

Returns Management in Supply Chain - Reverse Logistics

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Abstract

Enterprises around the world are employing reverse supply chain practices to overcome regulations and generate profit making opportunities. Due to rapid technological advancements, product life cycles are becoming shorter than ever. Further, due to increased global competition, tighter environmental regulations, many companies are forced to recall products to rectify defects, upgrade the products, or re cycle them. This has opened up opportunities for additional profits and improved corporate image. In the past, companies had no proper systems and processes to deal with products that were returned by customers. Though Returns Policies were in place in some cases, but tracking and managing returns were done in a haphazard manner. Very often, the defective merchandise was used as landfill which was costly and at the same time, not safe for the environment. There was need to manage this operation effectively at a world class level to reduce costs, improve customer service and even obtain revenue. This highlights the importance of returns management in supply chain. The inherent complexity of reverse supply chains due to the uncertainties associated with the quantity, quality, and timing of returns makes returns management all the more complicated. Returns management capability of a firm also plays a major role in providing a competitive edge to the firm. There may be environmental issues associated with the way a firm handles its returns. Hence managing products returned is also a major part of Supply Chain Management (SCM).

Returns Management has not been given the importance in SCM that it deserves. It has received less attention compared to other functions like manufacturing, purchasing etc. since firms feel that their prime responsibility is to put the product in the hands of the customer. However, with the increase in varieties of products, increased competition and change in customer attitudes, firms, today, are saddled with large volumes of returns. This has forced companies to focus on returns management – the physical handling and disposition of returns. Besides, it has also become a profit-generating avenue for many retailers and manufacturers.

Key words :

Reverse supply chains --- product life cycle --- environmental regulations --- global competition --- Returns Policies --- Returns Management --- Reverse Logistics --- Packaging return --- Product Recall

Reverse Supply Chain -- Reverse Logistics

A Reverse Supply Chain represents the products collected from consumers and businesses and returned to manufacturers, often via Distributors. In simple terms, we can define Reverse Logistics as the reverse process of logistics. Generally, businesses have viewed reverse logistics as a process that deals with re-cycling or disposal of products. But reverse logistics is defined in various ways by different players in the supply chain (SC).

Various definitions of reverse logistics

A retailer defines reverse logistics as “way to get product that has been returned by a consumer back to the vendor”. Manufacturers view it as a “way of receiving defective products or re-usable containers back from the user.

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Council of Logistics Management defines reverse logistics 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”. Industries have started to realise that the reverse logistics can be used to gain competitive advantage.

Reverse Logistics can be discussed under three heads:

- Packaging return and re-use
- Product recall
- Returns Management

Packaging Return and Re-use

Packaging is of two types:

- Packaging that is used to display the product and to show product information to the consumers
- Packaging used to transport consignments from manufacturers to the distributors and retailers or from suppliers to manufacturers

Packaging waste generated from both the above types is of nearly equal measure. Government has tightened the rules and regulations regarding packaging waste disposal. Hence companies have taken steps to reduce the packaging waste and also explore opportunities for re-use and thus reduce packaging waste. As regards consumer packaging, firms have less control and hence less scope for re-use. On transport packaging, firms have more control and more scope for re-use. Transport re-usable packaging consists of boxes, pallets, totes, and containers that are used to ship products from one place to another. They are designed to permit re-use over a long period and the waste generated is minimal.

Another way to minimise transport packaging waste is pallet pooling, in which the pallet renting service is provided by a third party pallet pooling service provider. The service provider rents the pallets to firms and collects empty pallets from the supply chain partners and checks them for re-usability. They are repaired if required and made ready for next usage.

Savings can be achieved from transport packaging re-use due to reduced purchase and disposal costs. However, certain factors have to be considered when using re-usable packaging. The empty packaging containers need to be returned to the sender which involves transportation costs. Re-usable packaging is suitable for firms that have the network to collect empty containers and have them returned to its facilities in a short time and with low costs. They are suitable for firms that constantly move products in large volumes and for firms that practice milk runs to distribute goods to consumers or to collect components from suppliers. In such cases transportation costs are less and hence using re-usable containers help the firm to save costs.

Product Recall

This is another important element in reverse logistics process, particularly for automobile companies where the recall of vehicles for repair or replacement is common process. Some of the reasons for product recall are:

- Product may be defective
- There may be design flaws
- Investigation or findings by Government or other agencies or by the firm itself
- There may be tampering by outside firms

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If a product recall is not managed properly, it may have long-term implications for the firm. Product recall needs to be handled properly and completed quickly so that the damage or potential damage can be contained in a short period of time thus restoring the product's as well as the firm's image. Sometimes the effective handling of the recall can boost the public image of the company. Some examples of major product recalls in the recent past are:

- In 1982, Johnson & Johnson recalled Tylenol which was contaminated with cyanide leading to the death of seven people.
- In 2000, Firestone recalled tires installed on Ford Explorer in USA due to complaints of fatal flaws resulting in rollover accidents
- In 2002, General Motors recalled 1.9 million vehicles due to likely steering column problem
- In 2002, Black & Decker recalled 2.1 million toasters due to potential fire & burn hazards from defective heating elements

The process of product recall involves the following steps:

- Firm constitutes a dedicated cross-functional team to deal with product recall and oversee the smooth functioning of the process
- The firm decides the course of action depending upon impact of the defect
- If the defect poses risk to consumer safety or health, then the recall process needs to be expedited.
- Firm has to decide whether to replace the defective part or the product itself.
- Next step is to transmit the recall information to retailers, service centers, and end consumers
- Final step is the actual recovery of the product. the product needs to be completely removed from circulation in the market place

Returns Management

Returns management is a broad concept which provides informational support for the entire process, arrangements for transportation, and physical handling. It can be defined as the management of returns across the supply chain that includes returns approval, transportation coordination, tracking the returns, receipt and disposition of the return and crediting the customer account. It is a continuous and more complex process as it involves many steps and players in the SC. The complexity is due to volumes and volatility in the returns from customers and SC partners. Returns can originate from customers as well as SC partners and can be of various types.

What are Returns?

Returns can be categorised in the following manner:

- Close-outs: First quality products that the retailer wants to stop carrying in its stores. These can be sold to outside firms
- Buy-outs: a manufacturer may buy-out competitor's products from the retailer to gain shelf space.
- Seasonal items: left over items at the end of the season.
- Surplus: these exist due to inaccurate sales forecast or the dealer has bought in excess to take advantage of special promotions.
- Defectives: these are replaced with new items or compensated for by the manufacturer

- Salvage: items that are used or damaged either in transit or at retailer/customer location these are disposed to salvage the value of a product.

Need for Returns Management

Reasons for practicing Returns Management are:

- **Legislative Factors**

There is increasing concern among consumers, government, and corporate for environmental matters and sustainable development. Governments have passed stringent legislation regarding disposal of residual products and discarded products. This has necessitated returns management programs by companies.

- **Economic Factors**

Proper Returns management not only reduces costs but also helps firms in recovering investment and generating revenue. Firms can recover investment through proper recycling and re-use of returned products.

- **Competitive Factors**

Proper returns management gives the firm a competitive edge in the market place. A customer-friendly returns policy, with faster and easy returns processing increases customer satisfaction, thus giving a competitive advantage

Returns Management Processes

These are classified under two heads – strategic returns process and operational returns process.

Strategic Returns Process

Following steps are involved:

- Review of environmental and legal compliance guidelines
- Developing return avoidance, gatekeeping and disposition guidelines
- Developing returns network and flow options
- Developing credit rules governing the returns processes

Operational Returns Process

Following steps are involved:

- Receiving return request
- Determining routing
- Receiving returns
- Selecting the disposition option
- Crediting consumer/supplier
- Analysing returns and measuring performance

Disposition Options

- Direct Re-use
- Product Recovery Management
 - Repair
 - Refurbish
 - Remanufacture
 - Cannibalize
 - Recycle

Waste Management

If no value can be recovered from the returned products or components, then these are either incinerated or sent to land refill. There are costs involved with these processes. Stringent regulations often exist and heavy penalties are levied for violations. So the firm has to evaluate the costs and benefits before taking a decision.

Challenges in Returns Management

Some of the challenges which a firm may have to overcome in the returns process are:

- Retailer-Manufacturer Conflict
- Lack of Information
- Not understanding the Importance of Returns Management

Conclusion

The reverse logistics processes may cost a lot for the company. The implementation may be a risky affair as it involves financial and operational aspects which can affect the performance of the company in the long run. However, with the governments tightening up the regulatory measures, there are not many options. The question is not whether to go for it, but which framework to adopt.

Returns Management is a vital but often neglected area in SCM. There are challenges to be overcome to ensure compliance with various environmental and regulatory requirements and at the same time ensure that the process is not only cost-effective, but also generates revenue. This is particularly true in the manufacturing sector, particularly in the automotive sector where numerous components, assemblies and vehicles are involved in the returns management. Hence this will be a focus area in Supply Chain Management.

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