

7

SUPPLY CHAIN MANAGEMENT IN A RECESSION

Edward Sweeney CMILT, Director of Learning at the National Institute for Transport and Logistics (NITL), explains the impact of the volatile global environment on the supply chain.

THE CHALLENGES PRESENTED by recent changes in the business environment has sharpened the focus on the need for robust approaches to supply chain improvement. This article, based on the theme of the recent Logistics Ireland 2009 conference, sets out the key changes in the strategic context of supply chain management (SCM) in a global and an Irish context. It goes on to outline some of the key characteristics of SCM excellence, based on the author's experience and on documented evidence in the literature. The performance of Irish firms in relation to these key characteristics is discussed with reference to NITL's ongoing research in this area. From this, a number of critical success factors for effective supply chain re-engineering are identified and some key conclusions drawn.

The evolving strategic context

A number of key issues are changing the SCM strategic landscape. Arguably, the three most significant such issues are:

1. Internationalisation (or globalisation) of supply chains;
2. Vertical disintegration; and
3. The changing role of the supply chain in strategic differentiation.

Internationalisation

Global sourcing of raw materials and other inputs has now become a reality for many organisations as the structure of the international economic and business environment evolves. This evolution, largely based on the reduction of barriers to the movement of capital, goods, services, people and information

Key supply chain activities such as transportation, warehousing and manufacturing are increasingly being outsourced to third-party organisations

internationally, has also made access to lower-cost manufacturing worldwide possible.

Furthermore, as markets have opened up internationally for a range of products and services, international (and in some cases global) selling has become the reality. All of this has implications for the logistics and distribution strategies of companies. In short, as economic globalisation has happened, so supply chain architectures have become more global and more complex.

VERTICAL DISINTEGRATION

Companies are increasingly focusing on what they regard as their core activities or competencies. The corollary of this is that the potential exists to outsource activities regarded as "non-core". Key supply chain activities such as transportation, warehousing and manufacturing are increasingly being outsourced to third-party organisations. This has resulted in a shift away from the traditional model of "control through ownership" towards models that are based on management and control through effective supply chain relationship management. In short, as this process of vertical disintegration has taken place, so supply chain architectures have become more virtual and more complex.

STRATEGIC DIFFERENTIATION

Classically, strategic management identified the generic approaches of cost leadership and differentiation. A significant proportion of the overall cost base of companies is in the supply chain. Hence, any worthwhile cost leadership approach needs to focus on the optimisation of total supply chain costs and the elimination of non-value adding activities (NVAs) - a key objective of SCM. Customer service is becoming a key order-winning criterion in many sectors. Its importance relative to product quality (now often largely an order qualifier) and price (largely determined by the dynamics of supply and demand in the market and subject to downward pressure in many sectors) has increased. Customer service is delivered by the supply chain. In this way, the supply chain itself has become a key determinant of competitive advantage. In short, a company pursuing a cost leadership strategy, a differentiation strategy or some hybrid of these two can leverage the supply chain as a fundamental element of their effort to improve competitive performance.

THE IRISH CONTEXT: IMPORTANCE OF SCM

In addition to the evolving strategic context and to the potential operational benefits in terms of customer service and supply



chain economics, SCM is of particular importance in an Irish context for several reasons. Ireland is one of the most open economies in the world with both imports and exports representing a significant proportion of overall economic activity (as measured in terms of, for example, GDP). Indeed, the export-orientation of the Irish economy was the principal driver of overall economic success in the early years of the "Celtic Tiger".

Logistics and SCM are key activities in this context. Given Ireland's relative geographical peripherality and the resulting transportation cost disadvantage faced by companies located here, it is important to note that transportation costs are only one, and often not the most significant, element of total supply chain costs. Furthermore, small companies are increasingly recognising their role as part of, often global, supply chain configurations. This is important as the great majority of companies in Ireland are small. Finally, it should be recognised that it is possible to manage 'virtual' supply chains from Ireland - there has been significant evidence in recent years of companies recognising such opportunities.

CHARACTERISTICS OF SCM EXCELLENCE

So what are the characteristics in evidence in companies that might be regarded as world class? "World Class", in this context, means companies that have been successful in tough, competitive international markets over a sustained period of time. It is impossible to develop an exhaustive list of the characteristics of SCM excellence but the following four elements appear to be of critical importance for most companies in most sectors:

- Identification and measurement of customer service because customer service 'sets the spec' for supply chain design;
- Integration of supply chain activities and information because many supply chain NVAs are caused by fragmented supply chain configurations;
- SCM and logistics is a senior management function because SCM is a strategic activity;
- Establishment and measurement of supply chain key performance indicators (KPIs) because what gets measured gets done!

This is based on documented evidence of SCM "best practice" and allies with the author's experience. It is worth exploring the performance of companies in Ireland in relation to these issues.

HOW DO COMPANIES IN IRELAND MEASURE UP?

NITL carries out research aimed at assessing the supply chain capability of companies in Ireland. A number of interesting facts are evident from this research in relation to the four key characteristics of SCM excellence outlined in the previous section:

- Approximately 50% of companies measure customer service formally and these tend to have very limited measurements;
- Companies score poorly in relation to having the latest supply chain information and communications technology (ICT) and having them integrated across the supply chain;
- A small minority of companies have any formal SCM position; and,
- Few companies use clearly defined SCM KPIs.

Overall, analysis of the research findings indicates that, whilst pockets of excellence undoubtedly do exist, there is significant room for improvement in these key areas. A number of possible barriers to SCM excellence have also been identified and will be explored as part of the ongoing research and associated analysis.

These include:

- Inefficiencies are often built into the supply chain;
- Communication structures are often ineffective and exchange of information poor;
- Corporate culture often makes effective inter-firm collaboration difficult;
- There is an excessive reliance on forecasting and stockholding; and
- Problems are often managed, rather than being solved by identifying and eliminating their causes.

It is important, therefore, that any robust approach to supply chain improvement and re-engineering at least addresses these areas meaningfully.

SUPPLY CHAIN RE-ENGINEERING

Improving supply chain performance through re-engineering involves: analysis of internal and external parameters using relevant data which has been collected; the identification and evaluation of possible alternative improvements and their detailed planning; and, the implementation of planned improvements including the associated change management. In short,

Re-engineering = Analysis + Planning + Implementation

It is important to bear in mind that, in supply chain re-engineering, no panacea or "magic solution" exists. Furthermore, as every company and every supply chain is unique in some respect it is inappropriate to attempt to copy or imitate companies regarded as being exponents of good practice. (It is for this reason that the author is more comfortable with the concept of "appropriate practice", as opposed to "best practice". The latter implies that there is one superior approach irrespective of the nature of the company and its environment.) The uniqueness could be with respect to products or services supplied, processes, customer expectations, people and cultural issues, systems or any one of a number of other factors.

CONCLUDING COMMENTS

Emerging from the current economic difficulties requires a focus on the creation of real wealth and real value - products and services for which there is a demand in domestic and international markets. SCM has a pivotal role in creating this value. The reality in today's competitive world is that standing still effectively means falling behind. Innovation in all aspects of SCM is the key to survival and success. Finally, the author's experience indicates that the real critical success factors in any supply chain re-engineering or change process relate to the people dimension, and specifically to the need to enhance knowledge and skill levels through effective education and learning.

Edward Sweeney is Director of Learning at the National Institute for Transport and Logistics (NITL), based at the Dublin Institute of Technology (DIT). He has held full-time and visiting academic positions in universities in Ireland, the UK and Asia, and has worked with several leading Irish and multinational companies.

Supply Chain Management and Logistics in a Volatile Global Environment by Edward Sweeney and friends (pictured) was published recently by Blackhall Publishing in Dublin and is available from the publisher, amazon.co.uk and all good bookshops.