

# Process View of a Supply Chain

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**Abstract-** Before going through the process view of a supply chain management, Supply Chain Management process view is an extremely important process but first, it should be clear what a supply chain management is. Supply chain management is actually best in managing goods and services in an order; it is a methodical, strategic worldwide network. It is used to send products from one end of the company to another end that is a consumer (Burt, Petcavage, & Pinkerton, 2011).

## Introduction

Its process includes managing, storage and movement of raw material from producer to distributor than the retailer and finally to the end consumers through a flow of information, physical distribution, and cash. In other words, all parties are involved whether it be directly or indirectly to carry out the customer's requirements (Cecere, 2014).

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In the supply chain, customers are extremely an integral part of the process because without them there would be no process and no business so the processes of making products and services are designed according to the preferences of the customers for getting profits with minimum cost possible for making the services and products. In the supply chain process there are mostly five parties involved that are customers, suppliers, distributors, manufacturers and retailers sometimes warehouses, transporters and customers themselves are also included in the process. However, in some cases, not all the parties are involved in all supply chain process (Chen, Drezner, Ryan, & Simchi-Levi, 2000).

The figure (Appendix- What is supply chain management) illustrates the very basic supply chain with three entities & four flows; a producer, one supplier and on another hand one customer. There are four basic flows are connecting the supply chain management entities together. Such flows are normally the flow of physical materials. There are services from supplier to the intermediate entities to convert them from consumer to supply it to the final customer. The next stage is then the customer pays the cash that will be ultimately given to the raw material supplier and thus the flow of information will be passed through along the chain.

The three entities in this figure were; the supplier, the producer, and the consumer;

The supplier can be the provider of the goods and services or he can be the seller with whom the buyer does business. The supplier provides the raw material, energy, services, a component with which the products and services are made. These could include the items as diverse as such as sugarcane, industrial metals, electric wiring, fabric or transportation services, the producer then receive services, materials, supplies, energy and component for using creating finished products. The producer provides then gives the professional, government and educational services. The customer (retailer, wholesaler, distributor, end user) then receives the shipment of finished products to deliver it to the end customer or the consumer (Choi & Cheng, 2011).

Supply chain management structure can be simple and complex and it can be simple and complex at the same time, dependent on the environment of the business. The main aim of the supply chain is to produce the Excellency and improve the working efficiency through the steady flow of supply no matter whether it is a product or service firm and it should be good enough to reduce the cost of their supply chain. Therefore, care should be done when implementing the supply chain program into your business because even a small improvement in the supply chain process can lead to profitability (Fabbe-Costes & Jahre, 2008).

## Strategies of a supply chain

The supply chain has also developed its strategies, which are reactive, stable and proficient reactive; the steady supply chain strategy is focused on chains that are focused on execution, efficiencies and cost performance in which you need technology and real-time information. The instance of a stable supply chain strategy is a salt manufacturer with commodity oriented process, new scale production and dedicated capital assets (Godsell, 2011).

A reactive strategy works well when a chain acts to fulfill demand from trade partner sales and marketing strategies. An example of the reactive supply chain strategy would be the manufacturer of sports team apparel for the fans competing rivals in the world championship tournament. When a team makes it to the new round, all products are needed for the round. However, when a team loses,

demand for apparel decreases. However, with an efficient reactive supply chain strategy, it focuses on efficiency and cost management on the total delivery of finished goods. So the example of efficient reactive strategy will be a Supermarket chain where the shops, distribution centers, third-party logistics providers, manufacturers cooperate to replace what is sold in the shop within less than 24 hours (Harrison, Lee, & Neale, 2005).

As one previously discussed that, there are 4 flows in the supply chain. Those flows are; information flow, primary product flow, primary cash flow and reverse product flow. Information flow includes invoices, rules, and regulations, receipts, order, sales literature, specifications. Primary cash flow includes payments for products, supplies etc. Primary product flow includes materials, components, supplies, services, energy, finished products and the reverse product flow includes returns for repair, replacement, recycling, disposal etc (Lewis, 2013).

### **Objective of a supply chain**

The major aim of the supply chain management is increasing and producing the value of the company. The customers' expectations met by the products and service of a company are prove that your supply chain is effective and how much effort you have put in making the quality product. In addition, the value of a product is strongly correlated with how much profit it generates with the minimum possible cost. So if the profit of the supply chain is high proves that the supply chain is successful (John, 2012).

For example, dell company which sells its computers to the customers receives \$2000 from a customer, and the cost which incurs in making and delivering a computer during the supply chain process includes transportation, information, storage cost etc. so the profit is calculated by calculating the difference between the revenue of \$2000 and the sum of all the cost. Therefore, the thing, which should be kept in mind is supply chain profitability should be shared across stages of a supply chain (Zhang & Huang, 2012).

In addition, the profit that is generated through supply chain management, it should be measured by total supply chain profitability that is not by an individual stage. For value supply chain, these things should be kept in mind:-

- The supply chain should be effective enough that it will generate the value of the product of the company
- Different sources of cost and revenue should be searched upon and the best option should be selected from the alternatives

- Must help in rationalizing the supplier
- The product should be made in such a way that it should stand out from the crowd and the customers should demand your product making it visible to yourself also.
- Quality of the products or services should be reviewed time by time and check if there is any improvement needed must be provided
- The supply chain should be effective enough that it will also help in reducing the cost of the transportation and warehouse
- The width and depth of the distribution should be enhanced

The supply chain process should be supported by the product life cycle.

### **Process view of a supply chain management**

A supply chain is a process and a flow that works in order between and within the different phases of a supply chain so that a company can fulfill the demands of a customer. Two methods are used in a supply chain to view how the processes are performed these are-

- Cycle view
- Push and pull view

### **Cycle view of Supply chains process**

The customer can be the real customer or the retailers and the customer order cycle starts when customer interface and this process involves directly receiving and satisfying customer's order. Usually customer place order and his specification of the products to the retailer site and this process revolve fulfilling the customer's demand. The customer and the retailer's interaction begin with the customer placing an order to the retailer site and ends at the customer receiving the order. There are further processes involved in the customer order cycles these are

- Arrival of Customer
- Customer order entity
- Customer order fulfillment
- Customer order receiving

### **Arrival of Customer**

Customer arrival means the arrival of a customer to the market to make a purchase of his or her choice. It is the first success of any business that if it is getting enough customers for his or her product so the effort should be made in making the quality product. The only reason behind the exercise is to transform the customer arrival into

a customer purchase. A customer can arrive through different means at the marketplace as he can walk into a supermarket for purchases, can call a mail order and he can use a website. Therefore, you should use all possible means for welcoming customers so that the entire door is open for the arrival of customers (Martin, 2014).

The main effort should be put according to the supply chain perspective. It is the arrival of a customer and the agenda is to make possible contact between a product and a customer and in the telemarketing center, the customers should not have to wait for too long for their orders and the telesales representative can answer customers' queries in a way, which will turn into customer orders. In addition, the benefit of having a website will be that customers can search and quickly view products that may interest them. All these things should be done for inviting customers (Martin, 2014).

### **Customer order entry**

In this phase, a crucial decision is finalized that the customer arrival successfully turns into a customer order. Customers are informing retailers that they like the product and want to purchase it. In the store markets, customer loads all items that they mean to purchase onto their carts. The main aim of order entry process is to make certain that the order entry is there with the fast pace. It is fast, correct and informed to all other supply chain processes that are affected by it (Jr, 2003).

### **Customer order fulfillment**

In this stage, after the customer order entry took place, the next phase is to fulfill the customer order by sending the customer's order to him. At the supermarket this method is simply performed by customer purchasing the item from the retailer, However at the mail order when a customer places the order, this process includes getting the order from the inventory, packaging it and shipping it to the customers and all the information is kept up to date. Therefore, the product is delivered to the customer at the time with the minimum cost (Seuring, Müller, Goldbach, & Schneidewind, 2003).

### **Customer receiving**

In this phase, the customer finally gets his order and the payment is made to the seller with the ownership transferring from the seller to the customers. All the information is updated regarding the purchases. When a customer purchases the product at the supermarket, he receives the product at the checkout counter but when he orders through the mail, he receives his order and ultimately it happened as the product approach the customer (Hwang & Min, 2015).

## **Replenishment Cycle**

In the replenishment cycle stage, mostly, there are many retailers exactly reacted as a customer; the stage is customer order entry according to main features. Distributor and retailer both are involved in replenishment cycle in integrated form. This cycle is made to replenish retailer's inventory so that the future demands could be met. Whenever an inventory or a supermarket is running out of stock as per its products then the replenishment cycle may be needed to refill inventories at the retailer at the lowest amount of cost so that all the products that are needed should be available at the market. There are four processes of replenishment cycle (Zhang & Huang, 2012). These are

- Retail order trigger
- Retail order receiving
- Retail order fulfillment
- Retail order Inventory

### **Retail order trigger**

The main purpose of retail order trigger is to maximize profit because when the customer purchases an item, replenishment of that product is needed in order to meet the needs of the future and by replenishing the product time-by-time economies of scales will be achieved. There will be no shortage of product and balance will be achieved in the availability of the product (globalreporting.org, 2013).

### **Retail order receiving**

When the customer receives his replenishment order, he must receive it and update all the information from the order placement to the flow of funds from the distributor to the retailer and must update and display all the inventory records.

### **Retail order fulfillment**

This process is also similar to the customer order process in which the retailers order are fulfilled by the distributor. But the order of a customer in comparison to the order of a retailer's replenishment order is very small because the replenishment order is very much large. The reason for fulfilling the retailer order too fast is to minimize the cost which could have occurred if the order of a customer wouldn't have been fulfilled.

### **Retail order inventory**

The stage is actually identical to customer order entry, but now, the retailer who places an order of inventory to the distributor through different means whether it being manually or electronically.

## **Manufacturing Cycle**

In this process, the main parties that are involved are distributors with the manufacturer and/or retailers with manufacturers. In addition, includes replenishing distributor's inventory. This process involves-

- Scheduling the production houses
- Maintaining the manufacturing and shipping placement
- Orders that arrive from the distributor, retailer or customers and the
- Orders receiving at the customer, distributor, and retailer, these are described in details

### **Order arrival**

This manufacturer order arrival is identical to order arrival perspective in no time. In this process, distributors and warehouse set proper replenishment time then convey it to the manufacturer. While it may also happen, customers and the retailers need replenishment and order it directly from the manufacturer. Although, in some cases, there are manufacturers produces to stock a finished product warehouse (Choi & Cheng, 2011).

### **Production scheduling**

In the production scheduling process, the producers allocate orders into the production plan, which they plan about the quantity and quality of the products that should be decided based on the orders and requirements. The main purpose of this stage is to decide how to maximize orders and profits while keeping the cost minimum.

### **Manufacturing and Shipping**

In this phase of manufacturing and shipping, the manufacturer produces the product according to the schedule of the production and in the phase of shipment, the product is shipped to its promised customers according to the promised due date with keeping the quality high and low cost. The customer in this phase could be the retailer or the producer etc

### **Receiving**

The products are received by its customers in this phase of the cycle, the inventories are recorded, updated, and the other process is updated.

### **Procurement Cycle**

The interface of manufacturer/supplier is necessary for the stage to occur. It included all processes in which it is being insured the mobilization of materials from the availability of manufacturing until the scheduling perspective. The

order is placed by the manufacturer to the suppliers for the replenishment of inventories. The above-mentioned entire profitable relationship is effective to the distributor along with the manufacturer with the only difference. Orders are initiated through uncertain customer's demands by the retailers- distributors while the orders of the component can be best with material scheduling without any issue in supply those products that show how it goes with the production. However, the orders of the component decide mainly through schedules of the productions and it is important that the supplier should integrate with the manufacturing perspective by the manufacturer (Ferguson & Souza, 2010).

### **Push and Pull view of the supplier (Appendix)**

It has been discussed earlier that all the process of the supply chain falls into two processes. The first one was the cycle view for modern supply chain process. Now, this one is the push and pulls view of supply chain process highly productive against many perspectives of tactful supply chain process. These supply chain processes are actually believed to give the best as supply chain management struggles. In the pull process of supply chain processes, the order is implemented according to the demand of the customers. While in the push process, the order is executed according to the anticipation of the orders of the customers. In other words in the pull process execution, the demand of the customer is known but in the implementation of the push process demand of the customers (Fabbe-Costes & Jahre, 2008).

It is actually not known and is forecasted in any perspective immediately in supply things from one chain to another. Pull process is also known as the hasty process because a response is made according to the customer demand while the push process uses the proactive strategy as they respond to the forecasted demand and not to the actual demand. In addition, this push/pull strategy separates push process from the pull process in a supply chain. It is useful in making a strategic decision that may affect the decision of supply chain in no time. Moreover, the view forces actual perspectives that are globalized paradigm with perfect combination in no time bounded way. These functions are related to the customer order. One example of a push and a pull process can be described as let us take an example of a Dell supply chain company (Lewis, 2013).

The customer, order, and manufacturing cycle are involved in the pull process that is not so much difficult to judge. The only reason behind it is the functional approach that how they know that they are done at last stage and being initiated by the arrival of customers. These factors are known without any hurdle with supply chain issues.

## Conclusion

In the end, one can say that the whole requirement being given towards the whole perspective while dealing without any intention towards the quality process. Dell as an example is best in showing the many processes going on the Dell view. Well, the inventory is replenished in expectation of customer's demand that is core way to deal with the customer order. Whereas all the process actually involved in the procurement cycle for Dell are push process from one step to the last step, because they are done according to the demands of the customers and are forecasted. Thus, this process is break up into push and pulls process.

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