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, more often that not 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. Airfreighting is somewhat of a luxury as shoes are bulky: meaning it is normally only an option in emergencies.

Another problem for the apparel industry, unlike homemade 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 marketplace?

It is not surprising that inventory management has become a big issue in the boardroom of companies all around the world and forms part of the argument about where things should be made and the type of service to be offered.

Many of the problems associated with footwear apply equally to the production of clothing.

Logistics - no longer just an upmarket term for a delivery business



If you are involved in the manufacture and sale of consumer goods you know 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 going to be hard to get cheaper or more efficient manufacturing, and in particular to find ways to produce better or cheaper merchandise than your competitors.

Transportation and shipping and all things associated with inventory management at all stages of the production and delivery of the products have instead come to the fore as one area where opportunities exist to find advantages over the competition.

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 such key elements in the financial success of any business.

Sometimes planning in terms of logistics creates a whole new set of business practices. An example of this is Benetton who hold undyed garments which could be coloured at the last moment to meet real demand. More recently, fashion chain Zara has shocked other retailers by showing the ability to produce small volumes within a month and removed itself from the industry's traditional entrapment in seasonal forecasts that lead to heavy orders and almost inevitably then to a need to clear out unsold stock when lines are discontinued. Instead, Zara offered its customers something new every time they visited the store and fast replenishment of successful products.

Speed and flexibility

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

One of the big issues in the world of footwear, for instance, is that the job of getting all of the components in place and product manufactured can take just as long as the sales window to be filled. This gives little opportunity for repeat orders and puts great emphasis on correctly predicting demand. Demand forecasting becomes

even harder when new products have to be produced, with pipelines to be filled and volumes made available to support the launch dates.

In terms of the modern sportswear industry Nike was one of the first to try to manage its inventory position with its concept of a store pre-booking system two decades ago, trading 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 by colour alone. 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 great 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 14 days tanning, assuming that the tanner has the appropriate raw hide available, and then almost a month at sea. Say the shoemaker takes two weeks to manufacture the shoes, we then have another four weeks at sea to the final destination. This is three months of inventory assuming 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.

Driven by consumers

Short product cycles and small runs add to the complexities of production, meaning that if the maker buys in excess stocks to ensure production there is a likelihood of leftover, redundant inventory. This is not helped by the pressure on prices and with seasonal ranges there is hardly any room 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. The Deichmann Group 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 sourcing from one country to another. It seems a long time since Korea, Taiwan and Brazil were dominant to be 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, with Marks and Spencer, for instance, reputed to have moved production of one style from Italy to Eastern Europe, to 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 where the drivers are price, innovation, environmental issues and speed to market.

Better information to control inventories

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 data allowing 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 subcomponent 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, but each item can be identified in terms of provenance which assists the speed of response if quality issues arise. Security and the fight against counterfeit product are both also helped.

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 all to the good. It is information and its management that holds the key.

