

Retail Logistics

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Retail Logistics

- Retailing and logistics are concerned with product availability
- Logistics is viewed as the competent which links an enterprise with its consumers and suppliers.
- Philip Kotler (2001) defines logistics as “planning, implementing and controlling the physical flows of materials and final goods from point of origin to point of use to meet customer’s need at a profit”.
- Information from and about customers flows through the enterprise in the form of sales activity, forecast and orders. This information is thus translated into manufacturing and purchasing plans.
- As the product and materials are procured, value addition takes place along with the inventory flow that ultimately results in transfer of ownership of finished products to customers.

Retail Logistics

- The process of logistics can be viewed in terms of two inter-related efforts, inventory flow and information flow
- In order to make products available, retailers have to manage their logistics in terms of product movement and demand management.
- Retailers need to know what is selling through their stores and their websites, anticipate and react quickly to changes in demand. At the same time they need to be able to move less demand-volatile (having unpredictable demand) products in an efficient and cost-effective manner.
- Logistics is the aspect of supply chain management that refers to the planning, implementation, and control of the efficient flow and storage of goods, services, and related information from the point of origin to the point of consumption to meet customers' needs.

Retail Logistics

The logistics management task is concerned with managing the components of the 'logistics mix'. The components are:

i. Storage Facilities: Retailers manage the warehouse or stock room facilities to enable them to keep stock in anticipation of, or to react to, demand for products.

ii. Inventory: All retailers hold stock to some extent. He should understand the amount of stock or inventory (finished products and/or component parts) that has to be held for each product and the location of this stock to meet demand changes.

iii. Transportation: Most products have to be transported in some way at some stage from production to consumption. Retailers therefore have to manage a transport operation that might involve different forms of transport, different sizes of containers and vehicles and the scheduling and availability of drivers and vehicles.

Retail Logistics

iv. Unitization and Packaging: Consumers generally buy products in small quantities. They sometimes make purchase decisions based on product presentation and packaging.

Retailers are concerned to develop products that are easy to handle in logistics terms, do not cost too much to package or handle, yet retain their selling ability on the shelves.

v. Communications: In order to get products to where retailers need them, it is necessary to have information, not only about demand and supply, but also about volumes, stock, prices and movements.

Retailers have thus become increasingly concerned with being able to capture data at appropriate points in the system and to use that information to have a more efficient and effective logistics operation.

Supply Chain Management (SCM)

- Supply Chain Management (SCM) involves the management of flow of goods and services and includes all processes that transform the raw material into final products. It involves active streamlining of a business' supply side activities.
- According to the Council of SCM Professionals: "SCM encompasses the planning and controlling of all processes involved in procurement, conversion, transportation and distribution across a supply chain. SCM includes coordination and collaboration between partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, SCM integrates supply and demand management within and between companies in order to serve the needs of end-customer".
- Enhanced supply chain can increase satisfaction level of customers and hugely improve manufacturing operations.

Strategic Advantage through Efficient SCM

I. Competitive Advantage

- Supply chain management and information systems have become important tools for achieving a sustainable competitive advantage.
- Supply chain management is a set of activities and techniques firms employ to efficiently and effectively manage the flow of merchandise from the vendors to the retailer's customers. These activities ensure that the customers are able to purchase merchandise in the desired quantities at a preferred location and appropriate time.
- Efficient supply chain management is important to retailers because it can provide a strategic advantage that increases product availability and an inventory turnover that produces a higher return on assets.
- Developing more efficient methods of distributing merchandise creates an opportunity to reduce costs and prices and ensure that the right merchandise is available when and where customers want it.

Strategic Advantage through Efficient SCM

- A critical factor in Walmart's success is its information and SCM systems. Even though competitors recognize this advantage, they have difficulty achieving the same level of performance as Walmart's systems because:
 1. Walmart has made substantial initial and continuing investments in developing its systems over a long period of time.
 2. It has the scale economies.
 3. The supply chain activities take place within the firm and are not easily known and copied by competitors.
 4. The effective use of these systems requires top management support and the coordinated effort of employees and functional areas throughout the company.

Walmart's systems are well regarded. Bharti Enterprises in India has a joint venture with Walmart to wholesale food and other products to small Indian retailers

Strategic Advantage through Efficient SCM

II. Product Availability

- Efficient SCM provides benefits to retailers and their customers that translate into greater sales, lower costs, higher inventory turnover, and lower markdowns for retailers. The benefits are:
 - (1) Fewer Stock outs:** Stock out occurs when an SKU that a customer wants is not available. It has significant short and long term effects on sales and profits.
 - (2) Tailored Assortments:** It is ensured that the right merchandise is available at the right store. Most national retail chains adjust assortments in their stores on the basis of climate, fashion, characteristics of customers in each store's local market etc.

Strategic Advantage through Efficient SCM

III. Higher Return on Assets

- An efficient supply chain and information system improves the ROA as it increases sales and net profit margins, without increasing inventory.
- Net sales increase because customers are offered more attractive, tailored assortments that are in stock. Net profit margin is improved by increasing the gross margin and lowering expenses.
- An information system that coordinates buyers and vendors allows retailers to obtain the merchandise at a lower cost, thus improving their gross margins.
- Retailers also can lower their operating expenses by coordinating deliveries, thus reducing transportation expenses.
- Moreover, merchandise can be received, prepared for sale, and shipped to stores with minimum handling, further reducing expenses.

Example: Amazon is a US e-commerce and cloud computing company. Their headquarters are based in Seattle, Washington and they are the largest internet-based retailer in the United States. Amazon was one of the first companies that started selling books online. Currently their range of products doesn't stop there; they also sell music, videogames, shoes, clothing, luggage and many other accessories. Amazon offers about everything you can think of and their variety in offers and products along with their customer driven shopping and recommendations is a hit with customers. One of the reasons why Amazon can have such a wide spectrum of products is the fact that they are not limited by physical spaces, since they don't have actual stores. Their supply chain goes from the lowest levels of inventory, through the logistics of the order itself all the way up to an outstanding distribution chain of their products in an international scale. Amazon can currently ship close to 10 million different products. This diversity gives it an edge against competitors and makes it a perfect example of what efficient supply chain management can accomplish.

(Source: <https://davidkigerinfo.wordpress.com/2016/03/08/5-examples-of-some-of-the-best-supply-chain-management>)

Push and Pull Supply Chain

The supply chain decision that retailers make for determining whether merchandise will be pushed from the distribution centers to the stores or pulled from the distribution centers to the stores:

- ❖ **Push Supply Chain:** A lesser sophisticated approach, in which merchandise is allocated to stores on the basis of forecasted demand. Once a forecast is developed, specified quantities of merchandise are shipped (pushed) to distribution centers and stores at predetermined time intervals.
- ❖ **Pull Supply Chain:** A supply chain in which requests for merchandise are generated at the store level on the basis of sales data captured by POS terminals. Basically, in this type of supply chain, the demand for an item pulls it through the supply chain.
- There is less likelihood of being overstocked or out of stock because the store requests for merchandise are based on customer demand.

Push and Pull Supply Chain

Pull approach, though more desirable, has limitations:

- It requires a more costly and sophisticated information system to support it.
- For some merchandise, retailers do not have the flexibility to adjust inventory levels on the basis of demand. For example, commitments must be made months in advance for fashion and private-label apparel. Because these commitments cannot be easily changed, the merchandise has to be allocated to the stores at the time the orders are formulated.
- Push supply chains are efficient for merchandise that has steady, predictable demand, such as milk and eggs, bath towels etc.

A pull approach increases inventory turnover and is more responsive to changes in customer demand, and it becomes even more efficient than a push approach when demand is uncertain and difficult to forecast.

Because both pull and push supply chains have their advantages, most retailers use a combination of these approaches.

Direct Store Delivery

- The decision to use Direct store delivery (DSD) or distribution centers depends on the characteristics of the merchandise and the nature of demand. To determine which distribution system is more efficient, retailers balance the total cost of each alternative and the impact of the alternatives on customer satisfaction.
- DSD is a method of delivering merchandise to stores in which vendors distribute merchandise directly to the stores.
- The vendors offering DSD also undertake additional services such as merchandising (arranging merchandise on racks or shelves) and information gathering about inventory levels.
- As part of the DSD process, vendor employees may visit the retailer's store several times a week and assess stock levels and backroom inventory to determine the right order amount, replenish the order, and display products based on local preferences.

Distribution Centre

The Distribution Center performs activities such as:

- 1. Coordinating Inbound Transportation:** Inbound logistics refers to the transport, storage and delivery of goods coming into a business.
- 2. Receiving and Checking:** Receiving is the process of recording the receipt of merchandise as it arrives at a distribution center. Checking is the process of going through the goods on receipt to make sure that they arrived undamaged and that the merchandise ordered is received properly.
- 3. Storing and Cross-docking:** Once the merchandise is received and checked, it is either stored or cross-docked. Cross docking is a logistics procedure where products from a supplier or manufacturing plant are distributed directly to a customer or retail chain with very less or no handling or storage time.
- 4. Getting Merchandise “floor-ready”:** Merchandise has to be placed on the selling floor, with ticketing and marking (affixing price and identification labels to the merchandise).

Distribution Centre

5. Preparing Shipment to Store: The computer system in the distribution center generates a list of items to be shipped to each store on each day. For each item, a pick ticket and shipping label is generated.

- Pick ticket is a document or display on a screen that indicates how much of each item to get from specific storage areas.
- Shipping label indicates the store's destination and is attached to the carton.

6. Coordinating Outbound Transportation: Outbound logistics refers to the transport, storage and delivery of goods going out of a business.

Distribution Center versus Direct Store Delivery

- Distribution centers lower inventory levels because the amount of backup stock needed in a centralized distribution center is less than the amount of backup stock needed in all the stores served by the center. Since the stores get frequent deliveries from the distribution center, they need to carry relatively less extra merchandise as backup stock. Thus, distribution centers enable the retailer to carry less merchandise in the individual stores, and this results in lower inventory investments system wide.
- Retail store space is much more expensive than space at a distribution center.
- Distribution centers are usually located in remote areas near highways, while stores are located in more expensive areas near customers' homes.
- Distribution centers are more efficient than direct store delivery when retailers need to prepare merchandise for sale, such as affixing price labels. When preparation is done in a center, several employees can be trained to perform the activity more efficiently.

Distribution Center versus Direct Store Delivery

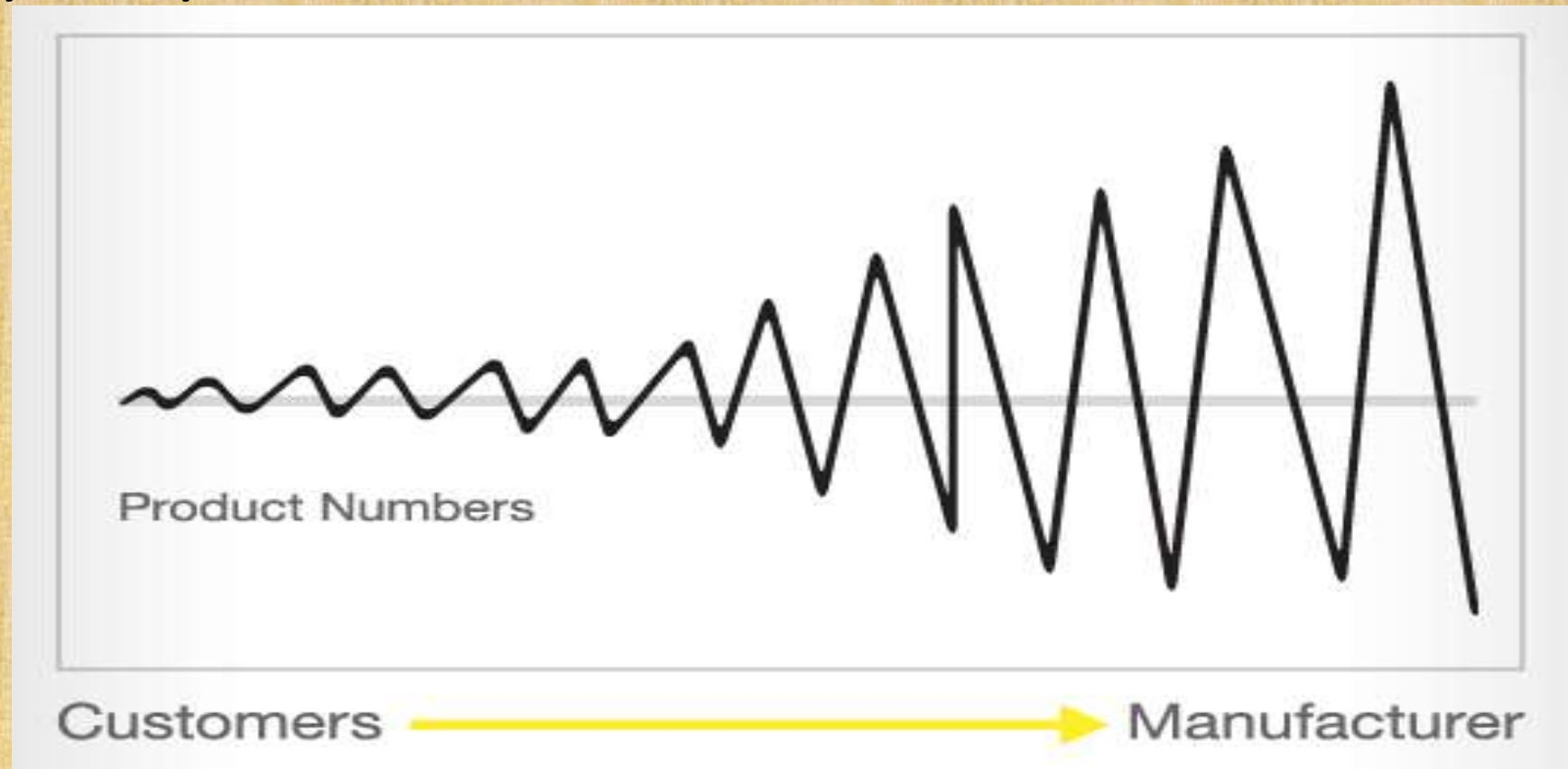
- Distribution centers, however, are not appropriate for all retailers.
- If retailers have only a few outlets, the expense of a distribution center is unjustified.
- Direct store delivery gets merchandise to the stores faster and thus is used for fragile items and for perishable goods like snacks, bread, milk, ice cream etc.
- Some vendors provide direct store delivery for retailers to ensure that their products are on the store's shelves, properly displayed, and fresh. For example, employees delivering Frito-Lay snacks directly to supermarkets replace products that have been on the shelf too long and are stale, replenish products that have been sold, and arrange products so that they are neatly displayed

Bull – Whip Effect

- Supply chain efficiency improves when vendors and retailers share information and work together.
- By collaborating, vendors can plan their purchases of raw materials and their production processes to match the needs of retailer's merchandise.
- Thus, vendors can make sure that the merchandise is available “just in time,” when the retailer needs it, without having to stock excessive inventory in the vendor's warehouse or the retailer's distribution centers or stores.
- When retailers and vendors do not coordinate their supply chain management activities, excess inventory builds up in the system.
- This buildup of inventory in an uncoordinated channel is called the bullwhip effect.

Bull – Whip Effect

The bullwhip effect was first discovered by Procter & Gamble, which saw that its orders from retailers for Pampers disposable diapers were shaped like a bullwhip, with wide swings in quantity ordered, even though retail sales were relatively constant. It was found that the retailers were ordering, on average, more inventory than they really needed.



Causes of Bull – Whip Effect

- **Delays in Transmitting Orders and Receiving Merchandise:** Sometimes the retailers may forecast sales accurately, but still there may be delays in getting orders to the vendor and receiving those orders from the vendor. In an uncoordinated supply chain, retailers might not know how fast they can get the merchandise, and thus they may order excess to prevent stockouts.
- **Over-reacting to Shortages:** When retailers find it difficult to get the merchandise they want, they order more than they need to prevent stockouts, hoping they will receive a larger partial shipment. On an average, the vendor ships more than the retailer really needs.
- **Ordering in Batches:** Rather than generating a number of small orders, retailers wait and place larger orders to achieve economies of scale (reduce order processing and transportation costs and take advantage of quantity discounts).

Reverse Logistics

- The Logistics system usually move products to customers. At times the products move backward through the supply chain, means from the point of consumption to the point of origin, this process is known as Reverse Logistics.
- Thus Reverse logistics (RL) is the process of disposing of merchandise returned by customers and/or stores.
- Rogers and Tibben-Lembke, define RL as: “The process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal”
- The reverse-logistics system processes merchandise that is returned because it is damaged, has been recalled, is no longer sold to customers because its selling season has ended or the product has been discontinued, or has excessive inventory.

Reverse Logistics

- The returned merchandise might involve returns from a customer to a retail store, from a retail store to a distribution center, or from a distribution center to a vendor
- The returned items may be damaged or lack the original shipping carton and thus require special handling.
- Transportation costs are high because items are shipped back in small quantities.
- Reverse logistics is sometimes called 'aftermarket supply chain', 'aftermarket logistics' or 'retrologistics'.

References

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