the raw-materials that are converted into final products. These final or finished products are then transported to the wholesalers and retailers that sell the finished products to the ultimate consumers (Simatupang and Sidharan, 2002).

On the other hand, service-based supply chain does not heavily relies on tangible goods other than offices and servers. To provide their customers with high-quality internet facility, distributors are required as an intermediary between the company and the clients (Veronneau and Roy, 2009).

#### Challenges encountered

The challenges encountered during analysing the differences between traditional product-based supply chain and service supply chain are as follows:

Availability of information in articles and other sources regarding both of the supply chain types.

Consumed a lot of time in collecting information associated with the differences between product and service supply chain.

#### Conclusion

Thus, it could be concluded that a product based supply chain and service

based supply chain are both different in terms of input and raw material required, the transportation of goods, increasing efficiency, the finished goods and the quality of the product.

#### List of References

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