TOWARDS THE SUSTAINABLE PACKAGING SUPPLY CHAIN

Edward Sweeney, NITL, introduces the role of Supply Chain Management as a means of eliminating waste in supply chains and examines the implications of the increased focus on sustainable packaging for the design and management of packaging supply chains.

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Supply Chain Management (SCM) is the integrated management of all activities from the source of raw materials through to delivery of the product or service to the final customer. It is concerned with ensuring that traditional approaches to managing companies – often characterised by fragmentation – is replaced by more integrated and holistic approaches. This means thinking beyond traditional functional and company boundaries and focusing on those processes that genuinely add value from a customer point of view. Most companies have a relatively small number of high level core business processes that create customer value and enhance shareholder value as a consequence.

Traditionally, SCM has been concerned with the achievement of two main objectives:

- Meeting (or exceeding) customer service requirements in targeted markets or market segments;
- Optimising total supply chain investment and cost.

Through the achievement of these objectives, customers can be satisfied in a manner which creates profit and shareholder value. The focus of SCM on the creation and delivery of value is aimed at ensuring that market requirements are met in a consistent manner. Thus, understanding customer service requirements in targeted markets or market segments "sets the spec" for integrated SCM.

ELIMINATING WASTE THROUGHOUT THE SUPPLY CHAIN

In relation to the financial dimension, the optimisation of supply chain costs requires that waste be eliminated throughout the chain. For example, the well known Toyota Production System (TPS), and the associated just-in-time (JIT) paradigm, is fundamentally concerned with the elimination of "muda" (the Japanese word for waste). However, SCM's focus on value creation suggests that a focus on non value-adding activities (NVAs) might be instructive.

An NVA may be defined as any activity (or resource or asset) anywhere in the supply chain which is adding cost but not necessarily adding value from a customer perspective. Given its central focus on the optimisation of total supply chain costs, the identification and minimisation of these NVAs is a key SCM issue.

Another approach to defining an NVA is that it is any activity (or resource or asset) anywhere in the supply chain which is adding time but not necessarily adding value from a customer perspective. Many world class companies have recognised that defining an NVA is this way facilitates the simultaneous achievement of the customer service and financial objectives set out earlier. This is important, as these objectives were often seen as mutually exclusive, in that:

- Increased costs and/or up-front investment were regarded as essential if customer service performance was to be improved;

- Reducing costs was deemed to impact negatively on customer service performance.

By using time-based approaches to managing the supply chain, and by focusing on the development and implementation of appropriate time compression strategies throughout the supply chain, customer service per-