

Supply-chain Management: An MPA seminar held at the Royal College of Pathologists, London on 21 June 2002

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“Best practice comes from certain circumstances of power... understand where the power lies and act accordingly.”—Industry analyst

Reaping the benefits of SCM

Companies who have successfully implemented SCM report:

- simplification
- cost savings, sometimes significant (see case study over leaf)
- swifter project/product delivery
- reduction of risk
- improved visibility of the workload
- economies of scale for all parties.

A well-managed supply chain offers a range of benefits, from simplification and risk reduction to significant cost savings. Traditional forms of procurement have relied on choosing from among a large number of suppliers, with the aim of maintaining supplier competition and driving down costs.

Supply-chain management takes a radical approach to procurement, with the aim of setting up long-term relationships with suppliers, so that leaner, value-adding and more efficient ways of working can be developed. Suppliers are encouraged to adopt similar “managed” relationships with *their* suppliers, and so on—ideally—down the tiers of supply.

The practice of supply-chain management (SCM) was pioneered by Toyota in Japan, driven by the demand for faster times to market, quicker fulfilment of orders and lower costs. It was enabled by the rapid development of IT and globalization. Other manufacturing industries have taken the same route.

SCM then spread to the oil and gas industries, where collaborative relationships were fostered during continuing programmes. SCM in these sectors, often in the form of partnerships and alliances, blazed a trail for the wider construction and engineering industries.

Factors favouring the adoption of SCM

SCM flourishes in particular circumstances:

- where the balance of power lies with the buyer—if there is supplier dominance, the buyer is not in a position to set an SCM agenda
- where business activity involves repeat processes—in practice this favours manufacturing (with its high-volume, standardized demand), not one-off projects
- in a collectivist culture like Japan—an opportunist culture works against successful SCM.

SCM in a steady-state environment

As its origins and evolution suggest, SCM works:

- where demand and supply can be successfully aligned in a long-term context
- where numerous assemblies (as in aerospace), each with its own supply chain, offer opportunities to eliminate waste
- where the organizational development of the company is advanced and management is well informed and positive.

SCM in a project environment

Major projects are not an ideal environment, but SCM can work in certain circumstances:

- in continuing construction programmes, where construction clients

Post-contractual moral hazard

Power moves in business relationships. A buyer managing a supply chain must understand where the balance of power lies. Remember that things change after a contract has been signed and the balance may shift. Economists have dubbed this “post-contractual moral hazard”. Be warned!

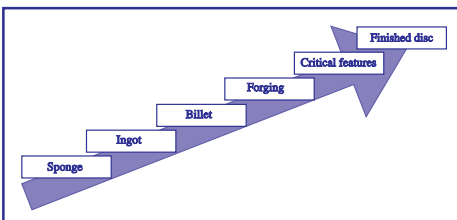
What is “post-contractual moral hazard”? It is the risk you take that things will remain the same after a contract has been signed. However, the chances are that they will not remain the same. Power moves in business relationships, but there are many buyers who do not understand how power moves post contractually. Those who work in construction and engineering know about information asymmetry and opportunism in business relationships.

Case study: SCM produces benefits for Rolls-Royce Naval Marine

Rolls-Royce has adopted SCM in its production and project environments, using rigorous processes, tailored to the context. Good supplier performance is critical to its own performance.

It now reports significant benefits: on a recent project, savings of 10 per cent were realized, representing several million pounds (the suppliers benefited through gainshare arrangements). Contracts are being standardized and equipment lead times have been reduced by 30 per cent. Improved quality performance is being recorded.

“SCM is a tough business approach”—and one that clearly works for Rolls-Royce.



The diagram shows a typical Rolls-Royce supply chain in a fully integrated supply-chain management system. Product procurement is integrated into the purchasing and logistics organization at the lower end and into the turnkey project management environment at the upper end.

(like BP’s petrol stations forecourts and McDonald’s restaurants), can, as “serial procurers”, develop SCM practices with their suppliers

- by any contractor who uses the same suppliers but has not yet standardized supplier relationships—there may be good opportunities for efficiency gain
- through mechanisms such as partnerships, alliances and incentivized contracting.

Hazards of SCM

Critics of SCM say it is another management fad and draw attention to its limitations:

- it works well in the automotive industry and in Japanese culture, but the model has less relevance for other sectors and other cultures
- full supply-chain integration involves development all the way down the chain to the lower tiers, a task that cannot be undertaken lightly as it consumes huge amounts of resources
- innovation cannot happen by itself, and the buyer in a managed relationship must provide encouragement
- safety and quality should not be jeopardized in the quest for SCM efficiencies
- effective SCM is not just about reducing the number of suppliers and awarding long-term contracts—it is not a numbers game to achieve dramatic reductions but is about good management of suppliers
- intellectual property rights may pose a problem
- with fewer suppliers, the buyer may find that an element of competition has been lost
- SCM departments often fail to deliver the real promise of SCM
- the buyer must be prepared to think long term: Toyota started using SCM in 1951 and is still at it.

Implementing SCM

Any policy of SCM is so complex and far-reaching that there is no simple “how to” recipe, but certain principles have worked well for some companies:

- ascertain whether SCM is the right decision for your company—proceed only if it is
- develop a value-stream map—if you map the processes, you can identify the best opportunities for eliminating waste
- identify the strategic relationships that will make a difference to your business in the long term and tackle your various supply chains steadily and systematically
- with a transparent project strategy, standardize your supply structure and select key suppliers meticulously to create leverage for yourself
- manage risk carefully to help improve margins over time
- develop your procurement people continuously so that you have capable, competent staff who can manage cost and cash in a complex commercial environment
- understand the power structures that exist at each point in the chains so that you can approach each supplier with an effective policy
- ensure senior management support for (and understanding of) SCM.