

Operations And Supply Chain Management 13th Edition Solutions Manual

Gain a clear understanding of the fundamental concepts and applications behind operations and supply chain management with the reader-friendly approach in Collier/Evans' popular OPERATIONS AND SUPPLY CHAIN MANAGEMENT, 2E. The authors present detailed, solved problems throughout this edition to illustrate key formulas and computations as you learn to complete both manual and digital calculations using Excel spreadsheet templates and other Excel models for optimization and simulation. Even more review questions, cases, experiential activities, problems and exercises as well as feature boxes teach you how to work with the latest operations management (OM) and supply chain management (SCM) concepts and tools. New content examines process analysis and resource utilization, analytics in OM, capacity measurement, applications of linear optimization and other critical OM and SCM topics. You can further your understanding with interactive digital resources and new algorithmic exercises within MindTap's complete learning applications.

Logistics and Supply Chain Management has been a vital part of every economy and every business entity. Both sciences have become prestigious research fields focusing on best practices, concepts, and methods. Outsourcing Management for Supply Chain Operations and Logistics Services is concentrated on the key players of the outsourcing paradigm; the organizations that provide logistics services, the Third Party Logistics (3PL's), as well as their clients, presenting and promoting the lessons learned by their cooperation. Specifically, this publication presents studies which are relevant to practitioners, researchers, students, and clients of the application of the Outsourcing practice on the Logistics and Supply Chain Management services giving emphasis to 3PL's.

For research in all subjects and among different philosophical paradigms, research methodologies form one of the key issues to rely on. This volume brings a series of papers together, which present different research methodologies as applied in supply chain management. This comprises review oriented papers that look at what kind of methodologies have been applied, as well as methodological papers discussing new developments needed to successfully conduct research in supply chain management. The third group is made up of applications of the respective methodologies, which serve as examples on how the different methodological approaches can be applied. All papers have undergone a review process to ensure their quality. Therefore, we hope that this book will serve as a valid source for current and future researchers in the field. While the workshop on "Research Methodologies in Supply Chain Management" took place at the Supply Chain Management Center, Carl von Ossietzky University in Oldenburg, Germany, it is based on a collaboration with the Supply Chain Management Group of the Department of Operations Management at the Copenhagen Business School and the Department of Production Management at the Vienna University of Economics and Business Administration. We would like to thank all those who contributed to the workshop and this book.

"This resource provides students with a thorough foundation in operations management, supply chain management, and the strategic implementation of programs, techniques, and tools for reducing costs and improving quality in health care organizations. It incorporates the features and functions of Microsoft Excel where appropriate in its coverage of supply chain strategy, process design and analysis of health care operations, managing health care operations quality, and planning and controlling health care operations. The book illustrates leading edge concepts and techniques such as six-sigma and lean logistics, and shows how operations and process improvement relate to contemporary health care trends such as evidence-based medicine and pay-for-performance"--

The third edition of Operations and Supply Chain Management: The Core focuses on the important "core" concepts in the dynamic field of operations. Just as lava flows from the core of the earth, operations and supply chain management is the core of business. Material must flow through supply chain processes to create cash output and input. This new edition has an increased focus on supply chain analytics involving the analysis of data to better solve business problems. Connect is the only integrated learning system that empowers students by continuously adapting to deliver precisely what they need, when they need it, and how they need it, so that your class time is more engaging and effective.

Introduction to Operations and Supply Chain Management provides an integrated and comprehensive treatment of both operations and supply chain management.

After reading this book, you will be able to answer the following questions: What is Operations and Supply Chain Management and why is it important? What are the key functions within this field, and how do they interact with one another and the broader business? What are the responsibilities and decisions that managers in each functional area think about? How will disruptions in the Supply Chain impact the business world and our lives going forward? What are the practical applications of the knowledge gained around Supply Chain Operations? Have you ever wondered what your peers meant by "Supply Chain" or "Operations", or why either of these fields matter? What about people that work in these roles - what do they actually do? In Operations and Supply Chain Management Essentials You Always Wanted to Know these questions will be answered, and more. This practical, yet simple, guide uses a hypothetical company and the consumer product they make, to explain how the various functions within the Supply Chain intertwine and contribute to bring a finished product to life for consumers in the market. You don't need a management background to understand our story of how new demands, changing preferences, and unforeseen circumstances force this fictional company to adapt in order to survive. By posing questions that Supply Chain Operations Manager's face, you will start to think like a Supply Chain Operations professional, whether it be in professional or personal applications. You may not be inspired to make a career shift into these areas or chat Supply Chain topics at the dinner table, however, you will gain an understanding and appreciation for how these activities make everyday products and services at our disposal - and why this is increasingly important for companies to pay attention to. About the Author Ashley McDonough is a Supply Chain and Finance professional who holds an M.B.A from the Hong Kong University of Science and Technology, one of the top M.B.A. programs in the world. She also holds a Bachelor's degree from the University of Minnesota, with an emphasis in Supply Chain, Operations Management, and Economics. Ashley has worked in various Supply Chain functions including planning, manufacturing, quality, logistics, continuous improvement, research and development, and project management. She has over 5 years of experience in large corporations as well as start-ups, in the United States and across Asia. This exposure is spread across various industries, including electronics, agriculture, FMCG, banking, retail, and apparel. As a firm believer in making complex Supply Chain concepts understandable, and a desire to share her experiences, Ashley has served as a corporate trainer on digital transformation and continuous improvement, both with emphasis on the implications to the Supply Chain. Her diverse work history prepared her to write her first published piece as a contributing author to Food Safety for the 21st Century, highlighting her experiences working with dairy and packaging start-ups in Sri Lanka on their quality and environmental plans. Her exposure in the developing world gave her an understanding of how Supply Chain practices can be modified or simplified given the context in which they are being applied. By complementing her professional experience with a passion for writing, Ashley hopes to share with others the complexities, challenges, and excitement that comes with working in the Supply Chain in a simple, yet practical way that is easy for anyone to understand.

Introduction to Operations and Supply Chain Management the first text to provide an integrated and comprehensive treatment of both operations and supply chain management. The authors provide deeper coverage of important topics while maintaining a trim, integrated book. It provides substantial coverage of the major operations management topics and tools, while extending coverage to include core supply chain management issues.

Sustainable Operations and Supply Chain Management John Wiley & Sons

An introduction to financial tools and concepts from an operations perspective, addressing finance/operations trade-offs and explaining financial accounting, working capital, investment analysis, and more. Students and practitioners in engineering and related areas often lack the basic understanding of financial tools and concepts necessary for a career in operations or supply chain management. This book offers an introduction to finance fundamentals from an operations perspective, enabling operations and supply chain professionals to develop the skills necessary for interacting with finance people at a practical level and for making sound decisions when confronted by tradeoffs between operations and finance. Readers will learn about the essentials of financial statements, valuation tools, and managerial accounting. The book first discusses financial accounting, explaining how to create and interpret balance sheets, income statements, and cash flow statements, and introduces the idea of operating working capital—a key concept developed in subsequent chapters. The book then covers financial forecasting, addressing such topics as sustainable growth and the liquidity/profitability tradeoff; concepts in managerial accounting, including variable versus fixed costs, direct versus indirect costs, and contribution margin; tools for investment analysis, including net present value and internal rate of return; creation of value through operating working capital, inventory management, payables, receivables, and cash; and such strategic and tactical tradeoffs as offshoring versus local and centralizing versus decentralizing. The book can be used in undergraduate and graduate courses and as a reference for professionals. No previous knowledge of finance or accounting is required.

The fifth edition of *Operations and Supply Chain Management: The Core* focuses on the important core concepts in the dynamic field of operations. Just as lava flows from the core of the earth, operations and supply chain management is the core of business. Material must flow through supply chain processes to create cash output and input. This new edition has an increased focus on supply chain analytics, focusing on the effective analysis of data to better solve business problems.

The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline through the Bookshelf (available as a free download), available online and also via the iPad and Android apps. Upon purchase, you'll gain instant access to this eBook. Time limit The eBooks products do not have an expiry date. You will continue to access your digital ebook products whilst you have your Bookshelf installed. For undergraduate and graduate operations management courses. *Operations Management* provides students with a comprehensive framework for addressing operational process and supply chain issues and uses a systemized approach while focusing on issues of current interest. The text has ample opportunities for students to experience the role of a manager with challenging problems, cases, simulations, experiential exercises, and tightly integrated online resources.

Innerhalb moderner Informations- und Kommunikationssysteme für Supply Chain Management und Logistik stehen heute erstmals große Mengen an digitalen, strukturierten Daten zur Verfügung. Diese bilden eine hervorragende Basis für den Einsatz quantitativer Methoden bei der Entscheidungsunterstützung. Durch State-of-the-Art-Technologien des Operations Research können heute sehr große Praxismodelle optimal gelöst und die Ergebnisse nahtlos in die Informations- und Kommunikationssysteme eines Unternehmens oder einer Lieferkette eingebunden werden. Darüber hinaus ist der Einsatz von Optimierungsverfahren heute nicht nur in der Planungsphase, sondern auch in der Ausführung möglich. Das Buch präsentiert Beispiele zur Nutzung quantitativer Methoden in Supply Chain Management und Logistik aus den Bereichen des Operations Research und der Wirtschaftsinformatik.

Boyer/Verma's breakthrough text meets today's student and instructor's needs and redefines the marketplace. Their text is briefer than most, taking all of the vital core concepts and building upon them with current and fresh examples. The authors understand the importance of striking a balance by creating a book that does an even better job at covering the core concepts while also providing customers with a new product that fully addresses and approaches this course area from today's teaching and learning perspectives and actual business practices. The three unifying themes throughout the book are Strategy, Global Supply Chain, and Service Operations. Strategy will serve as an overarching framework and will be used in each chapter to present students with an alternative approach to specific challenges. The authors use examples from non-US companies and/or organizations in each chapter to incorporate Service Operations in the book. They also show that even some of the largest manufacturing companies today have extensive service activities such as customer support and product development. The Global Supply Chain theme will allow students to see how products move through different companies and countries with Boyer/Verma's use of real world examples throughout his text. In addition the robust Cnow course allows instructors and students to go beyond the printed text to get the most from this exciting operations management program. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The second edition of this textbook comprehensively discusses global supply-chain and operations management, combining value creation networks and interacting processes. It focuses on the operational roles in the networks and presents the quantitative and organizational methods needed to plan and control the material, information and financial flows in the supply chain. Each chapter starts with an introductory case study, and numerous examples from various industries and services help to illustrate the key concepts. The book explains how to design operations and supply networks and how to incorporate suppliers and customers. It also examines matching supply and demand, which is a core aspect of tactical planning, before turning to the allocation of resources for fulfilling customer demands. This second edition features three new chapters: "Supply Chain Risk Management and Resilience", "Digital Supply Chain, Smart Operations, and Industry 4.0", and "Pricing and Revenue-Oriented Capacity Allocation". These new chapters provide the structured knowledge on the principles, models, and technologies for managing the supply-chain risks and improving supply-chain and operations performance with the help of digital technologies such as Industry 4.0, additive manufacturing, Internet-of-Things, advanced optimization methods and predictive analytics. The existing chapters have been updated and new case studies have been included. In addition, the preface provides guidelines for instructors on how to use the material for different courses in supply-chain and operations management and at different educational levels, such as general undergraduate, specialized undergraduate, and graduate courses. The companion website www.global-supply-chain-management.de has also been updated accordingly. In addition, the book is now supported by e-manuals for supply-chain and operations simulation and optimization in AnyLogic and anyLogistix. Providing readers with a working knowledge of global supply-chain and operations management, with a focus on bridging the gap between theory and practice, this textbook can be used in core, special and advanced classes. It is intended for broad range of students and professionals involved in supply-chain and operations management.

Resourceful companies today must successfully manage the entire supply flow, from the sources of the firm, through the value-added processes of the firm, and on to the customers of the firm. The fourteenth Global Edition of *Operations and Supply Chain Management* provides well-balanced coverage of managing people and applying

sophisticated technology to operations and supply chain management.

Finally, an operations management book to get excited about. Operations Management: A Supply Chain Process Approach exposes students to the exciting and ever-changing world of operations management through dynamic writing, application, and cutting-edge examples that will keep students interested and instructors inspired! Author Dr. Joel Wisner understands that today's students will be entering a highly competitive global marketplace where two things are crucial: a solid knowledge of operations management and an understanding of the importance for organizations to integrate their operations and supply chain processes. With this in mind, Wisner not only provides a clear and comprehensive introduction to operations management, but also gives attention to the important processes involved in linking firms' operations in a supply chain environment.

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Russell and Taylor's Operations and Supply Chain Management, 10th Edition is designed to teach students understand how to create value and competitive advantage along the supply chain in a rapidly changing global environment. Beyond providing a solid foundation, this course covers increasingly important OM topics of sustainability, corporate social responsibility, global trade policies, securing the supply chain, and risk and resilience. Most importantly, Operations Management, Tenth Edition makes the quantitative topics easy for students to understand and the mathematical applications less intimidating. Appropriate for all business students, this course takes a balanced approach to the foundational understanding of both qualitative and quantitative operations management processes.

Gain a clear understanding of the fundamental concepts and applications behind today's operations and supply chain management with the reader-friendly approach in Collier/Evans' popular OPERATIONS AND SUPPLY CHAIN MANAGEMENT, 2E. The authors present detailed, solved problems throughout this edition to illustrate key formulas and computations as you learn to complete both manual and digital calculations using Excel spreadsheet templates and other Excel models for optimization and simulation. New content examines process analysis and resource utilization, analytics in OM, capacity measurement, applications of linear optimization and other critical operations management (OM) and supply chain management (SCM) topics. In addition, new and proven review questions, experiential activities, problems and exercises as well as feature boxes teach you how to work with the latest OM and SCM concepts and tools. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The seventh edition of Operations and Supply Chain Management for MBAs is the definitive introduction to the fundamental concepts of supply chain and operations management. Designed specifically to meet the needs of MBA students, this market-leading book offers clear presentation of topics such process planning and design, capacity and location planning, schedule and inventory management, and enterprise resource planning. A strategic, conceptual approach helps readers comprehend the contemporary issues they will soon be facing in industry. This concisely-formatted volume enables instructors to customize their courses for the unique requirements of MBA programs. Each chapter integrates material directly into the text rather than sidebars, highlights, and other pedagogical devices to achieve a smooth, easy-to-read narrative flow. Carefully selected questions prompt discussions that complement the mature, more experienced nature of MBA students, while case studies and supplementary materials illustrate key concepts and practices. Topics such as outsourcing and global sourcing, the role of information technology, and global competitiveness strategies assist students to understand working and competing in the globalized economy.

It provides a complete account of location and layout models, production planning models, production control models, cycle inventory models, safety stock models and transportation models. A separate chapter on real-life situations provides the user with the knowledge of specific areas where the models have been applied in decision-making processes. The various techniques to solve operations and supply chain management problems are also discussed. The text is supported by a large number of illustrative examples, exercises and review questions to reinforce the students understanding of the subject matter. Besides students of Mechanical and Industrial Engineering, the book would also be useful to postgraduate students of Management.

Revised edition of the authors' Managing supply chain and operations, [2016]

For courses in operations and supply chain management. An integrated approach to operations and supply chain management Introduction to Operations and Supply Chain Management is an integrated, comprehensive introduction to both operations and supply chain management (SCM). The text remains engaging and brief while integrating all of the major concepts of both subjects in one cohesive source. The 5th Edition contains updated content and thorough coverage of analytical tools and techniques that students will apply to their careers in operations and SCM. It explores these topics in an interesting and relatable manner, providing students with real-world examples and easy-to-understand material. Also available with MyLab Operations Management By combining trusted authors' content with digital tools and a flexible platform, MyLab personalizes the learning experience and improves results for each student. Note: You are purchasing a standalone product; MyLab Operations Management does not come packaged with this content. Students, if interested in purchasing this title with MyLab, ask your instructor to confirm the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If you would like to purchase both the physical text and MyLab Operations Management, search for: 0134833511 / 9780134833514 Introduction to Operations and Supply Chain Management Plus MyLab Operations Management with Pearson eText -- Access Card Package, 5/e Package consists of: 0134740602 / 9780134740607 Introduction to Operations and Supply Chain Management 0134742176 / 9780134742175 MyLab Operations Management with Pearson eText -- Access Card --

for Introduction to Operations and Supply Chain Management

Creating value through Operations Management. Operations Management provides readers with a comprehensive framework for addressing operational process and supply chain issues. This text uses a systemized approach while focusing on issues of current interest. NOTE: This is the standalone book, if you want the book/access card order the ISBN below: 0132960559 / 9780132960557 Operations Management: Processes and Supply Chains Plus NEW MyOMLab with Pearson eText -- Access Card Package Package consists of 0132807394 / 9780132807395 Operations Management: Processes and Supply Chains 0132940477 / 9780132940474 NEW MyOMLab with Pearson eText -- Access Card -- for Operations Management: Processes and Supply Chains

LEVERAGE YOUR SUPPLY CHAIN FOR MAXIMUM PROFIT Do you have a global supply chain strategy designed for the long run? About 90 percent of global demand is not fully met by local supply, and global supply chains will soon account for 25 percent of multinational firms' performance--meanwhile, supply chains need to become 43 percent more global in the next decade just to maintain a firm's competitive edge. Written by three of today's leading experts on the subject--each from Michigan State University, the uncontested world leader of supply chain management--Global Supply Chain Management gives you the know-how and tools to dramatically boost supply chain efficiency by making it a core element of your overall corporate strategy. Global Supply Chain Management takes you step by step through the process of creating and managing a global supply chain strategy and aligning it with the conditions of your industry. Learn everything you need to know about developing a core strategy plus strategies for each of the critical supply chain functions: **LOGISTICS**--Integrate logistics strategy and tactical activities **PURCHASING**--Manage the transition to purchasing globally **OPERATIONS**--Systematically design, direct, and control processes **MARKET CHANNELS**--Effectively connect your supply chain to customers With in-depth case studies and data showing how American Express, AB InBev, Dell, FedEx, Daimler, Microsoft, Nestlé, Nokia, and several other prominent companies have applied global supply chain strategy to increase profits and growth, Global Supply Chain Management helps you take action to drive similar success in your company. If you're serious about competing today--and in the future--you must integrate and leverage strategic supply chain management into your overall corporate strategy. Global Supply Chain Management provides everything you need to build a strategy designed for the long run. **PRAISE FOR GLOBAL SUPPLY CHAIN MANAGEMENT** "This book does a superb job of using a total value perspective and integrating business functions into a strategic framework for global supply chain management that can be leveraged for success." -- Leif Johansson, Chairman of the Board of Directors of AstraZeneca, Ericsson, European Round Table of Industrialists, and the International Advisory Board of the Nobel Foundation "Written by a superb team of world-leading authors on global supply chain management, this book provides a great framework for companies to leverage global supply chain functions and processes, measurements, and tools to achieve sustained strategic advantage in the global marketplace." -- Michael Lawton, Chief Financial Officer (CFO) and Executive Vice President of Finance of Domino's Pizza, Inc. "In our company, we have come to recognize the strategic importance of building and maintaining a global supply chain. This book does an excellent job of identifying a framework for considering the implications of an integrated model for global supply chain management. It's clear that the authors have tremendous experience, and they have shared their insights in an innovative and integrative way." -- John Shull, Vice President and Global Procurement Officer of Steelcase Inc. "Global supply chains are critically important to companies in delivering products and services that satisfy customers. Hult, Closs, and Frayer provide an excellent model for how to drive the strategic and operational dimensions of global supply chain management to maximize end-customer value." -- Claes Fornell, Chairman of the Board of Directors of CFI Group Worldwide and ForeSee, and founder of the American Customer Satisfaction Index (ACSI)

Business practices are constantly evolving in order to meet growing customer demands. By implementing fresh procedures through the use of new technologies, organizations are able to remain competitive and meet the expectations of their customers. Designing and Implementing Global Supply Chain Management examines how various organizations have re-engineered their business processes in an effort to accommodate new innovations and remain relevant in a highly competitive global marketplace. Highlighting the creation of integrated supply chains and the emergence of virtual business communities, this publication is an appropriate reference source for students, researchers, and practitioners interested in trending approaches to external business functions used to efficiently respond to growing customer demands.

This book, developed in collaboration with the Rutgers Center for Supply Chain Management and based upon research projects conducted with over 100 participating corporations, combines theory and practice in presenting the concepts necessary for strategic implementation of supply chain management techniques in a global environment. Coauthored by top teaching and research faculty and a senior industry executive, this academic/industry partnership ensures the relevance of the text in terms of both practical application and academic rigor. This book introduces students to the key drivers of supply chain performance, including demand forecasting, sales and operations planning, inventory control, capacity analysis, transportation models, supply chain integration, and project management and risk analysis. It is enhanced by real-life examples and case studies as well as strategies from best practices and a focus on social and economic impact. The content reaches beyond a traditional operations management text and draws on the extensive experience of the authors conducting industry projects through the Rutgers Center for Supply Chain Management. The input of senior business executives has been an invaluable asset in presenting a balanced knowledge of both quantitative models and qualitative insights. This book is suitable for courses at the MBA core level, MS in supply chain management level, upper undergraduate level, and also suitable for executive education. Request Inspection Copy

Materials for course 20346 - OPERATIONS MANAGEMENT LAB - a.y. 2020/2021

30 up-to-date case studies illuminate every aspect of modern supply chain management • Risk management, analytics, global supply chain issues, and much more • Innovative processes, technologies, strategies, and tactics • An indispensable resource for both students and practitioners This casebook brings together 30 focused cases addressing virtually every aspect of supply chain management, from procurement to warehousing, strategy to risk management, IT to supplier selection and ethics. A global team of contributors presents key challenges in industries ranging from pharmaceuticals to fashion and previews issues ranging from the “limits of lean” to the potential of 3-D printing. Cases vary in length and complexity, offering maximum flexibility to both instructors and readers; a convenient table provides fast access to specific topics. Qualitative cases are supported by relevant discussion questions and sample responses; quantitative cases are supported by completed numerical solutions, and, where applicable, associated spreadsheets.

Sustainable Operations and Supply Chain Management addresses the most relevant topics of operations and supply chain management from the perspective of sustainability. The main focus is to provide a step by step guide for managerial decisions made along the product life-cycle, following a path made up of the following steps: product design, sourcing, manufacturing, packaging and physical distribution, reverses logistics and recovery.

Operations Management: Managing Global Supply Chains takes a holistic, integrated approach to managing operations and supply chains by exploring the strategic, tactical, and operational decisions and challenges facing organizations worldwide. Authors Ray R. Venkataraman and Jeffrey K. Pinto address sustainability in each chapter, showing that sustainable operations and supply chain practices are not only attainable, but are critical and often profitable practices for organizations to undertake. With a focus on critical thinking and problem solving, Operations Management provides students with a comprehensive introduction to the field and equips them with the tools necessary to thrive in today’s evolving global business environment. The new Second Edition includes more recent real-world examples of operations and supply chain issues, as well as new and updated cases. The inclusion of the new SAGE amp management system significantly improves the learning experience for the students and delivers learning outcomes for instructors.

Russell and Taylor’s Operations and Supply Chain Management, 8th Edition is designed to teach students how to analyze processes, ensure quality, create value, and manage the flow of information and products, while creating value along the supply chain in a global environment. Russell and Taylor explain and clearly demonstrate the skills needed to be a successful operations manager. Most importantly, Operations Management 8e makes the quantitative topics easy for students to understand and the mathematical applications less intimidating. In the 8th Edition, the production process and global supply chain of denim is used to introduce OM topics, and helps students see how all of the pieces of operations management fit together.

Appropriate for students preparing for careers across functional areas of the business environment, Operations Management 8e provides foundational understanding of both qualitative and quantitative operations management processes.

Known for its comprehensive approach, this text shows operations managers how to analyse processes, ensure quality, create value, and manage the flow of information, products and services. The seventh edition offers an extensive collection of exercises and solved problems to reinforce key concepts. An increased emphasis is placed on supply chain management and services. New information is presented on the environment and green management, and technology type OM topics as it applies to production, control, the supply chain, and global operations. All chapter opening cases and in-text example boxes have also been revised or replaced. This new content better prepares operations managers for the issues they’ll experience in the field. 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.

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