Table of Contents

Preface ............................................................................................................................................. xvi

Section 1
Enabling Smarter SCM

Chapter 1
An Improved Lightweight RFID Authentication Protocol ......................................................... 1
Xiaowen Zhang, College of Staten Island – CUNY, USA
Zhanyang Zhang, College of Staten Island – CUNY, USA
Xinzhou Wei, New York City College of Technology – CUNY, USA

Chapter 2
Research of Supply Quality Control and Optimization Under Multi-Period Dynamic Game .......... 10
Jun Hu, Zhejiang Gongshang University, China
Yulian Fei, Zhejiang Gongshang University, China
Ertian Hua, Zhejiang Gongshang University, China

Chapter 3
Utilizing SMS/3G Networks for Better and Reliable Communications between Yard Cranes and Server ......................................................................................................................... 19
C. D. Cheng, NDI Automation Pte. Ltd., Singapore
C. C. Ko, National University of Singapore, Singapore
W. J. Huang, National University of Singapore, Singapore

Chapter 4
Towards a Unified Definition of Supply Chain Management: The Four Fundamentals .............. 32
Edward Sweeney, Dublin Institute of Technology, Ireland

Chapter 5
Process Analysis of Knowledge Production .................................................................................. 51
Raafat G. Saadé, Concordia University, Canada
Ali Ahmed, Concordia University, Canada
Chapter 6
Introducing Quality of Service Criteria into Supply Chain Management for Excellence .................. 70
Roman Gumzej, University of Maribor, Slovenia  
Brigita Gajšek, University of Maribor, Slovenia

Chapter 7
Building an Expert-System for Maritime Container Security Risk Management ....................... 86
Jaouad Boukachour, University of Le Havre, France  
Charles-Henri Fredouet, University of Le Havre, France  
Mame Bigué Gningue, University of Le Havre, France

Section 2
Developing Networking Excellence

Chapter 8
The Development of Synergy Model on Internal and External Suppliers for Asian Airlines Industry .............................................................................................................................................. 110
Yudi Fernando, Universiti Sains Malaysia, Malaysia  
Norizan Mat Saad, Universiti Sains Malaysia, Malaysia  
Mahmod Sabri Haron, Universiti Sains Malaysia, Malaysia  
Suhaiza Zailani, Universiti Sains Malaysia, Malaysia

Chapter 9
The 2008 Survey of Indian Third-Party Logistics (3PL) Service Providers: Comparisons with the 2004 Survey of Indian 3PLs and 2006 Survey of North American 3PLs ............................................. 129
Subrata Mitra, Indian Institute of Management Calcutta, India

Chapter 10
IT-Based Classification for Supply Chain Coordination Mechanisms ............................................. 148
Fereshteh Ghahremani, K. N. Toosi University of Technology, Iran  
Mohammad J. Tarokh, K. N. Toosi University of Technology, Iran

Chapter 11
Analyzing the Lead Time and Shipping Lot-Size in a Chaotic Supply Network ............................... 163
Mohammad J. Tarokh, K. N. Toosi University of Technology, Iran  
Sina Golara, K. N. Toosi University of Technology, Iran

Chapter 12
An Empirical Investigation on the Use of Buffers and Incentives in Non-Hierarchical Networks .................................................. 178
Roberto Pinto, University of Bergamo, Italy  
Fabiana Pirola, University of Bergamo, Italy  
Tobias Mettler, SAP Research, Switzerland
Chapter 13
Dynamic Formation of Business Networks: A Framework for ‘Quality of Information’-Based Discovery of Resources ................................................................. 193

Markus Eurich, ETH Zürich, Switzerland
Claudia Villalonga, ETH Zürich, Switzerland
Roman Boutellier, ETH Zürich, Switzerland

Section 3
Towards Sustainable Economy

Chapter 14

Christian Ploberger, University of Birmingham, UK

Chapter 15
Promoting Technological Environmental Innovations: The Role of Environmental Regulation ...... 230

Jacqueline C. K. Lam, University of Hong Kong, Hong Kong
Peter Hills, University of Hong Kong, Hong Kong

Chapter 16
Information Technology Resources Virtualization for Sustainable Development ......................... 248

Malgorzata Pankowska, University of Economics in Katowice, Poland

Chapter 17
The Firm Boundary Decision for Sustainability-Focused Companies ........................................... 263

Ozan Özcan, University of South Florida, USA
Kingsley Anthony Reeves, Jr., University of South Florida, USA

Chapter 18
Study on Low-Carbon Economy Model and Method of Chinese Tourism Industry ...................... 284

Zhang Mu, Jinan University, China
Luo Jing, Jinan University, China
Zhang Xiaohong, Jinan University, China
Tang Lei, Jinan University, China
Feng Xiao-na, Jinan University, China
Chen Shan, Jinan University, China

Chapter 19
A Closed-Loop Logistics Model for Green Supply Chain Management .................................... 318

A. H. Basiri, K. N. Toosi University of Technology, Iran
A. Shemshadi, K. N. Toosi University of Technology, Iran
M. J. Tarokh, K. N. Toosi University of Technology, Iran