Customer–Oriented Global Supply Chains: Concepts for Effective Management

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Chapter 1
Towards Patient-Driven Agile Supply Chains in Healthcare......................................................... 1
  Véronique Nabelsi, Université du Québec en Outaouais, Canada

This chapter covers a strategic framework for customer-oriented or patient-driven SCM, integrating the evolving economics of the healthcare industry and the emerging dynamics of global supply chains.

Chapter 2
Knowledge Sharing in Supply Chain............................................................................................... 21
  Liandong Zhu, University of Vaasa, Finland
  Robertus Wahyu Nayan Nugroho, Technical University of Liberec, Czech Republic
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Knowledge sharing in supply chains introduces the thermodynamics analogy as a means of studying knowledge sharing in supply chain. It finds that distance and the knowledge capacity of the supplier are important to reduce knowledge sharing uncertainty. Furthermore, higher contact frequency between the supplier and the buyer without considering supplier capacity is proven to be insignificant to reduce knowledge sharing uncertainty.

Chapter 3
Negotiation Protocol Based on Budget Approach for Adaptive Manufacturing Scheduling......... 35
  Paolo Renna, University of Basilicata, Italy
  Rocco Padalino, University of Basilicata, Italy

The research proposed concerns the development of a multi-agent scheduling approach able to support manufacturing systems in different dynamic conditions. The negotiation protocol defined budget approach is based on a financial asset that each part obtains when it is released into the manufacturing system for processing.
Chapter 4
Supplier-Oriented Purchasing Behaviors in Projects

Ron Meier, Illinois State University, USA
Dan Brown, Illinois State University, USA

This chapter introduces project manager’s perceptions of the importance of developing relationships with preferred suppliers as it impacts elements of cost, planning, time management, quality management, technical expertise, and product availability. Furthermore, it identifies key characteristics and attributes of supplier-oriented purchasing behaviors in project-oriented environments.

Chapter 5
Coopetition in Supply Chains: A Case Study of a Coopetitive Structure in the Horticulture Industry

Lincoln C. Wood, Curtin University, Australia

The topic of chapter 5, coopetition, or the mingling of competitive and cooperative relationships, has been utilised by New Zealand companies in the horticulture industry to help break into and develop new markets. Using a case study, various elements of the supply chain are examined from both strategic and operational perspectives for this group of companies and their customers and suppliers.

Chapter 6
Agile Value Creation and Co-Evolution in Global Supply Chains

Ali Alavizadeh, Indiana University-Purdue University Fort Wayne, USA
Reza Djavanshir, The Johns Hopkins Carey Business School, USA
Mohammad J. Tarokh, K.N. Toosi University of Technology, Iran
Jaby Mohammed, The Petroleum Institute, UAE

This chapter sheds light on the concept of co-evolution and its application in supply chain management and how it can contribute to creating value for all customers.

Chapter 7
Engineer-to-Order: A Maturity Concurrent Engineering Best Practice in Improving Supply Chains

Richard Addo-Tenkorang, University of Vaasa, Finland
Ephrem Eyob, Virginia State University, USA

This chapter introduces a best practice concurrent approach for reducing the lead-time at an engineer-to-order product design/development stage by seeking to integrate business Information Technology systems in the design and operational phases to improve the supply chain.

Chapter 8
Total Quality Management in the Global Supply Chain

Janet H. Sanders, East Carolina University, USA

This chapter provides an overview of the importance of total quality management in supply chain management. It provides a summary of the evolution of quality and how supply chain management fits into that evolution.
Chapter 9
Supply Chain Management and the Other Half

Kaninika Bhatnagar, Eastern Illinois University, USA

This chapter covers the role of a diverse workforce in supply chain, particularly women, is reexamined from the perspective of maximizing the bottom-line and profit sharing in the logistics industry. The unique and problematic diversity issues that underlie both practices and policy in the industry are discussed.

Chapter 10
Identifying the Determinants of Customer Retention in a Developing Country Context

Norizan Mohd Kassim, University Technology Malaysia, Malaysia

This chapter investigates how image, perceived service quality, and satisfaction determine customer retention in the retail banking industry in Malaysia. Data was obtained using a self-administered survey involving a convenience sample of 134 retail banking customers in Malaysia. The results show that image is both directly and indirectly related to retention through satisfaction, while perceived service quality is indirectly related to retention through satisfaction.

Chapter 11
Adopting and Integrating Cloud Computing

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The objective of this chapter is to predict the adoption rate of Cloud Computing in the future with a soft timeline using a scenario-based forecasting model. The researchers identified key barriers preventing this transition, created a roadmap, the basics of cloud computing, identification of key areas for technology integration, performed a barrier analysis, and plotted a business adoption model.

Chapter 12
Radio Frequency Identification in the Smart Supply Chain

Albert Lozano-Nieto, The Pennsylvania State University, USA

This chapter uses RFID in the supply chain applications, which focuses on those related to inventory control and the detection of counterfeited products.

Chapter 13
The Role of Human Collaboration in Supply Chain Management

Kenneth A. Saban, Duquesne University, USA
John Mawhinney, Duquesne University, USA

This chapter discusses the importance human collaboration in supply chain management. Supply chain performance is often equated with acquiring the best technology or process. However, current studies suggest that supply chain performance also requires human collaboration. To change conventional thinking, this chapter proposes a holistic approach to achieving human collaboration among distributed partners, clarifies the forces that facilitate human collaboration, and identifies the steps management can take to create more collaborative team members.
Chapter 14
Evaluation of Key Metrics for Performance Measurement of a Lean Deployment Effort

Edem G. Tetteh, Paine College, USA
Ephrem Eyob, Virginia State University, USA
Yao Amewokunu, Virginia State University, USA

To meet customer’s needs for high-quality goods and avoiding risks of product-liability, global firms continually evaluate the performance of their supply chain for optimum design. The chapter covers lean management as one of the key techniques businesses adopt in redesigning their processes. The technique is a vital strategy to increase productivity and effectiveness with respect to the movement of goods. Multivariate Analysis of Variance (MANOVA) was utilized to evaluate the performance of work cell, shift, worker’s experience, and kaizen event participation level during a lean enterprise deployment effort at a multinational organization.

Chapter 15
Design for Sustainment: Challenges and Theoretical Issues in Product and Global Supply Chain Management

Benedict M. Uzochukwu, North Carolina A & T State University, USA
Silvanus J. Udoka, North Carolina A & T State University, USA

This chapter chronicles and analyzes existing challenges and theoretical issues in the domain of product, system and emerging area of global supply chain sustainment. These challenges encompass the provision of reliable, efficient, cost-effective, and quality services by key players and major stakeholders in product and global supply chain system. The authors argue that sustainment concept serves as a vehicle for elevating the rate of product and system utilization.

Chapter 16
Inventory Cost Share for Supply Chain Coordination by Means of Contracts

Alejandra Gomez-Padilla, Center of Exact Sciences and Engineering, University of Guadalajara, Mexico

The last chapter highlights the importance of contracts for coordination between companies in a supply chain. It considers a dyadic situation with a supplier a retailer. Coordination is achieved by two types of decisions: economic (concerning prices established and stated over a contract), and physical exchange of products (concerning the inventory that is going to be held by the retailer.

Compilation of References

About the Contributors

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