



# PRACTICAL ASPECTS OF SUPPLY CHAIN MANAGEMENT IN SOME OF THE WORLD'S BEST PRACTICE DISTRIBUTION CENTRES

Bill Gobbe, winner of the 1995 LM International Study Award presents his second article.

Throughout my overseas study tour last October, I observed that management of the supply chain is seen as a critical strategic issue. In many US companies, this means a position at Vice President level.

### **Trends**

Most of the sites visited have been part of distribution centre consolidation, with the number of distribution centres run by each company reducing over the last three years or so.

One advantage of this consolidation has been a reduction in inventory, in that fewer sites have a stockholding of a particular product.

One of the most outstanding trends is the increase in treatment and velocity of product being returned from customers.

There is a strong movement, particularly in Europe, to hold manufacturers responsible for returning to nature the goods they have produced, and this applies to goods after the consumer has finished using them.

IBM Germany is required to take back personal computers after the customer has finished with them, while chemicals manufactured by Sandoz in Switzerland are being returned if the consumer wants to dispose of them.

In the USA companies are also increasing their recycling efforts.

AT&T has an area which houses partly cannibalised telephone switchboards, manyh components having been taken for spare parts as needed.

Hewlett Packard has policies for treating returned personal computers, a different policy applying to the components used in current models.

Various disassembly processes are being developed to cater for the increasing range of returned components.

The increasing interest in environmental concern is also affecting packaging. In Switzerland, packaging is becoming a critical factor in the consumer purchasing decision and companies are beginning to review packaging policies accordingly.

The need to discourage use of depleting land fill resources has prompted this interest.

In some instances, customers are leaving packaging material in the store, and simply taking the item home with them to avoid the high costs now of being charged to take rubbish away.

Another trend observed at many sites was the concept of 'a small company soul in a big company body'.

Companies are recognising the need for increased flexibility in the way they deal with customers.

They are seeing systems as critical in building this 'small company' flexibility into large 100,000 employee organisations. Looking at the customer's needs and developing systems to satisfy those needs, rather than customers being forced to fit in with the systems, are now serious priorities.

AT&T is delivering telephone switching mechanisms into high rise buildings in downtown San Francisco's steep narrow streets in a one hour time window. They are also using sophisticated padded packaging to help the product withstand the rugged treatment transport in China.

International Thomson has concentrated on providing specialist services to its categorised customer list. It has pioneered different service levels to the different sectors in its market, such as the 'Gold Line' priority service to academic book shops at the beginning of each semester.

## **Business Units**

A noticeable trend in many US-based companies is the move towards product or customer-based Business Units. These Business Units are becoming increasingly autonomous with total responsibility for revenue profit and inventory, and all processes in moving goods to customers.

Where central service facilities exist, this change is having a huge impact on the way they are managed and function. Sometimes considerable conflict is occurring as Business Units compete for service priority.

In many cases, the service facilities are being forced into competing with external contractors for business. The Hewlett Packard site had adapted its organisational structure to cater to this trend.

Besides the functional managers, nine Business Analysts report to the Distribution Centre Manager.

Each of these Business Analysts acts as an account manager, their sole responsibility being to keep one of the Business Units happy by ensuring complaints are followed up and unusual request met.

Monthly meetings are held. Hewlett Packard has its own aircraft fleet, including an hourly 'shuttle' Boeing jet service ferrying staff the half hour between Palo Alto, where many of the Business Units are located, and Sacramento Airport which is close to the Roseville manufacturing and distribution facility.

In other cases, logistics divisions have commissioned promotions using glossy brochures to 'sell' the services to the Business Units.

The Thomson Andover facility is two and a half hours south west of London, and regular trips take place up and down the motorway to the Business Units which are mostly in London.

This distribution centre also has a centralised Customer Service Division processing customer orders and fielding customer queries. This was not typical of companies seen on the tour. The more typical scenario is for the Business Units to have their own Customer Service Division or for it to be in a centralised facility with the computer system allocating the orders to the most appropriate distribution centre.

## **Suppliers**

Most distribution centres have scheduled receiving times for suppliers, with typically a four-hour delivery time window. Hewlett Packard is moving to delivery-based supplier payment, believing that time is money.

Therefore, delivery reliability should be reflected in payment. In some cases very detailed delivery instructions are given to suppliers with most companies providing barcode labels to the supplier to apply to the shipment packaging.

## **Competitors**

3M have experimented with a freight arrangement with one of its major competitors, Abbott Laboratories, to distribute some of its hospital products. The original purpose was for both companies to save on freight costs by consolidating deliveries to common customers. This was seen as innovative at

the time; however, the concept has not developed further there and I did not observe it elsewhere.

## **Outsourcing**

Most of the companies visited are outsourcing some aspect of the Supply Chain. The tasks being outsourced though are inconsistent across the companies. Local management has generally been involved in the decision to outsource a particular process. From observation, outsourcing was decided upon to allow management to concentrate on processes of a critical nature to the company's mission, rather than to cut costs or improve customer service.

The Xerox site has outsourced its Information Technology department, although some staff are in the same offices as before, dealing with the same internal customers, and eating at the same canteen as they did when they were in-house.

Their employer though has changed from Xerox to an outsourced IT provider which has similar contracts with other companies.

3M reduces reliance on outsourcing its distribution function, bringing it back inside to give greater control over inventory and increase customer satisfaction through in-house product knowledge. An outsourced facility though provides returns processing. All customers' returns are sent directly to this facility.

Chemicals and dangerous products are recycled or disposed of, computer transactions entered and saleable goods returned to the distribution centre located close by.

In Hewlett Packard's case, the 'off-the-shelf' order fulfilment and return tasks were in the process of being moved to a 500,000 sq ft greenfield site. This facility was purpose built to HP's layout, but is to be run on a contract distribution basis using the HP computer systems. The agreement is with a transport company which has carried out HP's transport for some time. Due to its strategic importance, the computer assembly and 'made-to-order' PC manufacturing and distribution processes are remaining under direct control within the Roseville (California) facility.

## **Inventory**

The common understanding amongst the companies I visited, was that inventory must be kept low. However, many companies have space problems due to inventory growing beyond expectations. To cater for this, slower moving or excess stock has been located in bulk storage sites close to distribution centres. They generally lease these premises, giving flexibility should there be any change in inventory growth patterns. Typically, these premises store palletised bulk stock and are operated by one or two staff members.

As an incentive to keep inventory down, Xerox staff have a bonus system for improving or maintaining Return on Assets levels. 3M have set up a team of staff from the distribution centre and the Business Units to look at ways to reduce the obsolete stock holding. IBM is looking critically at cycle times, believing that a reduction in product development and manufacturing will lead to a reduction in the money tied up in inventory.