Review Article of Living Supply Chains: How to Mobilise the Enterprise Around Delivering What Your Customer Want

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Professor John Gattorna’s contribution to scholarship and practice in supply chain management (SCM) is substantial and sustained. Gattorna’s perspective has evolved from his earliest writings to the present as the potential and impact of SCM have shifted from purely a set of tools and techniques aimed at securing operational improvement through cost reduction into a platform on which corporate differentiation and strategic advantage can be built. It is the strategic dimension of SCM that forms the focus of his latest book.

The conceptual and operational content of SCM has itself evolved to take into account advances in the tools and techniques available to management and the development of an increasingly integrated international economy. This evolution has seen a shift in emphasis from cost-and-time efficiency, in which logistics is the dominant component, towards value-adding differentiation, in which integration and alignment of resources creates the means of satisfying current customer requirements and anticipating emerging requirements. This does not mean that cost-and-time efficiency is less relevant than it was, say, 15 to 20 years ago: it means that such efficiency is no longer enough to generate business success. In other words, it has become a “qualifier” rather than a “winner” in the view of customers. The basis of competitiveness and differentiation in the 21st century is, in Gattorna’s view, the business model and not some combination of product features balanced with product price and sales promotion.

There is another level of change in the evolution of Gattorna’s “living” supply chain concept, namely the change in emphasis from technological to behavioural aspects, and this constitutes the most interesting and provocative dimension of the work. The central argument is that because the impact of SCM has shifted from simple cost reduction towards competitive differentiation based on business model, the human/behavioural dimension has come to the fore and therefore SCM now plays as significant a part in the content of marketing and business strategy as it does in operations. Let us explore these dimensions of business management a little more closely.

Initially classical marketing theory and practice concentrated on product differentiation and positioning - branding and segmentation have been significant parts of this. Along with product we would consider the other components of the famous 4Ps - price, promotion and place.

Contemporary marketing is moving away from this classical model. Whereas it has been possible to create entry and/or development barriers that deter competition via ownership of physical assets, control of raw materials and intermediates through vertical integration or cross-investment or via simple economies of scale, the rise of the internet resulting in easier diffusion of information and less need for fixed relationships has to a growing extent levelled the playing field. Fixed assets, though accounted as positive on a balance sheet, can be real liabilities in 21st century marketing. As an increasing number of transactions are conducted online - and not only simple, routine purchases but also sophisticated product packages - a new form of competitive organisation has emerged that can leverage assets that it may or may not own to serve customers that it can find in an increasing number of locations. The 4P principle still holds firm: however, its content is changing radically and it is SCM that brings this about. So buyers can receive correct-specification product from anywhere (and it does not matter from where) supplied by any intermediate organisation (and it does not matter by whom) that can move the product cost- and time-effectively, with the operation co-ordinated by a marketer likewise located anywhere. So we are increasingly buying from organisations that did not even exist twenty years ago - in any sector from banking services to air travel to telecommunications - and the list is substantial. The new theme running through each of the 4Ps is agility plus alignment.

All this goes further and deeper, and goes to the heart of business strategy.

Business strategy is about achieving sustained differentiation in a way that enables a business to meet current customer demand and anticipate future demand in a manner that generates sufficient profit to satisfy shareholder aspirations (increasing shareholder value) whilst creating the competencies on which continuing renewal can be based (competitive advantage).

If a company can differentiate itself by achieving cost-competitiveness in getting high-quality, highly-specified product to the best-margin customers and can renew such competitiveness faster than competitors can emulate it, then that company sustains a competitive advantage that should be reflected in above-average profitability in relation to its sector average. If, however, a company’s final products are becoming increasingly difficult to differentiate, then the effectiveness of the supply chain and the ability of the organisation to re-configure that supply chain rapidly as competitive conditions change may become the critical factors underpinning its business strategy. This capability is often termed “agility”or “resilience”, and it enables a company to outweigh the growing problem of commoditisation of product and service and the consequent price convergence between competing suppliers by giving the agile/resilient company compensating access to value (and hence profit) elsewhere in the chain of value-adding transformations from raw material to finished product and beyond. Such an approach looks at value and the reasons why customers
assign value between various elements of the supply chain. The phenomenon of customer-driven migration of value needs to be understood and anticipated in a continuous quest for meeting customer expectations profitably as well as meeting them to the extent necessary to outweigh the actions of competitors. There is, after all, no point in exceeding a customer’s expectations to a competitively unnecessary extent and incurring a loss in so doing!

This shift in emphasis does not mean that the desirable objectives of SCM in relation to operational cost-effectiveness and systemic efficiency no longer matter. It is here that the principle of “alignment” is powerfully illustrated and where Gattorna emphasises the significance of the human dimension in SCM.

The essence of the “alignment” concept is that organisations seeking to improve supply chain performance must be aware both of their customers’ expectations and of their own internal capability. If these two dimensions are addressed adequately an organisation can become fully aligned with its marketplace. Other combinations of external and internal awareness lead to varying degrees of sub-optimal performance. Gattorna’s widely cited “Strategic Alignment Model” provides a useful framework that lucidly illustrates the alignment concept. Empirical evidence – reinforced by the authors’ experience in a range of sectors - suggests that if organisations are to achieve sustained high levels of performance, four key elements must be dynamically aligned. This starts with the development of a clear understanding of customers’ buying behaviours and of appropriate value propositions that align with the dominant buying behaviours. The key then lies in recognising that the appropriate capabilities (or “cultural” capability) need to be embedded in the organisation to underpin the delivery of these specific value propositions. Finally, leadership at the executive level ensures the appropriate subcultures are in place as required. Gattorna’s research suggests that there are a limited number (usually three or four) of dominant buying behaviours for any given product or service category. If this is so, then it leads to the notion of an equivalent number of supply chain architectures – each with an appropriate set of systems, skills and working styles - to service these different behaviours.

The people dimension of SCM is central to Gattorna’s alignment concept. However, the missing link in many supply chains continues to be clarity in relation to the pivotal role played both internally and externally by humans. This gap was the subject of an article by Edward Sweeney in this journal over seven years ago 1. In the intervening period the body of knowledge in the SCM field has expanded significantly. However, despite some valuable work by academics in a number of countries, the people dimension continues to be under-researched. This has contributed directly to deficiencies in relation to understanding in organisations of the human dynamics at play within contemporary supply chains. Much of the emphasis continues to be on the “hard wiring” of supply chains with its stress on methodology, systems, processes and technology. However, without the appropriate “soft wiring” (i.e. the people dimension) the competitive potential of SCM cannot be fully realised. Furthermore, it must be recognised that understanding this dimension in a vacuum is not enough.

It is alignment between the hard and soft wiring that is the real critical success factor for organisations. The implications of this are profound at many levels. For example, there is mounting evidence that the significant capital investment committed by organisations in recent years to advanced supply chain ICT is failing to realise its full potential as a direct result of misalignment is this area. The fact that the “hard wiring” is unlikely in itself to provide a sustainable competitive advantage is challenging organisations to adopt more innovative approaches to the people dimension in generic terms, but more importantly to the development of the “cultural capability” required to enable higher levels of overall supply chain integration.

The concept of integration has always been at the heart of SCM thinking. As a philosophy, SCM is fundamentally concerned with moving away from traditional organisational models where key supply chain functions were often measured and managed in isolation from each other. The application of the SCM concept requires a paradigm shift away from approaches characterised by fragmentation towards more integrated organisational models. The fact that “the whole is greater than the sum of the parts” has been recognised by an increasing number of organisations as SCM principles have been adopted and operationalised. The new challenge for many organisations is to take the next step and ensure that the both hard and soft wiring perspectives are incorporated into supply chain design and improvement processes. In many ways this is becoming the kernel of contemporary SCM in leading companies globally. As supply chain configurations become more international as a result of business globalisation, and as these architectures become more virtual as a result of the outsourcing of supply chain functionality, the focus of organisations on this thinking will be sharpened.

All of the foregoing has implications in terms of the professional development of the supply chain managers of the 21st Century. Gattorna’s work emphasises the role of leadership in shaping and creating the cultural capability of organisations and in formulating the value propositions required to meet evolving customer demands. There is a growing need for supply chain professionals at all levels in organisations to develop the skills, knowledge and competencies required to build leadership and other elements of cultural capability. In Ireland this requirement is recognised at a national policy level and NITL has been working in partnership with a wide range of organisations to ensure that the right learning programmes are in place. But much remains to be done. In particular, the supply chain learning paradigm - based on firm-to-firm exchange of knowledge - is a potentially powerful mechanism for leveraging the supply chain to enable learning and competency development.

In summary, what Gattorna is challenging us to do is, in essence, to “think backwards” from customer needs to the commencement of the product creation process. His latest book enables us to do this, and the process is facilitated by an innovative and readily applicable diagnostic framework that is included as an appendix.

Gattorna’s supply chain perspective is global, and he illustrates well how globalisation presents threats and opportunities simultaneously. Partly through the influences of GATT/WTO and partly through advances in technology, primarily information technology, most organisations have easier access to markets than in the past. This means inevitably that markets are also open to increased competition. However, the concept of supply chain globalisation goes further than the product/market dimension. It includes questions relating to capital structure and value migration. It relates increasingly to labour supply and deployment. Whereas initially globalisation was defined customarily in relation to physical trade, it now relates to multiple factor mobility. Gattorna therefore points us towards designing, aligning and continuously improving international supply chains by developing internally or sourcing externally a set of competencies that enable an organisation to contest any market it chooses and to derive competitive advantage from any combination of value-creating activities within the supply chain.

Professor Gattorna’s latest work is a valuable addition to scholarship and practice, and can be read equally profitably by researchers and business managers.

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