Challenges in relating supply chain management and knowledge management: an introduction

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Advances in Information Technologies have transformed the way organisations interact with each other, and with their customers. Customers and organisations have become more demanding, desiring customised products and services that are made to their precise needs, at comparatively cheaper costs, within a time-compressed environment. The last

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two decades have also witnessed a constantly changing business environment wherein revolutionary technologies are resulting in the creation of innovative products with shorter product life cycles, whilst being under constant pressure to reduce lead times. In response, best practice organisations have recognised that they cannot compete alone. Today supply chains compete. Furthermore, the exploitation of knowledge across the supply chain is fundamental to business optimisation. Organisations have accepted and recognised that in the dynamic modern day business environment, knowledge is the prime resource for providing their supply chains with a sustainable competitive advantage. Consequently, to enable organisations to respond to this dynamic environment, the new management paradigms of (1) Knowledge Management and (2) Supply Chain Management are evolving (Dwivedi and Butcher, 2008).

However, a key challenge in this context is that the domains of (1) Knowledge Management and (2) Supply Chain Management have been historically influenced by knowledge from narrow functional areas. This has resulted in the fact that both domains: (1) Knowledge Management and (2) Supply Chain Management have advanced disparately, and more significantly there has been very limited effort towards the production of a perspective that seeks to integrate these two domains. One of the main factors behind the widespread interest in SCM is because it is considered as a source of great competitive advantage.

Lummus and Vokurka (1999) have noted that organisations can no longer effectively compete in isolation of their suppliers and other entities in the supply chain, and this has led to companies engaging in collaborative relationships within and beyond their own organisation (*i.e.*, via horizontal and vertical integration). Bowersox and Closs (1996) have further argued that to be fully effective in today's competitive environment, organisations must expand their integrated behaviour to incorporate both customers and suppliers. Indeed, effective supply chain collaboration requires substantial investment in building resilient, long-term relationships (Mangan *et al.*, 2008). In this context, it is argued that the ultimate objective of SCM is to transform the way companies use knowledge about the interactions between the flows of information, materials, money, manpower, and capital equipment to the mutual advantage of all partners in the supply chain (*i.e.*, with horizontal and vertical integration partners) and their customers. As a ramification of the above, management thinkers have stated that for the SCM paradigm to succeed in enabling organisations to have a unique competitive advantage, adoption of the KM paradigm is imperative.

The purpose of this Special Issue is to:

- contribute to building theoretical and empirical knowledge on the linkages between Supply Chain Management and Knowledge Management paradigms
- to extend current critical thinking in the Supply Chain Management and Knowledge Management domains.

In order to promote the publication of current leading research in this important and significant research domain, we decided to embark upon the task of co-editing a special issue on "Supply Chain Management and Knowledge Management".

We were most pleased with the submissions we received as they covered many important aspects of the interaction between the domains of Supply Chain Management and Knowledge Management. There are a total of the nine papers in this special issue: The first paper by Hammervoll and Toften entitled 'How can supply chain managers classify and differentiate supply chain partners?' explores how supply chain managers can differentiate and classify supply chain partners. The second paper by Niemi *et al.* entitled 'Supply chain development as a knowledge development task' examines two research streams of knowledge management – knowledge maturity models and strategies of how to accelerate the knowledge creation in an organisation, in-order to better understand and support the adoption of complex practices of supply chain management. The next paper by Lopez and Eldridge entitled 'A working prototype to promote the creation and control of knowledge in supply chains' describes an approach which uses current Knowledge Management theory and technology to improve the dissemination of best practices among Supply Chain practitioners.

The fourth paper in the special issue by Corso *et al.* entitled 'The role of knowledge management in supply chains: evidence from the Italian food industry', presents the results of an empirical study on how efficient knowledge sharing can affect supply chain performance for different IT solutions. The fifth paper in the special issue by Hilletofth *et al.* entitled 'Multi-agent-based supply chain management: a case study of requisites' proposes an agent-based system for supply chain management. The next paper by Khalfan *et al.* entitled 'Knowledge management in construction supply chain integration' presents the results of a case study on how integrated construction supply chains are using knowledge management. The next paper Kovács and Spens entitled 'Knowledge sharing in relief supply chains' examines the role of co-operation between relief supply chains as well as within supply chains.

The penultimate paper by Eiermann and Walter entitled 'Document logistics in the public sector: integrative handling of physical and digital documents' reports on a multi-method study on the present state of document logistics in the public sector and identifies current needs and potential trends for the near future. The last paper of this special issue by Coleman entitled 'Extending supply chain synchronisation to upstream tiers: a collaborative approach illustrated with an automotive case study' describes a set of guiding principles designed to help supply chain practitioners define inventory and ordering policies collaboratively.

We acknowledge that it is not possible for any special issue to claim to be exhaustive in its coverage. However, given the quality of the research papers presented in the special issue, we hope that the reader will enjoy the compilation of papers we present here, and use this to inform their own research journey into understanding critical issues with respect to Supply Chain Management and Knowledge Management.

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