L I S

Best Practice Guide to Reverse Logistics

The processes associated with handling the return of orders and packaging from customers, better known as 'reverse logistics', is in many ways the neglected child in the extended family of the supply chain. For many companies the priorities lie in making sure goods get out, not on managing their return in an efficient manner.

The majority of companies do not properly understand the value of returns to their revenues, or to their reputation. Most are distracted by the fact that returns can be expensive and hard to administer.

All this has meant returns have traditionally been dealt with as exceptions within the normal operation of core supply chain processes and IT systems. However, as the desire to improve customer service intensifies, so reverse logistics has assumed ever-greater importance.

This best practice guide from LIS, one of the world's fastest growing supply chain execution companies, illustrates how changing market forces are driving reverse logistics up the supply chain agenda. It also examines how forward-thinking companies can rise to the challenges presented, both strategically and operationally.

E-commerce and the need for effective returns procedures

Many consumers and business customers are now being given 'quibble free' guarantees to return goods, often free of charge. This move illustrates the growing recognition that flexible returns procedures can operate as an effective sales incentive for customers. Nowhere is this more true than for online purchases.

The graphical limitations of a PC monitor means that it is often difficult to illustrate the detailed appearance of a product via the internet. Offering an effective and easy-to-use returns procedure can give consumers the confidence to make a purchase in the knowledge that they can send back any items that fall short of their expectations. Research firm Jupiter Communications recently estimated that 40 per cent of consumers would shop more online if they could return items more easily.

As it stands, many consumers buying online are already returning a high proportion of their purchases. Gartner Group estimates that the average online return rate is as high as 36 per cent. In addition to providing a vital incentive to boost sales, the reverse logistics strategy must therefore also make administration of these returned items as cost effective as possible. If the handling of growing volumes of returns is allowed to eat into revenues, the survival of business itself will be at stake.

Another issue on the horizon for online retailers is the new European Commission Distance Selling Directive. At its heart is the stipulation that anyone buying over the internet, or by telephone, fax, mail order (and any other means that isn't face-to-face), should be able to change their minds about their purchase up to seven working days after goods are received. No explanation for the rejection of the goods will be required. This is likely to enshrine in law a general market trend conferring greater flexibility to return items bought online compared to bricks-and-mortar purchases.

Other considerations

With so many companies clamouring to offer their products over the web, it is no surprise that e-commerce is one of the more high profile reasons motivating companies to introduce a reverse logistics strategy. However, there are many other factors, both commercial and regulatory, that are acting as a catalyst for the introduction of reverse logistics initiatives and increasing the investment in new software solutions.

- A raft of new EU regulations have been introduced to encourage the greater re-use of packaging materials. The underlying purpose of many of these statutes is environmental, the aim being to reduce the amount of packaging that is disposed after delivery. Aside from the legislative requirements, many companies are stepping up their packaging reclamation and reuse for economic reasons, recognising the cost benefits associated with limiting their expenditure on new packaging materials.

- The option to have old products picked up when new ones are delivered is being offered by a growing number of companies as part of their customer service initiatives. Old, unwanted goods are commonly regarded as a burden to customers but they can also have an economic value to forward thinking organisations selling replacement items. For example, white goods retailers will often remove old fridges when delivering new ones. The old fridge will then be delivered to third parties who recover CFC coolants in an environmentally sound manner and then typically recycle the rest of the components.

- More customers are demanding compliance with their inventory handling requirements, particularly in relation to the use of standard totes, containers, cages and pallets. This means that empty ones must be returned efficiently. Some may require cleaning or sterilisation and the reverse logistics strategy must be able to accommodate individual customer requirements.

- Once the option to return goods is given to an established customer base, reverse logistics transportation costs can be significantly reduced if empty vehicles pick up any returns immediately after they have made their deliveries. Flexible reverse logistics systems can also arrange for empty vehicles to collect from suppliers on their return journey.

- Reverse logistics can feed valuable data in to the marketing machine of a company, providing a good indication of which products are succeeding or failing. "The returned-goods aisle of a warehouse is a window to mistakes in engineering, sales, manufacturing, and distribution." (Source: John Fontanella, AMR Research, *The AMR Alert on Supply Chain Management*, May 1999)

- As a medium for supporting direct deliveries, the internet has led to a decline in the participation of sales intermediaries such as distributors and wholesalers. Many organisations seeking to exploit the attractive economies of direct delivery forget that they are losing partnerships with firms used to handling their product returns. Reverse Logistics strategies are being used to make up the lost ground.

Devising a reverse logistics strategy

Unfortunately, there is no one reverse logistics strategy that is ideally suited to all industries. This is largely because the frequency, number, and character of items returned will differ drastically from company to company. For example, the needs of an online book retailer delivering small items to a very large customer base will be markedly different from those of an engineering firm delivering heavy industrial components to a small number of regional suppliers.

The balance of disposition options can also vary significantly. Items can be routed for repair, refurbish, repackaging, remanufacture, reclamation of parts, upgrading, or recycling.

There are, however, common approaches that feature in most successful reverse logistics strategies, as well as in the solutions that need to be implemented to underpin them.

- None of the leading vendors of enterprise resource planning (ERP) applications have dedicated reverse logistics modules, although many provide basic functionality. Best-of-breed supply chain vendors offer greater breadth and depth of functionality, and crucially, the flexibility to accommodate the individual reverse logistics requirements of a broader range of customers.

- Organisations engaging in online retailing, or planning to do so, need to evaluate the transaction and supply chain capabilities of their e-commerce systems. The applications may have been designed to sell effectively into an online marketplace, but consideration should be given to how it will handle a potentially high return rate without incurring punitive costs or damaging customer service.

- Managers should consider whether their business model lends itself to the outsourcing of some or all elements of their reverse logistics process. On a technical level, they have the option to outsource the installation, maintenance and day-to-day running of reverse logistics IT applications through an application service provider (ASP) agreement. This can ensure they can run the system at an optimum from day one, as well as make the costs more predictable by reducing the capital outlay on new systems and hardware.

At a physical level, the collection, handling, and processing of returned items can be taken on by third party logistics (3PL) providers. Many such organisations are already well equipped to take on this role and invest in their own technologies on an ongoing basis. A 3PL firm will need to work alongside the user to understand the customer's requirements for returning items. They will then be able to receive returned goods directly, either for processing and restoring to inventory, or even for repackaging and selling on using their own channels.

- At an early stage the user should identify the high value and high demand items being returned so that they can be prioritised by their reverse logistics systems and processes.

The role of the WMS

The bulk of responsibility for tracking and managing returns will normally fall upon the user's warehouse management system (WMS).

> "WMS is the barrier reef of the reverse logistics process. It breaks the confused waves of customer returns down into pools of individual products, which can then be sorted, approved, categorized, and routed for disposition. WMS also keeps the process in control by ageing and allocating inventories and using its putaway routines to maintain good housekeeping and accounting of the goods.
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> Key functionality, or lack thereof, will mean the difference between a process in control, with structured flows and inventory integrity, or total chaos, which will preclude any attempt at turning the returns centre into anything more than a dumping ground for customer returns."
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> (Source: John Fontanella, AMR Research, The AMR Alert on Supply Chain Management, May 1999)

Any evaluation of the functionality of a WMS's reverse logistics module must be preceded by an analysis of the current and expected return rates of the user's customers. Seasonal factors can be expected to create peaks, as will diversification or extension of the existing product range.

Evaluating systems functionality

There are key elements of systems functionality that need to be present within the reverse logistics software module in order for the various processes to run smoothly.

- A reverse logistics module should allow the user or even the customer to allocate a condition code, determining the route the inventory must take, either before or as soon as the items arrive at the warehouse. The same functionality should also allow user-definable codes to be changed part way through the process. For example, the standard route may direct: 'inspect', 'repair', 'test' and then 'putaway'.

However, following inspection, the ‘repair’ stage may be deemed unnecessary and the system must then be flexible enough to direct the item to ‘test’.

- The WMS must direct the scanning of the items upon receipt to verify the correct items are about to be processed.
- Substandard inventory should be automatically routed to the supplier for collection when they next deliver.
- There should be full logging of the customer address from which the return was collected, along with contact names, phone numbers and e-mail addresses. Traceability should be supplemented by linking this data to the ongoing assessment of the item returned.
- The reverse logistics functionality should interface directly to the standard delivery data so that the collection of the old item or packaging material can take place at the time of the new delivery. Collections will then be scheduled to make most efficient use of the vehicles, minimising reverse logistics expenditure.
- If an agreement is in place for the supplier to collect defective items at the time of delivery, the WMS must pass these to the supplier and to the user’s own vehicle scheduling module.

Tailored functionality needed for returnable packaging:

- A tracking system will be required to monitor the amount and type of packaging material held by each customer.
- As packaging is returned by customers or by delivery drivers, it needs to be registered to accurately maintain the outstanding balance against each customer.

Customer service

Customers should ideally view reverse logistics as a natural extension of the organisation’s sales and customer service processes. For this reason, it must be possible for returns data to be accessed by customer service operatives, and that data should be acted upon immediately by the finance function. A customer needs to know that the return of a defective product is being processed effectively but often what they really want to know is when they are going to be reimbursed.

The customer will normally initiate a reverse logistics process by interacting with a customer-facing part of the company, such as a call centre, returns page on a website, or a salesperson. None of these are directly administered by supply chain managers and it is incumbent upon those initially devising the returns policy to ensure that data can be transferred effectively within the business.

The latest supply chain execution systems will automate this process by establishing a direct link from the supply chain to the finance function so, as soon as a returned product has been received and assessed, the action to refund is fed directly to the accountants. Crucially, the company will have to decide how it structures its product exchanges and re-issues, and then feed the data into the finance function accordingly.

The options here are replace, repair and return, or credit. Operationally this will all depend upon the individual customer service policy, the customer, and the age of the goods. Systems will need to be able to handle these in variable and possibly dynamic ways. For example do we re-issue to replace as we collect, or do we collect, inspect and then replace?

Conclusions

To lay the foundations of a successful reverse logistics strategy, companies must recognise that it is not solely a supply chain issue. Without the direct involvement of an organisation's customer service and finance functions, the whole process will become cumbersome and unresponsive. When the main beneficiary is improved customer service, this equals failure.

Many supply chain systems are ill equipped to initiate high levels of interaction with the rest of the business. This has given rise to the development of sophisticated supply chain execution systems that offer dedicated supply chain visibility and interaction applications. These allow companies to share data and management control with diverse parts of their organisation, empowering designated managers to streamline the administration of returns and make a tangible contribution to customer service and competitive differentiation.