Introduction To Logistics Systems Management By Gianpaolo Ghiani

This book deals with complex problems in the fields of logistics and supply chain management and discusses advanced methods, especially from the field of computational intelligence (CI), for solving them. The first two chapters provide general introductions to logistics and supply chain management on the one hand, and to computational intelligence on the other hand. The subsequent chapters cover specific fields in logistics and supply chain management, work out the most relevant problems found in those fields, and discuss approaches for solving them. Chapter 3 discusses problems in the field of production and inventory management. Chapter 4 considers planning activities on a finer level of granularity which is usually denoted as scheduling. In chapter 5 problems in transportation planning such as different types of vehicle routing problems are considered. While chapters 3 to 5 rather discuss planning problems which appear on an operative level, chapter 6 discusses the strategic problem of designing a supply chain or network. The final chapter provides an overview of academic and commercial software and information systems for the discussed applications. There appears to be a gap between general textbooks on logistics and supply chain management and more specialized literature dealing with methods for computational intelligence, operations research, etc., for solving the complex operational problems in these fields. For readers, it is often difficult to proceed from introductory texts on logistics and supply chain management to the sophisticated literature which deals with the usage of advanced methods. This book fills this gap by providing state-of-the-art descriptions of the corresponding problems and suitable methods for solving them.

"The documented benchmarks for success and the many examples help explicate the complexities for the reader. The book is organized and written so that it will be useful as an introduction to the field and also as a reference when special challenges arise for the practicing manager." -- DR. JOHN J. COYLE, Professor Emeritus of Logistics and Supply Chain Management, Department of Supply Chain and Information Systems, Smeal College of Business, Pennsylvania State University "The book is a must-read for all supply chain managers seeking to drive down costs and improve profits and must be read before any investment is made in your supply chain. Get copies for your controller and all senior managers...this book lays it all out." -- DR. RICHARD LANCIONI, Chair, Marketing & Supply Chain Management, Fox School of Business, Temple University Expert Strategies for Improving Supply Chain and Logistics Performance Using Lean This practical guide reveals how to identify and eliminate waste in your organization's supply chain and logistics function. Lean Supply Chain and Logistics Management provides explanations of both basic and advanced Lean tools, as well as specific Lean implementation opportunities. The book then describes a Lean implementation methodology with critical success factors. Real-world examples and case studies demonstrate how to effectively use this powerful strategy to realize significant, long-term improvements and bottom-line savings. COVERAGE INCLUDES: * Using Lean to energize your supply chain * The eight wastes * Lean opportunities and JIT in supply chain and logistics * Lean tools and warehouse * Global lean supply chain and logistics * Lean opportunity assessment, value stream mapping, and Kaizen event management * Best-in-class use of technology with Lean * Metrics and measurement * Education and training Valuable training slides are available for download.

The tactical organization of resources is a vital component to any industry in modern society. Effectively managing the flow of materials through various networks ensures that the requirements of customers are met. Sustainable Logistics and Strategic Transportation Planning is a pivotal reference source for the latest research on the management of logistics through the lens of sustainability, as well as for emerging procedures that are particularly critical to the transportation sector. Highlighting international perspectives, conceptual frameworks, and targeted investigations, this book is ideally designed for policy makers, professionals, researchers, and upper-level students interested in logistics and transport systems.

The logistician plays a critical role in the growth of his or her company – in this third edition of Essentials of Logistics, the conceptual framework in which all the stakes and themes of logistics is systematically analyzed, with a strong focus on the role of the supply chain. Indeed, many elements are critical to the successful logistical strategy: customer relation management, interactive information support, production optimization and process development, vision, strategy and operations management, and human resources and resource allocation. Growing out of a successful course given by the International Institute for the Management of Logistics (IML) of the Swiss Federal Institute of Technology (EPFL), in Lausanne, and by the Ecole des Ponts-ParisTech (ENPC), the purpose of this book is to present a methodology allowing the reader to understand and act based on the critical factors embedded in the design of strategy. Concepts are thus combined with practical examples. Transversal vision and detailed case studies highlight the main themes of modern logistics and daily preoccupations of logisticians. The book is addressed to all professionals of logistics: managers, planners and engineers; as well as to graduate students specializing in the field.

Looking at Logistics is a fresh and exciting first look at logistics and supply chain management that can easily be used as a textbook in the college, community college, and high school setting. It is written in an engaging, fun, and accessible style and every chapter includes revealing case studies. The chapters of Looking at Logistics include: Introducing the Supply Chain; Logistics & Its Role in Supply Chain Management; The Physical Side of Materials Management; Inbound Logistics: Purchasing; Outbound Logistics: Physical Distribution Management; Outbound Logistics: Transportation; Information Technology Systems; Finance in Logistics and Supply Management; Logistics and the Supply Chain in the Global Environment; Customer Service in the World of Logistics; The Human Side of Customer Service; and Logistics in the 21st Century. A Looking at Logistics Teaching Pack is also available from the publisher that includes PowerPoint and Keynote slides, activities and games, homework assignments, test questions for each chapter, and suggestions for adapting the materials for online instruction. With the Looking at Logistics Teaching Pack, an entire semester of content is at your fingertips!

Introduction to Logistics Systems ManagementJohn Wiley & Sons

THE PRACTICAL, EASY INTRODUCTION TO MODERN SUPPLY CHAIN/LOGISTICS MANAGEMENT FOR EVERY PROFESSIONAL AND STUDENT! COVERS CORE CONCEPTS, PLANNING, OPERATIONS, INTEGRATION, COLLABORATION, NETWORK DESIGN, AND MORE SHOWS HOW TO MEASURE, CONTROL, AND IMPROVE ANY SUPPLY CHAIN INCLUDES PRACTICAL ADVICE FOR JUMPSTARTING YOUR OWN SUPPLY CHAIN CAREER This easy guide introduces the modern field of supply chain and logistics management, explains why it is central to business success, shows how its pieces fit together, and presents best practices you can use wherever you work. Myerson explains key concepts, tools, and applications in clear, simple language, with intuitive examples that make sense to any student or professional. He covers the entire field: from planning through operations, integration and collaboration through measurement, control, and improvement. You'll find practical insights on hot-button issues ranging from sustainability to the lean-agile supply chain. Myerson concludes by helping you anticipate key emerging trends--so you can advance more quickly in your own career. Trillions of dollars are spent every year on supply chains and logistics. Supply chain management is one of the fastest growing areas of business, and salaries are rising alongside demand. Now, there's an easy, practical introduction to the entire field: a source of reliable knowledge and best practices for students and professionals alike. Paul A. Myerson teaches you all you'll need to start or move forward in your own supply chain career. Writing in plain English, he covers all the planning and management tasks needed to transform resources into finished products and services, and deliver them efficiently to customers. Using practical examples, Myerson reviews the integration, collaboration, and technology issues that are essential to success in today's complex supply chains. You'll learn how to measure your supply chain's performance, make it more agile and sustainable, and focus it on what matters most: adding customer value. MASTER NUTS-AND-BOLTS OPERATIONAL BEST PRACTICES Improve procurement, transportation, warehousing, ordering, reverse logistics, and more BUILD A BETTER GLOBAL SUPPLY

CHAIN Manage new risks as you improve sustainability STRENGTHEN KEY LINKAGES WITH YOUR PARTNERS AND CUSTOMERS Get supply chains right by getting collaboration right PREVIEW THE FUTURE OF SUPPLY CHAINS--AND YOUR SUPPLY CHAIN CAREER Discover "where the puck is headed"--so you can get there first

Industrial revolutions have impacted both, manufacturing and service. From the steam engine to digital automated production, the industrial revolutions have conduced significant changes in operations and supply chain management (SCM) processes. Swift changes in manufacturing and service systems have led to phenomenal improvements in productivity. The fast-paced environment brings new challenges and opportunities for the companies that are associated with the adaptation to the new concepts such as Internet of Things (IoT) and Cyber Physical Systems, artificial intelligence (AI), robotics, cyber security, data analytics, block chain and cloud technology. These emerging technologies facilitated and expedited the birth of Logistics 4.0. Industrial Revolution 4.0 initiatives in SCM has attracted stakeholders' attentions due to it is ability to empower using a set of technologies together that helps to execute more efficient production and distribution systems. This initiative has been called Logistics 4.0 of the fourth Industrial Revolution in SCM due to its high potential. Connecting entities, machines, physical items and enterprise resources to each other by using sensors, devices and the internet along the supply chains are the main attributes of Logistics 4.0. IoT enables customers to make more suitable and valuable decisions due to the data-driven structure of the Industry 4.0 paradigm. Besides that, the system's ability of gathering and analyzing information about the environment at any given time and adapting itself to the rapid changes add significant value to the SCM processes. In this peer-reviewed book, experts from all over the world, in the field present a conceptual framework for Logistics 4.0 and provide examples for usage of Industry 4.0 tools in SCM. This book is a work that will be beneficial for both practitioners and students and academicians, as it covers the theoretical framework, on the one hand, and includes examples of practice and real world.

LOGISTICS SYSTEMS ANALYSIS Logistics, the subject of this monograph, is narrowly defmed here to be the science that studies how to convey items from production to consumption in cost effective ways; some subjects of interest to logistics managers such as reliability and maintenance are not addressed. The theories that are covered, on the other hand, apply to generic items that can represent people, as well as freight; they should be of interest to passenger transportation firms and agencies. Besides'transportation, a logistics system usually includes other activities such as inventory control, handling, and sorting, which must be carefully coordinated if cost-effectiveness is to be achieved. Yet, both in theory and practice these activities are often examined separately. The operations research field includes sub-fields with specialized journals in inventory control, transportation, warehousing, etc ... Over the years, these sub-fields have evolved into disciplines that have developed their own specialized conventions and jargon, as a result making it increasingly difficult for researchers to communicate across disciplinary boundaries. Something similar happens in practice when firms become compartmentalized; if responsibilities for different logistical activities are allocated to different managers, decisions in the best interests of the firm are difficult (if not impossible) to make.

Global Logistics Management focuses on the evolution of logistics in the last two decades, and highlights recent developments from a worldwide perspective. The book details a wide range of application-oriented studies, from metropolitan bus routing problems to relief logistics, and introduces the state of the art on some classical applications. The book addresses typical logistic problems, most specifically the vehicle routing problem (VRP), followed by a series of analyses and discussions on various logistics problems plaguing airline and marine systems. The text addresses problems encountered in continuous space, and discusses the issue of consolidation, scheduling, and replenishment decisions together with routing. It proposes a methodology that supports decision making at a tactical and operational level associated with daily inventory management, and also examines the three-echelon logistic network. This material provides numerous examples and additional topics that include: An analysis for the airline industry and a novel approach for airline logistics including fare pricing and seat inventory control The berth-crane allocation problem in container terminals A marine system logistics application Ice navigation problems and factors that affect ice navigation Pharmaceutical warehouse route design problems An application in healthcare logistics in which medical suppliers are evaluated through a fuzzy linguistic representation model A real data-driven simulation model that outputs a new shuttle system A model that integrates routing and batching problems Joint replenishment and transportation problems Global Logistics Management clearly illustrates logistic problems encountered in many different application areas, and provides you with the latest advances in classical applications.

Logistics is a \$700 billion industry in the USA and is the second largest employer of college graduates. Logistics costs account for nearly 30% of the sales dollar, and logistics activities are essential to satisfying the ever- changing customer demand in terms of variety and availability. Today the need for cutting edge, sophisticated logistics practices has never been greater. This unique text is squarely focused on the key activities within the functional areas of logistics and transportation, with emphasis placed on the quantitative treatment of the design and planning issues in logistics. In scope, Logistics and Transportation comprehensively covers almost all the elements of the supply chain. Moreover, it includes a number of topics that are generally not covered by most popular logistics texts. These include functional areas such as: vendor selection, inventory models with inventory costs, advanced transportation models, logistics metrics, and latest trends in logistics. The text is primarily designed for use in the classroom by senior undergraduate and graduate-level students. It is also a useful resource for practicing transportation and logistics professionals. Readers will appreciate the references for recommended further reading, related training aids and problem sets given at the end of each chapter, as well as the two comprehensive logistics cases presented at the end of the text. unique introduction to distribution logistics that focuses on both quantitative modeling and practical business issues Introduction to Distribution Logistics presents a complete and balanced treatment of distribution logistics by covering both applications and the required theoretical background, therefore extending its reach to practitioners and students in a range of disciplines such as management, engineering, mathematics, and statistics. The authors emphasize the variety and complexity of issues and sub-problems surrounding distribution logistics as well as the limitations and scope of applicability of the proposed quantitative tools. Throughout the book, readers are provided with the quantitative approaches needed to handle real-life management problems, and areas of study include: Supply chain management Network design and transportation Demand forecasting Inventory control in single- and multi-echelon systems Incentives in the supply chain Vehicle routing Complete with extensive appendices on probability and statistics as well as mathematical programming, Introduction to Distribution Logistics is a valuable text for distribution logistics courses at both the advanced undergraduate and beginning graduate levels in a variety of disciplines, and prior knowledge of production planning is not assumed. The book also serves as a useful reference for practitioners in the fields of applied mathematics and statistics, manufacturing engineering, business management, and operations research. The book's related Web site includes additional sections and numerical illustrations.

Business practices are constantly evolving in order to meet growing customer demands. Evaluating the role of logistics and supply chain management skills or applications is necessary for the success of any organization or business. As market competition becomes more aggressive, it is crucial to evaluate ways in which a business can maintain a strategic edge over competitors. Supply Chain and Logistics Management: Concepts, Methodologies, Tools, and Applications is a vital reference source that centers on the effective management of risk factors and the implementation of the latest supply management strategies. It also explores the field of digital supply chain optimization and business transformation. Highlighting a range of topics such as inventory management, competitive advantage, and transport management, this multi-volume book is ideally designed for business managers, supply chain managers, business professionals, academicians, researchers, and upper-level students in the field of supply chain management, operations management, logistics, and operations research.

This book illustrate sand explains a wide range of practical logistics strategies and analytic techniques to facilitate decision-making across functions such as manufacturing, warehousing, transportation, and inventory management. Logistics professionals must utilize a broad array of analytic techniques and approaches for decision-making. Effective use of analytics requires an understanding of both fundamental and advanced logistics decision-making techniques and methodologies. Further, logistics professionals must organize and view these analytics-based decision support tools through well-structured planning frameworks. In this book, we illustrate and explain a wide range of practical logistics strategies and analytic techniques to facilitate decision-making across functions such as manufacturing, warehousing, transportation and inventory management. We also describe how to organize these analytics-based tools and strategies through logistics frameworks that span strategic, tactical and operational planning and scheduling decisions. This book is intended for logistics professionals to use as a reference document that offers ideas and guidance for addressing specific logistics management decisions and challenges, and it will also serve as a valuable resource or secondary text for graduate and advanced undergraduate students.

Technology in Supply Chain Management and Logistics: Current Practice and Future Applications analyzes the implications of these technologies in a variety of supply chain settings, including block chain, Internet of Things (IoT), inventory optimization, and medical supply chain. This book outlines how technologies are being utilized for product planning, materials management and inventory, transportation and distribution, workflow, maintenance, the environment, and in health and safety. Readers will gain a better understanding of the implications of these technologies with respect to value creation, operational effectiveness, investment level, technical migration and general industry acceptance. In addition, the book features case studies, providing a real-world look at supply chain technology implementations, their necessary training requirements, and how these new technologies integrate with existing business technologies. Identifies emerging supply chain technologies and trends in technology acceptance and utilization levels across various industry sectors Assists professionals with technology investment decisions, procurement, best values, and how they can be utilized for logistics operations Features videos showing technology application, including optimization software, cloud computing, mobility, 3D printing, autonomous vehicles, drones and machine learning

This book provides a comprehensive overview of how to strategically manage the movement and storage of products or materials from any point in the manufacturing process to customer fulfillment. Topics covered include important tools for strategic decision making, transport, packaging, warehousing, retailing, customer services and future trends. An introduction to logistics Provides practical applications Discusses trends and new strategies in major parts of the logistic industry

Publisher Description

Logistics Transportation Systems compiles multiple topics on transportation logistics systems from both qualitative and quantitative perspectives, providing detailed examples of real-world logistics workflows. It explores the key concepts and problem-solving techniques required by researchers and logistics professionals to effectively manage the continued expansion of logistics transportation systems, which is expected to reach an estimated 25 billion tons in the United States alone by 2045. This book provides an ample understanding of logistics transportation systems, including basic concepts, in-depth modeling analysis, and network analysis for researchers and practitioners. In addition, it covers policy issues related to transportation logistics, such as security, rules and regulations, and emerging issues including reshoring. This book is an ideal guide for academic researchers and both undergraduate and graduate students in transportation modeling, supply chains, planning, and systems. It is also useful to transportation practitioners involved in planning, feasibility studies, consultation and policy for transportation systems, logistics, and infrastructure. Provides real-world examples of logistics systems solutions for multiple transportation modes, including seaports, rail, barge, road, pipelines, and airports Covers a wide range of business aspects, including customer service, cost, and decision analysis Features key-term definitions, concept overviews, discussions, and analytical problem-solving Introduction to Logistics Systems Management is the fully revised and enhanced version of the 2004 prize-winning textbook Introduction to Logistics Systems Planning and Control, used in universities around the world. This textbook offers an introduction to the methodological aspects of logistics systems management and is based on the rich experience of the authors in teaching, research and industrial consulting. This new edition puts more emphasis on the organizational context in which logistics systems operate and also covers several new models and techniques that have been developed over the past decade. Each topic is illustrated by a numerical example so that the reader can check his or her understanding of each concept before moving on to the next one. At the end of each chapter, case studies taken from the scientific literature are presented to illustrate the use of quantitative methods for solving complex logistics decision problems. An exhaustive set of exercises is also featured at the end of each chapter. The book targets an academic as well as a practitioner audience, and is appropriate for advanced undergraduate and graduate courses in logistics and supply chain management, and should also serve as a methodological reference for practitioners in consulting as well as in industry.

This book aims to help engineers, Masters students and young researchers to understand and gain a general knowledge of logistic systems optimization problems and techniques, such as system design, layout, stock management, quality management, lot-sizing or scheduling. It summarizes the evaluation and optimization methods used to solve the most frequent problems. In particular, the authors also emphasize some recent and interesting scientific developments, as well as presenting some industrial applications and some solved instances from real-life cases. Performance evaluation tools (Petri nets, the Markov process, discrete event simulation, etc.) and optimization techniques (branch-and-bound, dynamic programming, genetic algorithms, ant colony optimization, etc.) are presented first. Then, new optimization methods are presented to solve systems design problems, layout problems and buffer-sizing optimization. Forecasting methods, inventory optimization, packing problems, lot-sizing quality management and scheduling are presented with examples in the final chapters.

Looking at Logistics is a fresh, clear, and exciting look at logistics and supply chain management that can easily be used as a textbook in the college, community college, and high school settings. Written in an engaging, fun, and accessible style, its chapters include plenty of diagrams, illustrations, and photographs to enhance learning. Each chapter also concludes with an insightful case study. The third edition of Looking at Logistics has been updated and expanded with more than 100 pages of new content, including content addressing the Covid-19 pandemic and its impact on logistics and supply chain management. Instructors considering using Looking at Logistics in their classrooms should contact the publisher directly for a free desk copy. Available January 2021: Complete companion teaching pack for online and face-to-face courses. Contact the publisher for more details. This book addresses critical issues in today's logistics operations and supply chain management, with a special focus on sustainability. In dedicated chapters the authors address aspects concerning multimode logistics operations, reverse network configuration, forward and reverse supply chain integration, improvement of the production operations and management of the recovery activities, as well as carbon footprint reduction in transportation. Selected best practices from different countries and

industries are presented to aid in the implementation of sustainable policies in private enterprises and at public-sector institutions. The book offers a valuable resource for both academics and practitioners who wish to deepen their expertise in the field of logistics operations and management with regard to sustainability issues. The book examines both qualitative and qualitative aspects of sustainable supply chain and logistics operations.

Knowledge management has been widely applied to various industries as a good strategy to help improve firms' performance. As globalisation accelerates and international trade increases more and more, maritime transport operations have become one of the vitalest industries to receive large attention from international managers. This is because the managers have perceived that the maritime transport system is an integrated entity within the global logistics and supply chain, and it should be therefore managed in the most efficient and effective ways possible, as an organic body within a global logistics system. Taking this approach, this book examines how maritime transport operators – such as shipping companies, port terminal operators and freight forwarders – could successfully play a role within the global logistics flow wherein they are embedded by improving their logistic value, i.e. maritime logistics value. As per the objective, the current book suggests a knowledge management based solution. It attempts to systematically investigate what types of knowledge are needed in the maritime logistics industry, how maritime operators could effectively acquire the knowledge, and whether the acquired knowledge would help maritime operators enhance maritime logistics value. This book provides not only comprehensive understandings of knowledge management strategy, but also its practical application to the maritime logistics industry. This would therefore be a useful guidebook for the managers, academics, and undergraduate / postgraduate students in the field of maritime transport and global logistics, to help them to gain comprehensive knowledge of the application of knowledge management strategy to the industry.

In a context of global competition, the optimization of logistics systems is inescapable. Logistics Systems: Design and Optimization falls within this perspective and presents twelve chapters that well illustrate the variety and the complexity of logistics activities. Each chapter is written by recognized researchers who have been commissioned to survey a specific topic or emerging area of logistics. The first chapter, by Riopel, Langevin, and Campbell, develops a framework for the entire book. It classifies logistics decisions and highlights the relevant linkages to logistics decisions. The intricacy of these linkages demonstrates how thoroughly the decisions are interrelated and underscores the complexity of managing logistics activities. Each of the chapters focus on quantitative methods for the design and optimization of logistics systems.

Finance and Risk Management for International Logistics and the Supply Chain presents a detailed overview of financial and risk management tools, activity-based costing, and multi-criteria decision-making, providing comprehensive guidance for those researching and working in logistics and supply chain management. The book breaks new ground, combining the expertise of leading authorities to analyze and navigate the funding components for these critical transportation functions. As the international logistics and supply chain transportation fields have recently received heavy investments, this research and the theory behind it provide a timely update on risk management, finance and legal and environmental impacts. Users will find sections that address the wide-ranging issues related to this emerging field that are presented from an international and holistic perspective. Provides a valuable reference covering the full slate of financial issues of interest to global players in the international transport, logistics and supply chain industries Covers a truly international perspective, addressing a diverse variety of worldwide transport, logistics and supply chain contexts Features finance and risk-management strategies related to the banking industry, exchange rates, fuel prices, climate-related funding, freight derivatives and legal aspects

Fierce competition in today's global market provides a powerful motivation for developing ever more sophisticated logistics systems. This book, written for the logistics manager and researcher, presents a survey of the modern theory and application of logistics. The goal of the book is to present the state-of-the-art in the science of logistics management. As a result, the authors have written a timely and authoritative survey of this field that many practitioners and researchers will find makes an invaluable companion to their work.

Logistics Management is a comprehensive textbook designed to meet the requirements of postgraduate management students specializing in Operations or International Business. Written in a student-friendly style, it describes the theory extensively and provides numerous figures and exhibits showcasing managerial aspects of Logistics Management. The book is divided into 4 parts. Part I, Introduction to Logistics and Integration, introduces the basic concepts of Logistics, its relevance and relation with supply chain management in both, national and international scenarios. Part II, Logistics Delivery and Fulfilment, covers unitization, palletization and containerization along with various forms of transport including surface, marine, and air. This section also deals with material handling and role of ports in facilitating international logistics. Following this, Part III, Logistics Documentation and Processes, includes chapters on role of customs in regulating international trade, insurance and processes of documentation related to domestic and international trade. The concluding section, Part IV, Logistics Strategy and SCM, provides discussions on system planning, warehousing, inventory management and technology in logistics. With the inclusion of real life case studies in Indian context and written in a simple manner, this book will be useful for students and young professionals. Despite its importance, logistics engineering often lags industry requirements, especially in terms of engineering-based needs. Filling the gap between education and practice, this brief but comprehensive volume covers the most basic material in the field of logistics engineering, making is suitable for those who require an overview of the topic. The book discusses logistics from historical and economic perspectives, covers the basic tools required for the study and practice of logistics, and reviews the metrics that can be used to evaluate progress. It then delves into activities that commonly fill the workdays of logisticians. The book closes with an excellent chapter on logistics as an integrating systems function.

A well-planned, well-structured warehouse management system (WMS) offers significant advantages to an organization, particularly in its ability to make warehouse operations more efficient, more cost effective, and more responsive. A Supply Chain Logistics Program for Warehouse Management details the concepts, applications, and practices necessary for the successful management of a WMS program, including the selection and adoption of the right software. Taking a process approach to a generic warehouse and its workings, the authors trace a product's life cycle from its receipt at a warehouse, through its outbound shipment, and to its eventual return. This approach illustrates the logistics of a well-run supply chain and how it works in relation to every phase of a warehouse's operation. The book details each phase and its related process, demonstrating how every component fits into the overall operation. Specific topics include how to reduce product damage, enhance identified product flow and track inventory, increase employee productivity, improve customer service, reduce warehouse operating costs, improve profits, and assure asset protection. The book also presents guidelines, tips and checklists so the reader can view how each

component is carried out. Whether a warehouse operation supports a small, medium, or large business, A Supply Chain Logistics Program for Warehouse Management is an important book to have in order to design a system that reduces operating costs, improves products, and maintains timely delivery to customers.

Warehousing and Transportation Logistics examines professional transport and warehousing logistics, and offers an overview of all logistics functions for the area of internal business logistics, so-called intra-logistics, with a particular focus on transport, warehousing and assembly logistics. It includes interfaces such as unit creation, material flow or goods storage as well as systems and management for planning or information to identify objects, control and processing of orders. This book does not just contain specialist knowledge for students of technical subjects, but it also serves as a practice-oriented book for the planning of bachelor and master degree theses, with a multitude of useful information and ideas. It is also a workbook for professional practitioners, production, planning and industrial engineers, who are specifically concerned with the planning side of this specialist area. Warehousing and Transport Logistics covers transportation, information systems, procurement, finance, performance metrics as well as warehousing and distribution. There are more than 200 examples with solutions outlining the disadvantages of depending, and about 250 questions to encourage independent learning.

International trade has made logistics a strategic consideration for firms. The decision-making framework is substantially different in the case of international logistics, as this involves cross-border movement of goods and multimodal transportation. An integrated framework based on customer's requirement, their country regulations, risk, and cost specific to goods and countries needs to be developed. Global Supply Chains and Multimodal Logistics: Emerging Research and Opportunities is an essential reference source that provides concepts of global logistics and its risk factors and provides an integrated framework for effective decision making. Highlighting such topics as enterprise resource planning, forecasting models, and logistics systems, this publication is ideally designed for managers, business professionals, researchers, academicians, and students in fields including but not limited to supply chain management, international business, and logistics.

The UK's bestselling book on logistics and supply chain management – over 100,000 copies sold. Effective development and management of supply chain networks helps businesses cut costs and enhance customer value. This updated 5th edition is a clear guide to all the key topics in an integrated approach to supply chains. As well as new and updated examples and case studies, there are two new chapters: Routes to Market: Many companies now have to manage multiple distribution channels - this chapter covers strategic issues on how companies "go to market" along with the cost implications of using alternative channels. Service Logistics: As companies begin to sell performance rather than physical product, this chapter explores the implications for logistics management as the need to provide higher levels of service and customer support becomes ever more critical. This book provides an overview of important trends and developments in logistics and supply chain research, making them available to practitioners, while also serving as a point of reference for academicians. Operations and logistics are cornerstones of modern supply chains that in turn are essential for global business and economics. The composition, character and importance of supply chains and networks are rapidly changing, due to technological innovations such as Information and Communication Technologies, Sensors and Robotics, Internet of Things, and Additive Manufacturing, to name a few (often referred to as Industry 4.0). Societal developments such as environmental consciousness, urbanization or the optimal use of scarce resources are also impacting how supply chain networks are configured and operated. As a result, future supply chains will not just be assessed in terms of cost-effectiveness and speed, but also the need to satisfy agility, resilience and sustainability requirements. To face these challenges, an understanding of the basic as well as more advanced concepts and recent innovations is essential in building competitive and sustainable supply chains and, as part of that, logistics and operations. These span multiple disciplines and geographies, making them interdisciplinary and international. Therefore, this book contains contributions and views from a variety of experts from multiple countries, and combines management, engineering as well as basic information technology and social concepts. In particular, it aims to: provide a comprehensive guide for all relevant and major logistics, operations, and supply chain management topics in teaching and business practice address three levels of expertise, i.e., concepts and principles at a basic (undergraduate, BS) level, more advanced topics at a graduate level (MS), and finally recent (state-of-the-art) developments at a research level. In particular the latter serve to present a window on current and future (potential) logistics innovations in the different thematic fields for both researchers and top business practitioners integrate a textbook approach with matching case studies for effective teaching and learning discuss multiple international perspectives in order to represent adequately the true global nature of operations, logistics and supply chains.

Designed for students, young managers and seasoned practitioners alike, this handbook explains the nuts and bolts of the modern logistics and distribution world in plain language. Illustrated throughout, this second edition includes new chapters on areas previously not covered, such as: intermodal transport; benchmarking; environmental matters; and vehicle and depot security.

The fashion industry has a dynamic, ever-changing landscape. The last decade has seen a shift in consumer expectations and a heightened dependence on efficient and effective supply chain management. These shifts in the consumer mentality have already forced apparel retailers to adapt, making changes throughout their organisations to maintain consumer loyalty. This new text provides an overview of the latest trends and advances in fashion supply chain management and logistics, including: The fundamentals of fashion supply chain management Strategic management of the fashion supply chain, including the planning aspect of management Technology in fashion supply chain management Radio-frequency identification (RFID) and interoperability Drawing on the expertise of academics, researchers and industry experts, including a wealth of real-life international cases, this book is ideal for advanced undergraduate and postgraduate students and academics of fashion management, logistics and supply chain management, as well as practising professionals.

Increasing legislative and environmental pressure requires businesses to become more responsive to products that either have been returned or that are at the end of their useful lives. Life cycles are getting shorter, and efficient handling can save large amounts of money since many materials can be extracted and reused or redistributed. Reverse lo

High-Tech and High-Touch Logistics Solutions for Supply Chain Challenges In today's fast-paced and customer-oriented business environment, superior supply chain performance is a prerequisite to getting and staying competitive. Supply Chain Strategy is based on world-class logistics practices in place in successful supply chain organizations, the latest academic breakthroughs in logistics system design, and the logic of logistics. It presents the proven pillars of success in logistics and supply chain management. Part of McGraw-Hill's Logistics Management Library, Supply Chain Strategy is organized according to author Dr. Ed Frazelle's breakthrough logistics master planning methodology. The methodology leads to metrics, process designs, system designs, and organizational strategies for total supply chain management, total logistics management, customer response, inventory planning and management, supply, transportation, and warehousing. Concise yet complete, Dr. Frazelle's book shows how to develop a comprehensive logistics and supply chain strategy, one that will both complement and support a company's strategic objectives and long-term success. Logisticsthe flow of material, information, and money between consumers and suppliershas become a key boardroom topic. It is the subject of cover features in business publications from Wall Street Journal to BusinessWeek. Annual global logistics expenditures exceed \$3.5 trillion, nearly 20 percent of the world's GDP, making

logistics perhaps the last frontier for major corporations to significantly increase shareholder and customer value. And at the heart of every effort to improve organizational logistics performance? Supply chain efficiency. Supply Chain Strategy is today's most comprehensive resource for up-to-the-minute thinking and practices on developing supply chain strategies that support a company's overall objectives. Covering world-class practices and systems, taken from the files of Coca-Cola, Wal-Mart, General Electric, and other companies, it covers essential supply chain subjects including: Logistics data miningfor identifying the root cause of material and information flow problems, pinpointing opportunities for process improvements, and providing an objective basis for project-team decision making Inventory planning and managementpresenting metrics, processes, and systems for forecasting, demand planning, and inventory control, yielding lower inventory levels and improved customer service Logistics information systems and Web-based logisticshelping to substitute information for inventory and work content Transportation and distributionfor connecting sourcing locations with customers at the lowest cost by, among other things, leveraging private and third-party transportation systems Logistics organization developmentincluding the seven disciplines that link enterprises across the supply chain, as well as logistics activities within those enterprises Supply Chain Strategy explains and demonstrates how decision makers can use today's technology to enhance key logistics systems at every point in the supply chain, from the time an idea or product is conceived through its delivery to the final user. It describes the major steps in developing an effective, workable logistics management programone that will reduce operating expenses, minimize capital investment, and improve overall customer service and satisfaction.

Introduction to Global Logistics offers a step-by-step guide to global logistics. Covering the breadth of logistics, this highly accessible text is illustrated by engaging case studies of market leaders. In this comprehensive second instalment of Global Logistics Strategies, John Manners-Bell provides an in-depth definition, description and exploration of the strategic principles and practices in transportation modes and supply chain verticals, including: freight forwarding, contract logistics, shipping, road freight, air cargo and express. The book also examines major sectors, including automotive, chemical, pharmaceutical, retail, consumer, and high tech. Introduction to Global Logistics offers a detailed examination of key topics, including: how the logistics industry has developed, how it is influenced by macro-economic factors and demand-side trends, what the risks are to the industry, and how it will develop over the coming years. It examines important trends and developments that are shaping the industry, including 3D printing, megacities, and post-harvest food losses. Online resources available: Chapter-supporting lecturer slides.

"This book explores the creation of integrated supply chains, the developments of virtual business, and the processes of re-engineering for business development"--Provided by publisher.

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