Developments in Logistics and Supply Chain Management
Past, Present and Future

Edited by

Kulwant S. Pawar
Nottingham University Business School, UK

Helen Rogers
Nuremberg Institute of Technology, Germany

Andrew Potter
Cardiff University, UK

Mohamed Naim
Cardiff University, UK
Contents

List of Figures viii
List of Tables x
Notes on Contributors xii

1 Introduction 3

1.1 Introduction and Overview 3
Kulwant S. Pawar, Helen Rogers, Andrew Potter and Mohamed Naim

2 Supply Chain Design and Configurations 13

2.1 Framework for Designing Robust Supply Chains 13
Jelena V. Vlajic, Jack G. A. J. van der Vorst and Rene Haijema

2.2 Collaborative Supply Chain Configurations: The Implications for Supplier Performance in Production and Inventory Control 27
Jan Holmström, Johanna Småros, Stephen M. Disney and Denis R. Towill

2.3 A Critical Review of Surveys in Supply Chain Integration Research 38
Dirk Pieter van Donk and Taco van der Vaart

2.4 The Reverse Amplification Effect in Supply Chains 52
Matthias Holweg and John Bicheno

3 Agility, Flexibility and Risk 61

3.1 Creating the Agile Supply Chain: Issues and Challenges 61
Martin Christopher, Alan Harrison and Remko van Hoek

3.2 Process Control in Agile Supply Chain Networks 69
Michael Pearson, Ron Masson and Anthony Swain

3.3 The Power of Flexibility for Mitigating Supply Chain Risks 80
Christopher Tang and Brian Tomlin

3.4 Managing Risk in International Inbound Supply Chains 90
Claudia Colicchia, Fabrizio Dallari and Marco Melacini
4 Supplier Management

4.1 A Computerised Vendor Rating System
Abby Ghobadian, Alan Stainer, Jonathan Liu and Tibor Kiss

4.2 Toyota Supplier System in Japan and the UK
Peter Hines

4.3 Readiness for Supply Chain Collaboration and Supplier Integration – Findings from the Chinese Automotive Industry
Joachim Schadel, Martin Lockström, Roger Moser and Norma Harrison

4.4 Business Process Management and Supply Chain Collaboration: Critical Comparison of Four Thai Case Studies
Jiraporn Pradabwong, Christos Braziotis and Kulwant S. Pawar

5 Retail Logistics

5.1 Customer Segmentation Based on Buying and Returning Behaviour: Supporting Differentiated Service Delivery in Fashion E-Commerce
Klas Hjort, Björn Lantz, Dag Ericsson and John Gattorna

5.2 The Retailer's Stock-Keeping Unit Allocation Problem
Balram Avittathur and Janat Shah

5.3 Exploring Supply Chain Relationships and Information Exchange in UK Grocery Supply Chains: Some Preliminary Findings
Mark Barratt

6 ICT and Decision Support

6.1 Traceability Information Management System for Composite Production Process
Takeo Takeno, Azuma Okamoto, Mitsuyoshi Horikawa, Toshifumi Uetake, Mitsumasa Sugawara and Masaaki Ohba

6.2 Flexible Mass Customisation: Managing Its Information Logistics Using Adaptive Cooperative Multi-agent Systems
Ingo J. Timm, Peer-Oliver Woelk, Peter Knirsch, Hans-Kurt Tönshoff and O. Herzog
7 Transport and Distribution

7.1 The Determinants of Containerised Grain Shipping 215
Ted T. C. Lim and Jung-De Wang

7.2 Modelling the Impact of Factory Gate Pricing on Transport and Logistics 231
Andrew Potter, Chandra Lalwani, Stephen Disney and Helder Velho

7.3 The Load Planning Problem for Less-Than-Truckload Motor: Carriers and a Solution Approach 240
Naoto Katayama and Shigeru Yurimoto

8 Sustainable and Responsible Supply Chains

8.1 Does Firm Size Influence Sustainable Performance in Food Supply Chains: Insights from Greek SMEs 253
Michael Bourlakis, George Maglaras, Emel Aktas, David Gallear and Christos Fotopoulos

8.2 Setting Targets for Reducing Carbon Emissions from Logistics Operations: Principles and Practice 266
Alan McKinnon

8.3 On the Operational Logistic Aspects of Reuse 279
Simme Douwe P. Flapper

Index 289