Table of Contents

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

Section 1

Chapter 1
Coordination of a Supply Chain with Demand Stimulation and Random Demand Disruption .......... 1
   Tiaojun Xiao, Nanjing University, China
   Jia Luo, Nanjing University, China
   Jiao Jin, Nanjing University, China

Chapter 2
Supply Chain Risk Management: Literature Review and Future Research ......................................... 15
   Iwan Vanany, Sepuluh Nopember Institute of Technology, Indonesia
   Suhaiza Zailani, Universiti Sains, Malaysia
   Nyoman Pujawan, Sepuluh Nopember Institute of Technology, Indonesia

Chapter 3
Application of Dynamic Analysis in a Centralised Supply Chain ........................................................ 33
   Mu Niu, Northumbria University, UK
   Petia Sice, Northumbria University, UK
   Ian French, University of Teesside, UK
   Erik Mosekilde, The Technical University of Denmark, Denmark

Chapter 4
Adoption of RFID in Supply Chains: A Motivation and Ability Perspective ....................................... 54
   Chin-Boo Soon, The University of Auckland, New Zealand
   Jairo Gutiérrez, Universidad Tecnológica de Bolívar, Colombia

Chapter 5
A New Optimization Method for Supplier Evaluation in the Context of Volume Discount ................ 64
   Reza Farzipoor Saen, Islamic Azad University-Karaj Branch, Iran
Chapter 6
An Evaluation and Scenario Analysis of the Representative Supply Chain Management Software ................................................................................................................ 76
  Ruiliang Yan, Indiana University Northwest, USA
  Zhongxian Wang, Montclair State University, USA
  Ruben Xing, Montclair State University, USA

Section 2

Chapter 7
Decision-Making Coordination within Three-Echelon Supply Chains ................................................ 93
  Jairo R. Montoya-Torres, Universidad de La Sabana, Colombia

Chapter 8
An Approach of Decision-Making Support Based on Collaborative Agents for Unexpected Rush Orders Management ................................................................................................................... 108
  El Habib Nfaoui, University of Lyon, France and University of Sidi Med Ben AbdEllah, Morocco
  Omar El Beqqali, University of Sidi Med Ben AbdEllah, Morocco
  Yacine Ouzrout, University of Lyon, France
  Abdelaziz Bouras, University of Lyon, France

Chapter 9
Contracts Based on Inventory Cost Share for Supply Chain Coordination ........................................ 126
  Alejandra Gomez-Padilla, University of Guadalajara, Mexico

Chapter 10
On the Analysis of Supplier-Manufacturer Information Sharing Strategies for Production Scheduling ........................................................................................................................................... 139
  Jairo R. Montoya-Torres, Universidad de La Sabana, Colombia
  Gloria L. Rodríguez-Verjan, Universidad de La Sabana, Colombia

Chapter 11
Coordination Policies for Multi-Echelon Multi-Product Inventory Systems ........................................ 153
  Fidel Torres, Universidad de los Andes, Colombia
  Gonzalo Mejía, Universidad de los Andes, Colombia

Section 3

Chapter 12
A Stochastic Perturbation Algorithm for Inventory Optimization in Supply Chains ......................... 165
  Liya Wang, NASA Ames Research Park, USA
  Vittal Prabhu, Penn State University, USA
Chapter 13
Trust-Based Information Risk Management in a Supply Chain Network................................. 181
Yanjun Zuo, University of North Dakota, USA
Wen-Chen Hu, University of North Dakota, USA

Chapter 14
A Stochastic Model for Improving Information Security in Supply Chain Systems.................. 197
Ibrahim Al Kattan, American University of Sharjah, UAE
Ahmed Al Nunu, American University of Sharjah, UAE
Kassem Saleh, Kuwait University, Kuwait

Chapter 15
Supply Chain Risk Management Driven by Action Learning...................................................... 212
H.P. Borgman (Hans), University of Leiden, The Netherlands
Wilfred Rachan, University of Leiden, The Netherlands

Chapter 16
Using Organizational Information Processing Theory to Examine the Relationship between
Information Sharing and Supply Chain Performance................................................................. 230
Clay Posey, University of Arkansas at Little Rock, USA

Chapter 17
Sheu Hua Chen, National Chinyi University of Technology, Taiwan

Section 4

Chapter 18
Revenue Sharing in a Two-Stage Supply Chain with Linear Stepwise Unit Inventory
Holding Cost................................................................................................................................. 254
Jing Hou, Southeast University, P. R. China
Amy Z. Zeng, Worcester Polytechnic Institute, USA
Lindu Zhao, Southeast University, P. R. China

Chapter 19
Genetic Algorithm to Solve Multi-Period, Multi-Product, Bi-Echelon Supply Chain Network
Design Problem.......................................................................................................................... 275
R. Dhanalakshmi, IBM India Pvt. Ltd, Bangalore, India
P. Parthiban, National Institute of Technology, India
K. Ganesh, Tata Consultancy Services Limited, India
T. Arunkumar, Vellore Institute of Technology, India
Chapter 20
Enhancing Cooperation in Enterprises using Agent and Web Services Paradigms............................ 290
Mahmoud Brahimi, Mentouri University of Constantine, Algeria
Lionel Seinturier, University of Lille, France
Mahmoud Boufaida, Mentouri University of Constantine, Algeria

Chapter 21
Production Lots as Determinant of Paper Production Lead Time Performance............................... 310
Pekka Koskinen, Confidea Business Consulting, Finland
Olli-Pekka Hilmola, Lappeenranta University of Technology, Finland

Chapter 22
Optimal Pricing Strategies for an Inventory System with Perishable Items and Waiting Time
Dependent Order Cancellations ........................................................................................................... 326
A. Thangam, Gandhigram Rural University, India
R. Uthayakumar, Gandhigram Rural University, India

Compilation of References ................................................................................................................... 339

About the Contributors ........................................................................................................................... 373

Index..................................................................................................................................................... 383