
Introduction: Preparedness in sustainable supply chain design and practice

Tim Butcher*

Centre for Sustainable Organisations and Work,
School of Management,
RMIT University,
239 Bourke St., Melbourne, VIC 3000, Australia
E-mail: tim.butcher@rmit.edu.au
*Corresponding author

Ashish Dwivedi

Hull University Business School,
University of Hull,
Cottingham Road, Hull, HU6 7RX, UK
E-mail: a.dwivedi@hull.ac.uk

Biographical notes: Tim Butcher is the Deputy Head of the School of Management for Industry Engagement, a member of the Centre for Sustainable Organisations and Work, the Global Cities Institute and the Platform Technologies Research Institute. He researches the impact of technologies on work and society, with particular reference to manufacturing, logistics and supply chain management. Prior to joining RMIT in 2010, he spent six years at the University of Hull Logistics Institute where he was the Programme Director for the flagship MSc in Logistics and Supply Chain Management. He has authored various papers, articles and chapters on skills and technology in logistics and supply chain management and is co-author of *Global Logistics and Supply Chain Management* (with Mangan, Lalwani and Javadpour) published by Wiley.

Ashish Dwivedi is the Deputy Director of the Centre for Systems Studies at Hull University Business School, UK. Previously, he was the Deputy Graduate Research Director at the Business School, University of Hull. He received his PhD degree from Coventry University, UK and his MSc in Information Technology for Management from Coventry University, UK. He also has an MBA and BA in Management. His disciplinary research interests are in supply chain management and knowledge management. Since 2004, he has organised one international conference, edited five books, authored over 30 journal articles/book chapters and presented over 20 conference papers.

For this special issue, we sought contributions that explore contemporary supply chain designs and practices that can achieve longevity and sustainability. We framed this statement in the current global conditions of ever-increasing market volatility, global competitive pressures, and events such as the ongoing global economic crisis. Hence, we adopt a holistic perspective of sustainability in the supply chain context. That being sustainability not merely meaning ‘green’ but embracing all factors that must be

considered when assessing the impact of supply chain designs and practices on the environment, society and economy. This we extend beyond the notion of industrial ecology; the life cycle or chain of activities that form the basis for analysing and reducing environmental impacts (Seuring, 2004).

Sustainability concerns are critical and timely concerns, with the ever-present growth of global supply chains to feed consumer appetites for goods and services. Continued research into the long-term affects of current supply chain designs and practices and identification of more sustainable alternatives is essential to influencing government policy, corporate practices, and consumer behaviour (after Linton et al., 2007). Indeed, we note that this is not the only special issue to be published on this subject this year, with volume 17, issue 1 of *Supply Chain Management: An International Journal* addressing carbon management and sustainable development. And a literature review of 'sustainable supply chain management' identified 191 papers published from 1994 to 2007 (Seuring and Müller, 2008). This is a 'hot topic' not because it is a fledgling academic endeavour but because it is critical to future global prosperity.

While environmental and economic issues such as carbon emissions, regional development, green performance metrics and closed-loop supply chains have gained traction as valid research topics, social aspects have received less attention from supply chain researchers. This began to be addressed in a special issue of the *Journal of Cleaner Production* in 2008 (Seuring et al., 2008). Here, we believe this is continued to some extent.

We invited theoretical and empirical submissions relating to sustainable supply chain issues. In so doing, one of our objectives was to provide a roadmap to developing future research into designing supply chains for sustainable supply and developing adaptable, agile management practices that will outlast short- and long-term shifts in supply and demand. We received a far greater response than was expected and have been able to span two issues of this volume of the *International Journal of Agile Systems and Management*. In so doing, we have grouped the contributions into two themes, namely: *preparedness for sustainability* (this Part 1), and *decision-making for sustainability* (Part 2 to follow).

In this Part 1, four contributions reflect the scale of the task in being prepared for sustainable supply chain management. Empirical contributions are drawn from the fashion and construction industries to understand and explain the preparedness and adaptation of management as they are required to transition to more sustainable practices. In 'Green manufacturing practices in the fashion supply chain: lessons from Italian case studies', Bigliardi and Bottani discuss 15 case studies from the Italian fashion industry. With management agendas being evermore focused on environmental issues, driving firms to undertake initiatives that meet green strategies, they offer insights into current practices in that context, with reasons why green manufacturing is not widely adopted there. The authors offer lessons learned from organisations that have implemented greener manufacturing practices. Likewise in 'Engaging small firms in sustainable supply chains: responsible sourcing practices in the UK construction industry', Glass, Achour, Parry and Nicholson discuss a UK Government requirement for 25% of construction products to have been responsibly sourced by 2012; with the 2015 target for commodities sourced by major contractors being 100%. Yet, the authors find a lack of research into industry preparedness for such initiatives. They report survey and interview results exploring the scope of *responsible sourcing*, its drivers, benefits and challenges.

Interestingly, contractors' lack of awareness of the requirements of responsible sourcing limits their preparedness.

The two other contributions research the risks associated with sustainable supply chain management. In 'Building robust supply chains by reducing vulnerability and improving resilience', Vlachos, Iakovou, Papapanagiotou and Partsch discuss supply chain risks and vulnerability. The authors present an extended literature review of interventions to reduce supply chain vulnerability and increase resilience. From their review, they offer lessons learned and guidelines for improved interventions. In 'Conceptualising risk distribution for supply chain sustainability', Yingvilasprasert, Banomyong and Vilko identify that while there is distinct body of knowledge on supply chain risk management there is a paucity of knowledge on risk distribution in that context. The authors, therefore, address this significant gap by conceptualising risk distribution and setting an agenda for further research.

Being Part 1 of this special issue, we offer our conclusions at the end of our introduction to Part 2.

As editors of this special issue, we thank the Editor-in-Chief of the *International Journal of Agile Systems and Management* for his confidence in this project; the administrative team at Inderscience, particularly Liz Harris, for their ongoing support; the reviewers, many of whom provided prompt, cogent and supportive reviews at short notice; and the contributors for their patience with the review process. We feel this Part 1 and subsequent Part 2 of this special issue offer worthwhile and timely contributions to this fledgling field of research and paves the way for further research.

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