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PUTTING SUPPLY CHAIN MANAGEMENT (SCM) THEORY INTO PRACTICE: THE ROLE AND IMPORTANCE OF THE PEOPLE DIMENSION

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THIS ARTICLE DEALS WITH A NUMBER OF SUPPLY CHAIN MANAGEMENT (SCM) ISSUES:

- SCM's "Big Idea" - integration
- Divergence of Theory and Practice - the limitations of hard-wiring
- The Human Chain - the soft-wiring
- The Way Forward - asking the right question?

SCM'S "BIG IDEA" - INTEGRATION

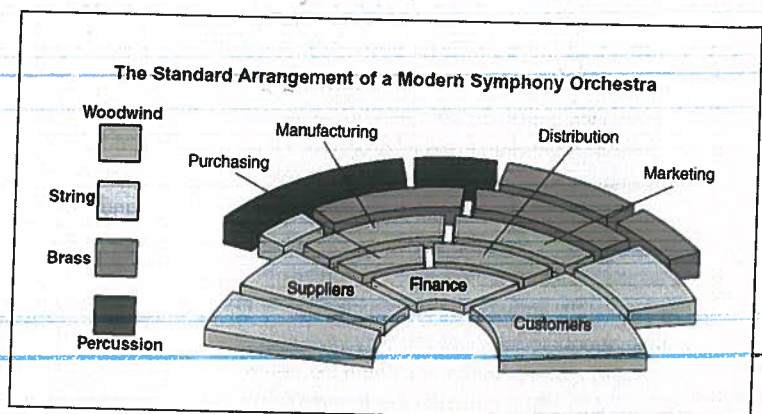
The supply chain management (SCM) concept was originally introduced by management consultants in the early 1980s and has a strong emphasis on the idea of inter-firm and intra-firm integration of supply chain activities. In many ways, integration is the central tenet – or "big idea" – of SCM. For example, John Storey and his collaborators from the Open University and Cranfield, in their discussion of the interlocking ideas and propositions of SCM in the *International Journal of Operations and Production Management* in 2006, declared that "the central underpinning ideas relate to alignment and integration". Similarly, Mark Pagell of Oregon State University, writing in the *Journal of Operations Management* in 2004 stated that "in its essence the entire concept of SCM is really predicated on integration".

Most businesses – certainly manufacturing-based business – can be described in terms of the five functions: buy, make, store, move and sell. This is what is referred to as the internal (or micro- or intra-firm) supply chain. Traditionally these functions have often been measured, and therefore managed, in isolation, often working at cross purposes. As succinctly noted in the aforementioned paper by Storey et al., this traditional approach is analogous to a relay race with responsibility being passed from one function to another. SCM means thinking beyond the established boundaries, strengthening the linkages between the functions, and finding ways for them to pull together. A recognition that the "whole is greater than the sum of the parts" calls for more effective integration between – for example - purchasing and procurement ("buy"), production planning and control ("make"), warehouse management ("store"), transport management ("move") and customer relationship management ("sell"). Contemporary SCM also has a strong focus on integration and the management of relationships between the upstream and downstream firms – suppliers, manufacturers, third-party logistics (3PL) firms, distributors, retailers and so on – that comprise the wider external supply chain or extended enterprise.

The core SCM concepts of integration and teamworking can be seen clearly with reference to any pursuit that requires groups of individuals to work together. Take the symphony orchestra (see Figure 1) as a case in point. If the various sections of the orchestra were to play in isolation from each other, irrespective of the virtuosity of the individual players and section leaders, the result would likely be noise to most ears (although some have argued that jazz is the more likely outcome!). However, with the aid of sheet music and a conductor, harmony can be added resulting in music to our ears! The sheet music

is analogous to the supply chain plan, and the conductor to the supply chain director or manager. They ensure that the players operate as a team and perform in an integrated manner.

Figure 1 below: *The Modern Symphony Orchestra and Supply Chain Integration.*



DIVERGENCE OF THEORY AND PRACTICE - THE LIMITATIONS OF HARD-WIRING

However, there is significant evidence of a divergence between theory and practice in relation to this "big idea". The aforementioned paper by Storey et al. from 2006 put this very succinctly:

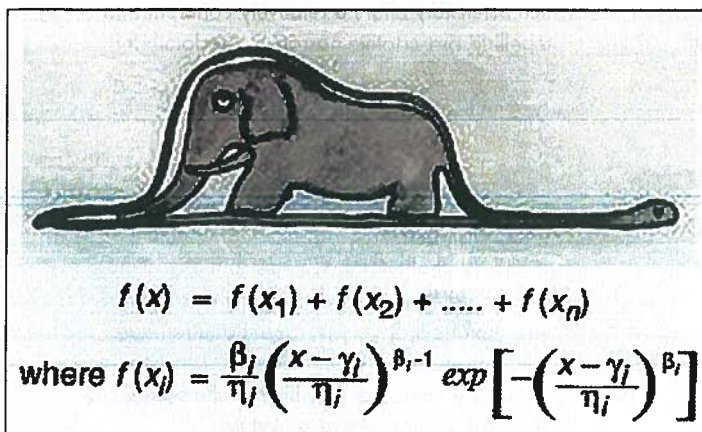
"while there is an emerging body of theory which ostensibly offers a relatively coherent and compelling prescriptive narrative, predominant practice is at considerable odds with this conceptualisation"; "Our research found very few examples of 'end to end' SCM".

Several other scholars have made similar points. Writing in the *International Journal of Physical Distribution & Logistics Management* in 2007, Nathalie Fabbe-Costes and Marianne Jahre confirmed that supply chain integration is "more rhetoric than reality" and that it is "more difficult in practice than in theory". Using their own cultural reference they likened the scenario to that of the Emperor's new clothes.

Identifying underlying reasons for this divergence is difficult. However, there is significant evidence of a strong focus on the so-called hard-wiring of supply chains in practice. This hard-wiring is concerned primarily with technology, systems and structures. For example, recent research in an Irish context carried out by NITL reveals that the great majority of recent and planned major SCM initiatives by firms are in areas like information and communications technology (ICT), organization re-structuring, process control and other components of the hard-wiring. In many ways, this emphasis in firms is mirrored by the dominance of largely quantitative methodologies in academic research in the SCM and logistics field. The fundamental point here is that adoption of predominantly quantitative approaches to SCM research is seriously limiting as supply chains are - first and foremost - about people. Similarly, improvement initiatives in firms that focus exclusively on the hard-wiring dimension by definition largely ignore this people dimension and are unlikely to fulfill their potential as a result.

Almost any situation can be described in mathematical language or in an algebraic formula. Such constructs can then be analysed in great detail and appropriate interpretations drawn. However, such analysis is entirely meaningless in the absence of an understanding of the real environment that the mathematics is attempting to describe (see Figure 2). Indeed, the construction of mathematical models almost always requires analysts to make assumptions about the nature of the real situation that they are trying to model. Thus, a critical issue in the analysis concerns the impact of these assumptions on the way in which models are interpreted and, in particular, how any assumptions made impose limitations on how the model can be used in practice. This points to the need for a new focus on the Human Chain.

Figure 2 below: *Mathematical Descriptions of Real Environments*²



THE HUMAN CHAIN - THE SOFT-WIRING

Seamus Heaney's 2010 collection of poems – Human Chain – addresses, amongst other issues, relationships (between – for example – husband and wife, child and parent, the past and the present) and affirms the interconnectedness of phenomena. Supply chains are about people: customers are people; suppliers are people; those who design, manage and execute supply chain operations are people. However, the people dimension (or soft-wiring) has traditionally been underemphasized both in research and in practice.

As noted earlier, supply chain improvement initiatives across many sectors have tended to emphasise the hard-wiring dimension with a focus on, for example, technology and systems. This ignores the criticality of the people dimension – the Human Chain to borrow Heaney's language. The orchestral analogy outlined earlier in this article illustrated the centrality of integration in the overall SCM paradigm. But integration – either intra- or inter-firm – is predicated on relationships (e.g. relationships between individuals; relationships between teams; relationships between functions; relationships between divisions; and, relationships between upstream and downstream organizations) and relationships are in essence about people. For many firms, the adoption of the holistic SCM approach requires a reappraisal of the way in which these relationships are created and managed. The creation and management of so-called "partnerships" – possibly the most abused word in the supply chain lexicon – with all customers and suppliers (internally and externally) is not what SCM is about. There is no "one size fits all" approach to this. There are many possible relationship forms and choosing the right ones in specific situations is the key. Nonetheless, one of the biggest manifestations of the adoption of SCM in recent years has involved the move away in many sectors from adversarial relationships with key external suppliers towards relationships which are based on mutual trust and benefits, openness and shared goals and objectives. Similarly, my experience suggests that good supply chain design and management in practice is neither purely an art nor a science. It is probably best described as amalgam of the two and more akin to a craft. It certainly has elements of art in that creativity and innovation are critical success factors. But there is also a scientific dimension with a need for robust analysis and concomitant attention to detail.

Recent years have seen a strong focus in research and in practice on the notion of supply chain "best practice" often linked to inter-firm benchmarking processes. I strongly dispute the concept of "best practice" in this context. The notion implies that there is one single optimum supply chain strategy that is equally appropriate irrespective of the detail of individual scenarios (i.e. that "one size fits all"). Every company has unique products, unique processes and – perhaps most importantly – unique people and a unique culture. The resultant reality is that every supplier and every customer in has its own particular cost/customer service drivers and its own set of strategic priorities. The detail of each customer/supplier dyad is also characterised by its own unique set of factors. The optimum solution must be tailored to each of these sets of factors to reflect the uniqueness of the specific scenario. Indeed, it has long been recognised that good supply chain design practice in any sector must be based on: (i) fully understanding these dynamics; (ii) designing supply chain configurations that take these dynamics into account; and, (iii) implementing these solutions superbly with strong attention to detail. The latter is important as "the devil is in the detail" and this detail varies significantly from company to company and from supply chain to supply chain. There is no 42, i.e. no ultimate answer to the ultimate question of life, the universe, and everything!¹ Incidentally, Douglas Adams – the creator of the Hitchhiker's

Guide to the Galaxy - was an interesting man as illustrated by some of his well known quotations that have a certain resonance for logisticians (see inset).

THE DOUGLAS ADAMS PRINCIPLES OF LOGISTICS AND SCM

- To give real service you must add something which cannot be bought or measured with money, and that is sincerity and integrity.
- A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools.
- I love deadlines. I like the whooshing sound they make as they fly by.
- I seldom end up where I wanted to go, but almost always end up where I need to be.

THE WAY FORWARD – ASKING THE RIGHT QUESTION?

So what is the question? A fundamental question for SCM professionals is:

what is the optimum supply chain configuration given that I have certain unique strengths and weaknesses, and that the market and the wider business environment are likely to throw up particular opportunities and threats?

The bad news is:

- while we can of course learn from exponents of world-class SCM practice, we can not blindly copy so-called "best practice"; and,
- there are no "magic solutions" or "silver bullets" or panaceas.

This raises questions in relation to the key components of "appropriate practice". NITL's ongoing research into SCM practice in firms in Ireland (indigenous and MNEs) suggests that while pockets of excellence do undoubtedly exist, there is significant room for improvement in many sectors (particularly in the more traditional industries). The areas for improvement relate to many factors, one of which is overall supply chain structure/configuration/architecture (the primary focus of the "best practice" models). These factors include, but are not limited to:

- investment in supply chain ICT and systems as a facilitator of integration (the hard-wiring);
- creating and managing relationships in the supply chain (the soft-wiring);

- elimination of excessive complexity - and other non-value adding activities (NVAs) - in supply chain operations;
- effective measurement and management of supply chain performance; and,
- (returning to the first theme of this article - SCM's "big idea") integration between internal supply chain activities, as well as between firms upstream and downstream in the supply chain.

Economic recovery will depend on the success of companies based in Ireland in competitive international markets. Excellence in logistics and SCM is critical in this regard. The adoption of the arguments posited in this article has the potential to support the ongoing and continuous quest for innovation across all aspects of the supply chain.

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FOOTNOTES:

1. With due acknowledgement to Benjamin Britten's Young Person's Guide to the Orchestra for the idea.
2. With due acknowledgement to Antoine de Saint-Exupéry's Le Petit Prince for the idea.

