



Hong Kong container port

Supply chain logistics

Those who roll their own cigarettes understand inventory management. When you want a cigarette you make one, and that's the end of the story. But if you are in the footwear industry life is a little different. Almost everyone makes their shoes in a different country and more often than not on a different continent from where they intend to sell them. Shipping a container around the world rarely takes much less than three weeks to a month. Air freighting is a rare luxury as shoes are bulky, so it is normally only an option in emergencies.

Another problem for the footwear industry—unlike home-made cigarettes—is that styles vary, not just for end use, but also with fashion. How do you predict the volume requirement for a new shoe about to be introduced in a highly competitive market place? It is not surprising that inventory management has become a big issue in the boardroom of companies all around the world and now forms part of the argument about where things should be made and the type of service to be offered.

If you are involved in the manufacture and sale of consumer goods you know all about logistics. If those goods—as with shoes or clothing—are labour intensive to produce, you also know that after a decade or more of relocation, it is harder

to get cheaper or more efficient manufacturing, and in particular, find ways to produce better or cheaper than your competitors. Transportation, shipping and everything associated with inventory management at all stages of the production and delivery of products have instead come to the fore as one area where opportunities exist to find advantages over the competition.

Redefining transportation

It is not surprising that we see transportation businesses now being defined as 'logistics'. The management of huge volumes of inventory all around the world and their on-time delivery to multiple destinations through multiple channels are now such key elements in the financial success of any business.

Sometimes planning in terms of logistics creates a whole new set of business practices. For example, Benetton holds undyed garments that can be coloured at the last moment to meet real demand. More recently, Zara shocked retailers by showing an ability to produce small volumes within a month, so removing themselves from the industry's entrapment by seasonal forecasts that lead to heavy orders and a need to discount unsold stock when lines are discontinued. Instead, the company offered its customers something new

every time they visited the store and fast replenishment of successful products.

Part of the Zara approach, as with the original Benetton situation, relates to the physical location of the business. A large number of designers at its Spanish headquarters and an associated network of small flexible suppliers was integral to the rapid reaction time capability. A major part of this cycle also involved integrated logistics that got goods to market without delay.

One of the big issues in the world of footwear is that the job of getting all the components in place and the product manufactured can take as long as the sales window. This allows little opportunity for repeat orders and puts great emphasis on correctly predicting demand. Forecasting demand becomes even harder when new products have to be produced with pipelines to be filled and volumes made available to support launch dates.

In terms of the modern footwear industry, Nike was one of the first to try to manage the inventory position twenty years ago with their concept of a store pre-booking system. This trades availability and delivery promises in return for retail commitments which allowed Nike to have data for capacity planning.

The starting point for all this today has

to be the consumer. Many of the products involved will be seasonal; some through style or some only by colour. Many are essentially impulse purchases and, by definition, if the product is absent from the shelves, the customer is likely to walk out with another product—perhaps made by a competitor. So, with short life cycles, consumers who will not wait and increasing product diversification, there is enormous pressure on logistics to ensure the product is in the right place at the right time and overall inventories are kept to a minimum.

This is a problem that goes back right through the supply chain. Consider a pair of leather shoes being made in China out of European leather to be sold in the USA. Side leather is normally too heavy to be air-freighted so we are looking at two weeks tanning—assuming that the tanner has the appropriate raw hides available—and then almost a month at sea. The shoemaker takes say two weeks to make the shoes, we then have another four weeks at sea to the final destination. This is three months of inventory, assuming that there are no delays or quality issues. For the shoemaker who has to assemble many components, getting everything together on time to meet even these targets is extremely difficult.

The complexities of small runs

Short product cycles and small runs add to the complexities of production. If the shoemaker buys in excess stocks to ensure production, there is a likelihood of leftover and redundant inventory. There is also the pressure on prices, and with seasonal ranges, there is hardly any room at all left for adjustment.

To get a sense of the scale of all this, consider the Deichmann Group that distributes and sells 82 million pairs of shoes in 12 countries. It uses P&O Nedlloyd for its logistics and according to the Blue and Orange P&O Nedlloyd magazine, its shoes are mostly bought in Vietnam, China, Indonesia, Italy and Spain and delivered to eight international distribution centres before being moved on to retail outlets in the USA and Europe.

This sort of structure is typical. Over the last few years we have also seen rapid movement of the sourcing of footwear from one country to another. It seems a



long time since Korea, Taiwan and Brazil were dominant. They have been followed by Indonesia, China, Vietnam, and of course, India. Tariffs also play a role, with quotas and other barriers impacting on where goods will be manufactured. No more obvious an example arises than the withdrawal of textile tariffs as of January 1, 2005.

Currency rates also have an impact. Marks and Spencer are reputed to have moved production of one style from Italy, to Eastern Europe and then Manila, all within the space of a year, in pursuit of more competitive pricing as the euro strengthened and the dollar weakened. All this is happening in a crowded market place driven by price, innovation, environmental issues and speed to market.

One key is better information. If you are going to be agile and keep inventories low, it is important to know how much you have and where it is located. New systems can now automate this to allow integration of supply

information with data from sales and marketing. Even better outcomes can be achieved if information can be shared with suppliers or even sub-component suppliers, but then issues related to confidential data could be seen as creating unnecessary risk. Yet there is no doubt that valuable time can be gained when suppliers are pre-warned of events closer to the market place.

The progressive replacement of bar codes with the more useful RFID chips will also help in this process. According to the type of chips used, whole containers can be scanned from the outside, goods can be automatically handled at their destination and inventories can be automatically managed at the retail outlet. Not only that, each item can be identified in terms of provenance to assist the speed of response if quality issues arise. Security and the fight against counterfeit product are also enhanced.

So, integrated logistics, tied in with precise inventory management, continue to offer opportunities for competitive advantages and differentiation. Achieving low inventories concurrently with high levels of customer satisfaction must be to the good. It is information and its management that holds the key. 

