

Obsolescence in the supply chain

Do you remember your first mobile phone? Mine was an Ericsson GA 628 back in the 1990's. It now occupies a special place in the bottom drawer at home. I was not an early adopter of technology so this phone was already one of the more refined ones on the market.

Technology and consumer tastes have moved on since the 1990's. The ownership of mobile phones in the UK is at saturation point with more communication devices in circulation than there are adults in the country. And it is this consumer-led marketplace that serves as an excellent example to illustrate obsolescence in the supply chain. A working party of the CIPS Supply Chain Group defined obsolescence as 'a process whereby goods or services no longer meet the needs of the current user'.

In common with many consumer electronics products, the simple supply chain started with the sales department identifying the demand for a product. The R & D department developed the product and the marketeers raised customer awareness of the consumer item. The role of purchasing was to ensure that the components were available from carefully selected suppliers for the production lines and that cost budgets were met.

There is a saying that if your product is too robust you will go out of business because nobody will need to buy a replacement. The mobile phone industry works with short explosive product life cycles to tap into the early adopters in the market. This creates different opportunities, requiring a different set of skills for the purchasing and supply chain professional.

Integrated product teams focus on product development, and an army of logisticians might be employed to ensure the products are in the shops for launch. The figures are astonishing. The Apple Inc organisation recently sold 1.4 million units of the iPhone in the first 90 days when they went on sale. The product life cycles for consumer products generates three types of inter-related

obsolescence within this industry:

- Technical or functional obsolescence
- Planned obsolescence
- Style obsolescence

Often obsolescence is deliberately introduced into the marketing strategy – it is a planned activity, to create technical or functional obsolescence.

The legislative and political environment is one of the main drivers to managing obsolescence in the supply chain. Sustainability is a key mantra, often at loggerheads with the capitalist consumer society.

There are a number of EU Directives aimed at managing waste - the by-products of obsolete parts:

- The Directive on Waste, Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC as amended by Directive 2003/108/EC.
- The Directive on the Restriction of the Use of Hazardous Substances (RoHS) – Directive 2002/95/EC
- The Directive on Packaging and Packaging Waste (94/62/EC).
- The End of Life Vehicle Directive (200/53/EC).

Some of the most important areas of UK legislation include the following:

- The Landfill Allowance Trading Scheme (LATS) which sets allowances for an amount of biodegradable waste that can be sent to landfill each year. The target is that by 2010 biodegradable waste going to landfill must be 75% of the amount disposed of in 1995. By 2013 this must be cut to 50%, and by 2020 to 35%.
- The Landfill Tax – a surcharge paid by businesses and

local authorities on waste disposal of using a landfill site. This tax is paid on top of normal landfill charges at two rates. A lower rate of £2 per tonne applies to inactive waste such as rocks and soil (increasing to £2.50 from April 2008). The standard rate is currently £24 per tonne, with escalation of £8 per tonne from April 2008 until at least 2010/2011.

If current legislative requirements were in place back in the 1990's, the components for my beloved Ericsson mobile phone would have been considerably different. The phone would have been made and marked as recyclable, with the minimum use of precious metals.

Recyclability is only one aspect of managing waste. Businesses are developing around maximising the revenues from each user of the mobile phones to develop them into an integrated communications tool (such as the iPhone). Other enterprises have evolved to reuse old working phones or when not possible, to reuse some of the components.

The conclusion is that obsolescence in the supply chain is not new. However an environmental and political agenda, being driven by the European Union, is addressing the whole issue of reducing consumption of resources, increasing recovery of materials and recycling what is recovered. The potential for obsolescence will always exist, especially if it is part of a marketing strategy. Others however will see the commercial benefits of the effective management of obsolescence in the supply chain. Further information is available from the Professional Resources area of the CIPS website or from the Professional Practice Team.

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