Outsourcing Management for Supply Chain Operations and Logistics Services

Dimitris Folinas
ATEI-Thessaloniki, Greece
# Table of Contents

**Foreword by Nyoman Pujawan** ................................................................. xix

**Foreword by Michael Bourlakis** ............................................................... xxi

**Preface** ........................................................................................................ xxiii

**Acknowledgment** ....................................................................................... xxxii

## Section 1
**The Concept of Logistics Outsourcing**

**Chapter 1**
General Views of Logistics, Outsourcing, and Logistics Outsourcing .................................................. 1
*Leonidas Baziotopoulos, Logistics & Business Consultant, Greece*

**Chapter 2**
A Framework for the Management of Logistics Outsourcing Life Cycle ............................................... 24
*Dimitris Folinias, Alexander Technological Educational Institute of Thessaloniki, Greece*

**Chapter 3**
*Kostas Selviaridis, Lund University, Sweden*

**Chapter 4**
Logistics Service Providers: Collaboration with IFFs, 3PL, or 4PL Providers? ........................................ 52
*Eleni-Maria Papadopoulou, Alexander Technological Educational Institute of Thessaloniki, Greece*

**Chapter 5**
Taking Logistics Service Providers into Account in Industrial Classifications ....................................... 78
*Laurence Saglietto, University of Nice-Sophia Antipolis, France*
Section 2
The Management of Logistics Outsourcing Services

Chapter 6
Outsourcing Execution in Transportation and Distribution .............................................. 91
Paulo Mendes Jr., Pontifical Catholic University of Rio de Janeiro, Brazil
José Eugenio Leal, Pontifical Catholic University of Rio de Janeiro, Brazil

Chapter 7
Outsourcing the Warehousing Function: A Survey of Greek Practices ............................ 120
Socrates J. Moschuris, University of Piraeus, Greece
Socrates A. Nikitas, Famar S.A., Greece

Chapter 8
Sequencing Orders from Multiple Industrial Customers on an External Manufacturing Facility ............................................................... 134
Dimitrios Koulouriotis, Democritus University of Thrace, Greece
Alexandros Xanthopoulos, Democritus University of Thrace, Greece

Chapter 9
Short-Term Time Series Prediction for a Logistics Outsourcing Company ...................... 150
Angeliki Papana, Postdoctoral Researcher, University of Macedonia, Greece

Section 3
Case Studies and Empirical Studies of Logistics Outsourcing

Chapter 10
Does the Outsourcing of Logistics Services Keep its Promise of Increased Efficiency?
The Case of Colgate-Palmolive, Greece ............................................................................. 162
Aliona Grigorenco, Perrotis College, American Farm School, Thessaloniki, Greece
Philippos Papadopoulos, Perrotis College, American Farm School, Thessaloniki, Greece
Konstantinos Rotsios, Perrotis College, American Farm School, Thessaloniki, Greece

Chapter 11
Service Innovation along the Chain of Service Process in Airline Business .................. 185
Yudi Fernando, Graduate School of Business, Universiti Sains, Malaysia

Chapter 12
Distribution and Logistics Outsourcing in the Pharmaceutical Sector .......................... 202
George Malindretos, Harokopion University, Greece

Chapter 13
Logistics Modeling and Forecasting with Regression ...................................................... 223
Ariadni Papana Dagiasis, Cleveland State University, USA
Chapter 14
Outsourcing Supply Chain Support and its Effectiveness and Implication in R&D Environment in Singapore ................................................................. 238
   Dimitris Folinas, Alexander Technological Educational Institute of Thessaloniki, Greece
   Lye Hock Sim, Hyperion@sg, Singapore

Section 4
Selection and Evaluation of the Logistics Service Providers

Chapter 15
Overview on 3PL Selection Problem .............................................................. 266
   Aicha Aguezzoul, LGIPM, University of Lorraine, France

Chapter 16
   Christos Keramidas, Aristotle University of Thessaloniki, Greece
   Naoum Tsolakis, Aristotle University of Thessaloniki, Greece
   Anastasios Xanthopoulos, Aristotle University of Thessaloniki, Greece
   Dimitrios Aidonis, Alexander Technological Educational Institute of Thessaloniki, Greece

Chapter 17
Selection of the 3rd/4th Party Logistics Provider: A Multi-Criteria Approach ......................... 296
   Voulgarakis Nikolaos, Alexander Technological Educational Institute, Greece
   Aidonis Dimitris, Alexander Technological Educational Institute, Greece
   Achillas Charisios, International Hellenic University, Greece
   Triantafillou Dimitrios, Alexander Technological Educational Institute, Greece
   Moussiopoulos Nicolas, Aristotle University of Thessaloniki, Greece

Chapter 18
Multi-Criteria Decision Making for Supplier Selection in Biomass Supply Networks for Bioenergy Production ........................................................................ 313
   Vasiliki Kazantzi, Technological Education Institute (TEI) of Larissa, Greece
   Vassilis Gerogiannis, Technological Education Institute (TEI) of Larissa, Greece
   Leonidas Anthopoulos, Technological Education Institute (TEI) of Larissa, Greece

Chapter 19
Measuring Performance of Logistics Outsourcing Services .................................................. 344
   Harlina Suzana Jaafar, Malaysia Institute of Transport (MITRANS), Universiti Teknologi MARA, Malaysia
   Mohammed Rafiq, Loughborough University, England
Section 5
Costing and Legal Issues of Logistics Outsourcing

Chapter 20
Using Outsourced Logistics Services (4PL): Economical and Technical Analysis of an Operational and Business Model
Vasileios Giotopoulos, Democritus University of Thrace, Greece
Dimitrios Koulouriotis, Democritus University of Thrace, Greece
Vasileios Moustakis, Technical University of Crete, Greece

Chapter 21
Pricing of 3PL Services
Dimitris Papasotiriou, Global Logistics Consultant, Greece

Chapter 22
Key Contractual Issues with Logistics Outsourcing
Sam De Silva, Manches LLP, UK

Chapter 23
Planning Negotiations for Logistics Service Providers
Miltiadis Sarigiannidis, Aristotle University of Thessaloniki, Greece

Chapter 24
Loyalty and Disloyalty in Logistics Outsourcing Relationships
Jari Juga, University of Oulu, Finland
Jouni Juntunen, University of Oulu, Finland

Section 6
Trends in Outsourcing Logistics Services

Chapter 25
The Effects of the Financial Crisis on 3PL Enterprises: A Focus in the Greek Market
Fotios Misopoulos, City College, International Faculty of the University of Sheffield, Greece
Konstantinos Papathanasiou, City College, International Faculty of the University of Sheffield, Greece

Chapter 26
Purchasing Green Transport and Logistics Services: Implications from the Environmental Sustainability Attitude of 3PLs
Pietro Evangelista, IRAT-CNR and University of Naples Federico II, Italy
Maria Huge-Brodin, Linköping University, Sweden
Karin Isaksson, Linköping University, Sweden
Edward Sweeney, National Institute for Transport and Logistics (NITL), Dublin Institute of Technology, Ireland
Chapter 27
Moving toward a Global Supply Chain Operations and the Impact on International Competition ......................................................... 466
Seyed-Mahmoud Aghazadeh, State University of New York at Fredonia, USA

Chapter 28
Managing the Risks of Outsourcing IT Security in Supply Chain ................................................................. 477
Theodosios Tsiakis, Alexander Technological Educational Institute of Thessaloniki, Greece
Panagiotis Tsiakis, Wipro Ltd, UK

Compilation of References .............................................................................................................................................. 496

About the Contributors ................................................................................................................................................. 548

Index ........................................................................................................................................................................ 560