Designing And Managing The Supply Chain

Closed loop supply chains and their management have become mandatory for firms to stay competitive and profitable. This book provides insights into designing supply chain networks by understanding and incorporating key return parameters into the network design, which will affect profitability. The book discusses how customer categories and their acceptance behavior are incorporated into the network design. It also shows how to analyze the interaction of parameters on supply chain network design and profitability, offers modeling framework for incorporating uncertainties in the return product parameters, and shows how to design a robust network. Invaluable for managers in designing a sustainable, robust, and profitable supply chain network and ideal for managers, practitioners, and researchers in the area of supply chain network design and optimization.

The two volumes IFIP AICT 459 and 460 constitute the refereed proceedings of the International IFIP WG 5.7 Conference on Advances in Production Management Systems, APMS 2015, held in Tokyo, Japan, in September 2015. The 163 revised full papers were carefully reviewed and selected from 185 submissions. They are organized in the following topical sections: collaborative networks; globalization and production management; knowledge based production management; project management, engineering management, and quality management; sustainability and production management; co-creating sustainable business processes and ecosystems; open cloud computing architecture for smart manufacturing and cyber physical production systems; the practitioner’s view on "innovative production management towards sustainable growth"; the role of additive manufacturing in value chain reconfiguration and sustainability; operations management in engineer-to-order manufacturing; lean production; sustainable system design for green products; cloud-based manufacturing; ontology-aided production - towards open and knowledge-driven planning and control; product-service lifecycle management: knowledge-driven innovation and social implications; and service engineering.

Designing and Managing the Supply Chain, 3/e provides state-of-the-art models, concepts, and solution methods that are important for the design, control, operation, and management of supply chain systems. In particular, the authors attempt to convey the intuition behind many key supply chain concepts and to provide simple techniques that can be used to analyze various aspects of the supply chain. Topical coverage reflects the authors' desire to introduce students to those aspects of supply chain management that are critical to the success of a business. Although many essential supply chain management issues are interrelated, the authors strive to make each chapter as self-contained as possible, so that the reader can refer directly to chapters covering topics of interest. Each chapter utilizes numerous case studies and examples, and mathematical and technical sections can be skipped without loss of continuity. The 3rd edition represents a substantial revision. While the structure and philosophy were kept intact, the authors placed an increasing importance on finding or developing effective frameworks that illustrate many important supply chain issues. At the same time, motivated by new developments in industry, they added material on a variety of topics new to the book while increasing the coverage of others. 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. The success of any project relies on the punctual, accurate and cost-effective delivery of materials, systems and facilities. Typically, a major project involves several stakeholders working together with controlled resources to deliver a completed project. It has many suppliers, contractors and customers; it has procurement and supply, demand planning and scheduling; it often lasts several years and has long lead times. Managing Project Supply Chains demonstrates how customised supply chain management can be applied to project management, ensuring project resources are delivered as required, reducing delays and costs and promoting a successful outcome. An expert offers a set of rules that will help managers achieve dramatic improvements in operations performance. In recent years, management gurus have urged businesses to adopt such strategies as just-in-time, lean manufacturing, offshoring, and frequent deliveries to retail outlets. But today, these much-touted strategies may be risky. Global financial turmoil, rising labor costs in developing countries, and huge volatility in the price of oil and other commodities can disrupt a company’s entire supply chain and threaten its ability to compete. In Operations Rules, David Simchi-Levi identifies the crucial element in a company's success: the link between the value it provides its customers and its operations strategies. And he offers a set of scientifically and empirically based rules that management can follow to achieve a quantum leap in operations performance. Flexibility, says Simchi-Levi, is the single most important capability that allows firms to innovate in their operations and supply chain strategies. A small investment in flexibility can achieve almost all the benefits of full flexibility. And successful companies do not all pursue the same strategies. Amazon and Wal-Mart, for example, are direct competitors but each focuses on a different market channel and provides a unique customer value proposition—Amazon, large selection and reliable fulfillment; Wal-Mart, low prices—that directly aligns with its operations strategy. Simchi-Levi’s rules—regarding such issues as channels, price, product characteristics, value-added service, procurement strategy, and information technology—transform operations and supply chain management from an undertaking based on gut feeling and anecdotes to a science. Designing and Managing the Supply Chain, 3/e provides state-of-the-art models, concepts, and solution methods that are important for the design, control, operation, and management of supply chain systems. In particular, the authors attempt to convey the intuition behind many key supply chain concepts and to provide simple techniques that can be used to analyze various aspects of the supply chain. Topical coverage reflects the authors’ desire to introduce students to those aspects of supply chain management that are critical to the success of a business. Although many essential supply chain management issues are interrelated, the authors strive to make each
chapter as self-contained as possible, so that the reader can refer directly to chapters covering topics of interest. Each chapter utilizes numerous case studies and examples, and mathematical and technical sections can be skipped without loss of continuity. The 3rd edition represents a substantial revision. While the structure and philosophy were kept intact, the authors placed an increasing importance on finding or developing effective frameworks that illustrate many important supply chain issues. At the same time, motivated by new developments in industry, they added material on a variety of topics new to the book while increasing the coverage of others.

Product design touches every aspect of modern life, determining the form and function of the products and technologies that we use every day. Product design is not just concerned with the appearance and functionality of products; it has an important role in determining the cost, pricing, risk and profitability profile of those products. Product Design and the Supply Chain shows how decisions taken at the design stage of a product's life cycle go on to affect that product's subsequent value to a company. Eighty percent of a product's eventual supply chain costs are already present at the early stages of product design and development. This book allows companies to make informed design decisions that have significant positive through-life implications for risk, complexity and responsiveness, thus allowing them to create a 'moat' that is difficult for competitors to sidestep or surmount. Product Design and the Supply Chain contains fascinating content applicable to industry. It is full of useful and insightful real-life cases and examples. This book sets out to show how design impacts: sales revenues, pricing, time to market, manufacturing and supply chain costs, supply chain risks, brand loyalty, and competitiveness.

In today's rapidly changing business environment, strong influence of globalization and information technologies drives practitioners and researchers of modern supply chain management, who are interested in applying different contemporary management paradigms and approaches, to supply chain process. This book intends to provide a guide to researchers, graduate students and practitioners by incorporating every aspect of management paradigms into overall supply chain functions such as procurement, warehousing, manufacturing, transportation and disposal. More specifically, this book aims to present recent approaches and ideas including experiences and applications in the field of supply chains, which may give a reference point and useful information for new research and to those allied, affiliated with and peripheral to the field of supply chains and its management.

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.

If you are a supply chain manager, an executive, an entrepreneur, or a stakeholder in a sustainable business, this book will help you develop the awareness and skills needed to support sustainable supply chain management in your firm. The authors introduce the many ways that social and environmental responsibility can be integrated into supply chain management, from sustainable product and process design to programs and techniques that support product end-of-life management. The book begins with a discussion of sustainability and business strategy. It then explores product and process design, sustainable purchasing and logistics, and product end-of-life management topics. The authors include real-world examples and cases from some of the world’s leading companies in sustainable supply chain management. The examples range from small local companies to large multinational players to give a broad range of ideas to the reader. With case examples, workshops, and step-by-step
instructions on how to create a sustainable supply chain, Sustainability Delivered is the most practical and usable book on the market that will help you and other business leaders to authentically pursue and deliver on sustainability ideals.
The managed flow of goods and information from raw material to final sale also known as a "supply chain" affects everything--from the U.S. gross domestic product to where you can buy your jeans. The nature of a company's supply chain has a significant effect on its success or failure--as in the success of Dell Computer's make-to-order system and the failure of General Motor's vertical integration during the 1998 United Auto Workers strike. Supply Chain Integration looks at this crucial component of business at a time when product design, manufacture, and delivery are changing radically and globally. This book explores the benefits of continuously improving the relationship between the firm, its suppliers, and its customers to ensure the highest added value. This book identifies the state-of-the-art developments that contribute to the success of vertical tiers of suppliers and relates these developments to the capabilities that small and medium-sized manufacturers must have to be viable participants in this system. Strategies for attaining these capabilities through manufacturing extension centers and other technical assistance providers at the national, state, and local level are suggested. This book identifies action steps for small and medium-sized manufacturers--the "seed corn" of business start-up and development--to improve supply chain management. The book examines supply chain models from consultant firms, universities, manufacturers, and associations. Topics include the roles of suppliers and other supply chain participants, the rise of outsourcing, the importance of information management, the natural tension between buyer and seller, sources of assistance to small and medium-sized firms, and a host of other issues. Supply Chain Integration will be of interest to industry policymakers, economists, researchers, business leaders, and forward-thinking executives.

This handbook contains chapters covering a broad range of supply chain management issues written by leading experts in the field. It is aimed at researchers, students, engineers, economists and managers involved in supply chain management.

This edited book describes new trends in supply chain design and management with an emphasis on technologies and methodologies. It contains guidelines detailing the real-world applications of these technologies and methodologies. This book is of interest to researchers and practitioners and can also be used as a reference handbook by lecturers and postgraduate students in this field.

In today's environment of tight budgets and even tighter turnarounds, effective supply-chain management has become a core business requirement. Managing the Supply Chain adapts the number one supply-chain book on the college market to examine how professionals can consistently turn supply-chain strategy into a competitive advantage. This results-based book examines the experiences of today's most accomplished companies to demonstrate supply-chain innovation at work in the marketplace.

Computational Intelligence (CI) is a term corresponding to a new generation of algorithmic methodologies in artificial intelligence, which combines elements of learning, adaptation, evolution and approximate (fuzzy) reasoning to create programs that can be considered intelligent. Supply Chain Optimization, Design, and Management: Advances and Intelligent Methods presents computational intelligence methods for addressing supply chain issues. Emphasis is given to techniques that provide effective solutions to complex supply chain problems and exhibit superior performance to other methods of operations research. Winner of the 2016 Coup de Coeur prize at the Plumes des Achats & Supply Chain, Paris. Focusing on the design of robust value-creating supply chain networks (SCN) and key strategic issues related to the number; location, capacity and mission of supply chain facilities (plants, distribution centers) – as well as the network structure required to provide flexibility and resilience in an uncertain world – this book presents an innovative methodology for SCN.
reengineering that can be used to significantly improve the bottom line of supply chain dependent businesses. Providing readers with the tools needed to analyze and model value creation activities, Designing Value-Creating Supply Chain Networks examines the risks faced by modern supply chains, and shows how to develop plausible future scenarios to evaluate potential SCN designs. The design methods proposed are based on a visual representation formalism that facilitates the analysis and modeling of SCN design problems, book chapters incorporate several example problems and exercises which can be solved with Excel tools (Analysis tools and Solver) or with commercial statistical and optimization software. This introduction to issues pertinent to supply chain management discusses topics ranging from the basics, such as inventory management, logistics network design and distributions systems, to the more advanced, such as strategic alliances.

Global supply chain management is a core business process of the utmost strategic importance that all global firms have to manage. The Structure of Global Supply Chains provides a better understanding for the development of the right footprint of a global firm in its effort to supply its markets in environments of fast paced competition and tremendous uncertainty. The authors focus on the structure of global supply chains and the detailed choices involving the network of facilities at all stages of the supply chain in order to successfully execute the global business strategy. The main purpose of The Structure of Global Supply Chains is to go beyond an elementary exposition of global supply chain network design issues using the latest research to identify the multiplicity of factors that contribute to designing these networks for competitive advantage of the global firm, while at the same time exposing both the successful features and the challenges faced by decision support systems developed to address such decisions. The emphasis is on presenting approaches built on operations and supply chain modeling research and support tools based on academic and industrial research of the last two decades. The Structure of Global Supply Chains provides the reader with comprehensive answers to how should a global firm configure its network of facilities and what dynamic approaches to use to effectively reconfigure it in an effort to meet demand in global markets in a profit maximizing way of sustainable profitability and competitive advantage.

This book focuses on supply chain management in emerging markets. The authors present issues relating to supply chain development covering countries such as Brazil, China, the Czech Republic, Russia, Indonesia, Malaysia, Nepal, Turkey, Egypt and South Africa and focuses on the challenges faced when the supply chain is designed and maintained. Such challenges derive from issues to do with risk, security, quality management and infrastructure among others. Case studies and survey results are presented in chapters which explore practical solutions to these issues. The latter will be of interest not only to local and international managers, but also to students who are interested in emerging economies. The book covers manufacturing, retail and food chains at the local and international levels. Everyone can impact the supply chain Supply Chain Management For Dummies helps you connect the dots between things like purchasing, logistics, and operations to see how the big picture is affected by seemingly isolated inefficiencies. Your business is a system, made of many moving parts that must synchronize to most efficiently meet the needs of your customers—and your shareholders. Interruptions in one area ripple throughout the entire operation, disrupting the careful coordination that makes businesses successful; that's where supply chain management (SCM) comes in. SCM means different things to different people, and many different models exist to meet the needs of different industries. This book focuses on the broadly-applicable Supply Chain Operations Reference (SCOR) Model: Plan, Source, Make, Deliver, Return, and Enable, to describe the basic techniques and key concepts that keep businesses running smoothly. Whether you're in sales, HR, or product development, the decisions you make every day can impact the supply chain. This book shows you how to factor
broader impact into your decision making process based on your place in the system. Improve processes by determining your metrics Choose the right software and implement appropriate automation Evaluate and mitigate risks at all steps in the supply chain Help your business function as a system to more effectively meet customer needs We tend to think of the supply chain as suppliers, logistics, and warehousing—but it's so much more than that. Every single person in your organization, from the mailroom to the C-suite, can work to enhance or hinder the flow. Supply Chain Management For Dummies shows you what you need to know to make sure your impact leads to positive outcomes.

Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies
Tata McGraw-Hill Education

Supply chain management, both in industry and in academia, has grown rapidly over the past several years mainly due to an increase in corporate goals of reducing manufacturing costs and the savings that come from planning and managing the supply chain effectively. Most textbooks do not include models and decision support systems robust enough for industry. Designing and Managing the Supply Chain: Concepts, Strategies, and Cases, 2/e by Simchi-Levy, Kaminsky and Simchi-Levi discusses the problems, models and concepts derived from issues related to effective supply chain management. This text is suitable for both academic study and practicing professionals. While many core supply chain management issues are interrelated, the authors have tried to make each chapter as self-contained as possible so that the reader can refer directly to chapters covering topics of interest. Each chapter utilizes case studies and numerous examples. Mathematical and technical sections can be skipped without loss of continuity. The accompanying CD-ROM also provides two simulations, the Computerized Beer Game and the Risk Pool Game and a computerized tool, new to this edition, for developing and executing supply chain contracts. These packages help illustrate many of the concepts discussed.

As the most up-to-date, cutting-edge supply chain management book on the market, the Third Edition of Designing and Managing the Supply Chain discusses the problems, models and concepts derived from issues related to effective supply chain management. While many core supply chain management issues are interrelated, the authors have tried to make each chapter as self-contained as possible so that the reader can refer directly to chapters covering topics of interest. Each chapter utilizes case studies and numerous examples. Mathematical and technical sections can be skipped without loss of continuity. Most textbooks do not include models and decision support systems robust enough for industry, but that is not true of this new edition. The accompanying CD-ROM also features the return of two simulations, the Computerized Beer Game and the Risk Pool Game and a computerized tool. These simulations help users develop and execute supply chain contracts while also illustrating many of the concepts discussed in the text.

This book is dedicated to the issues and complexities of industrial services supply chain management. It analyzes how the transition from products to services can be managed, and how supply chains can be adjusted to reflect this new status quo. The book begins with chapters examining product-service systems structures and servitization—the services infusion process. Next, it presents industrial services as marketing and operations strategy. The focus shifts to service delivery, and this chapter discusses how the actual operations take place. This is followed by an examination of the role of technology and how connected assets are utilized by product vendors in value-creation. The book analyzes the transition from ownership to subscriptions in the pricing decisions chapter. Then the value chain effects chapter offers an overview of the mechanisms through which industrial companies are shortening the distance to end-users and aim for a better position in the value chain. Finally the conclusion addresses theoretical and empirical implications in the industrial services supply chain management.
The practice of supply chain management has become widespread in most industries. It is now included in the curriculum of many business schools in the United States and in many countries around the world. A number of professional associations, such as the American Production and Inventory Control Society and the Supply Chain Management Society, offer New technologies are revolutionising the way manufacturing and supply chain management are implemented. These changes are delivering manufacturing firms the competitive advantage of a highly flexible and responsive supply chain and manufacturing system to ensure that they meet the high expectations of their customers, who, in today's economy, demand absolutely the best service, price, delivery time and product quality. To make e-manufacturing and supply chain technologies effective, integration is needed between various, often disparate systems. To understand why this is such an issue, one needs to understand what the different systems or system components do, their objectives, their specific focus areas and how they interact with other systems. It is also required to understand how these systems evolved to their current state, as the concepts used during the early development of systems and technology tend to remain in place throughout the life-cycle of the systems/technology. This book explores various standards, concepts and techniques used over the years to model systems and hierarchies in order to understand where they fit into the organization and supply chain. It looks at the specific system components and the ways in which they can be designed and graphically depicted for easy understanding by both information technology (IT) and non-IT personnel. Without a good implementation philosophy, very few systems add any real benefit to an organization, and for this reason the ways in which systems are implemented and installation projects managed are also explored and recommendations are made as to possible methods that have proven successful in the past. The human factor and how that impacts on system success are also addressed, as is the motivation for system investment and subsequent benefit measurement processes. Finally, the vendor/user supply/demand within the e-manufacturing domain is explored and a method is put forward that enables the reduction of vendor bias during the vendor selection process. The objective of this book is to provide the reader with a good understanding regarding the four critical factors (business/physical processes, systems supporting the processes, company personnel and company/personal performance measures) that influence the success of any e-manufacturing implementation, and the synchronization required between these factors. Discover how to implement the flexible and responsive supply chain and manufacturing execution systems required for competitive and customer-focused manufacturing · Build a working knowledge of the latest plant automation, manufacturing execution systems (MES) and supply chain management (SCM) design techniques · Gain a fuller understanding of the four critical factors (business and physical processes, systems supporting the processes, company personnel, performance measurement) that influence the success of any e-manufacturing implementation, and how to evaluate and optimize all four factors Biomass to Biofuel Supply Chain Design and Planning under Uncertainty: Concepts and Quantitative Methods explores the design and optimization of biomass-to-biofuel supply chains for commercial-scale implementation of biofuel projects by considering the problems and challenges encountered in real supply chains. By offering a fresh approach and discussing a wide range of quantitative methods, the book enables researchers and practitioners to develop hybrid methods that integrate the advantages and features of two or more methods in one decision-making framework for the efficient optimization of biofuel supply chains, especially for complex supply chain models. Combining supply chain management and modeling techniques in a single volume, the book is beneficial for graduate students who no longer need to consult subject-specific books alongside mathematical modeling textbooks. The book consists of two main parts. The first part describes the key components of biofuel supply chains, including biomass production, harvesting, collection, storage, preprocessing, conversion, transportation,
and distribution. It also provides a comprehensive review of the concepts, problems, and opportunities associated with biofuel supply chains, such as types and properties of the feedstocks and fuel products, decision-making levels, sustainability concepts, uncertainty analysis and risk management, as well as integration of biomass supply chain with other supply chains. The second part focuses on modeling and optimization of biomass-to-biofuel supply chains under uncertainty, using different quantitative methods to determine optimal design. Proposes a general multi-level framework for the optimal design and operation of biomass-to-biofuel supply chains through quantitative analysis and modeling, including different biomass and waste biomass feedstock, production pathways, technology options, transportation modes, and final products. Explores how modeling and optimization tools can be utilized to address sustainability issues in biofuel supply chains by simultaneously assessing and identifying sustainable solutions. Presents several case studies with different regional constraints to evaluate the practical applicability of different optimization methods and compares their performance in real-world situations. Includes General Algebraic Modeling System (GAMS) codes for solving biomass supply chain optimization problems discussed in different chapters.

Sustainable Food Supply Chains: Planning, Design, and Control through Interdisciplinary Methodologies provides integrated and practicable solutions that aid planners and entrepreneurs in the design and optimization of food production-distribution systems and operations and drives change toward sustainable food ecosystems. With synthesized coverage of the academic literature, this book integrates the quantitative models and tools that address each step of food supply chain operations to provide readers with easy access to support-decision quantitative and practicable methods. Broken into three parts, the book begins with an introduction and problem statement. The second part presents quantitative models and tools as an integrated framework for the food supply chain system and operations design. The book concludes with the presentation of case studies and applications focused on specific food chains. Sustainable Food Supply Chains: Planning, Design, and Control through Interdisciplinary Methodologies will be an indispensable resource for food scientists, practitioners and graduate students studying food systems and other related disciplines.

Contains quantitative models and tools that address the interconnected areas of the food supply chain. Synthesizes academic literature related to sustainable food supply chains. Deals with interdisciplinary fields of research (Industrial Systems Engineering, Food Science, Packaging Science, Decision Science, Logistics and Facility Management, Supply Chain Management, Agriculture and Land-use Planning) that dominate food supply chain systems and operations. Includes case studies and applications.

A guide to help readers meet the demands of an evolving competitive business environment, Modeling of Responsive Supply Chain outlines novel concepts and strategies for implementing a fully integrated system of business improvement methodologies. This self-contained reference covers various key aspects of supply chain management, which is crucial to boosting industrial growth in the face of expanding globalization in the manufacturing and transportation sectors. The book focuses on topics that could potentially improve the free flow of goods and services between nations by helping users assess the performance of logistic systems deployed to achieve this end. Chapters present a conventional and evolutionary approach to coordinating all elements of the supply chain to optimize an enterprise’s competitive advantage. The authors explore different models associated with transportation, facility location, and assignments, as well as planning and scheduling. They also address diverse technologies, such as RFID tags used to monitor product flow within the supply chain network. This book addresses the importance of: Recognizing responsiveness as a metric of supply chain performance. Domain interfaces for solving the optimization problem by making supply chains more responsive. Coordination through contracts to enhance responsiveness. System
dynamics methodology to achieve responsiveness, as well as management principles, control
theory, and computer simulation. The use of different types of technologies to build a better
supply chain that achieves higher responsiveness. Few, if any, single volumes provide the
detailed explanation of practical and conceptual approaches found in this book. It covers the
entire spectrum of topics and will be equally useful as a reference for scholars and graduate
students and as a compendium for practitioners dealing with real-life problems in contemporary
supply chain management.

Heavy industrialization in the past few decades has caused several global environmental
issues including poor air quality, climate change, and outdoor air pollution-related diseases. As
such, consumer pressure coupled with strict governmental policies have influenced firms to
adopt and implement green practices in their supply chain and business operations in order to
improve socio-environmental sustainability. Global Perspectives on Green Business
Administration and Sustainable Supply Chain Management is an essential reference book that
discusses innovative green practices including recycling, remanufacturing, reduction in waste
and adoption of renewable energy in manufacturing. It also examines environmentally friendly
policies that have been adopted by many European and Western countries. Featuring
coverage on a broad range of topics such as energy analysis, environmental protections, and
logistics development, this book is ideally designed for managers, operations managers,
executives, manufacturers, environmentalists, researchers, industry practitioners,
academicians, and students.

In the fall of 1992 a conference honoring Elwood S. Buffa was held at the Anderson Graduate
School of Management of the University of California, Los Angeles. This book is a collection of
the work presented at that conference. The scholars who gathered to honor El are the
prominent researchers in the field of Operations Management. Their collective work published
in this book represents the richness of the field and provides the reader with valuable insights
into its important issues and problems. While any grouping of the articles by these
distinguished scholars will be arbitrary, I have organized the book in four sections. In the first
section the articles dealing with the strategic issues in Operations Management are compiled.
The articles deal with continuous improvement, quality, services, supply chain management,
and creating value through operations. The articles that explore the interface of Operations
Management with other functional areas, e.g. engineering and marketing, are grouped in the
second section. The third section of the book contains articles that attempt to model some
important planning problems that arise in the management of production and operations. Some
of the papers in this section provide state of the art reviews of selected topic areas. Finally, the
fourth section contains articles that deal with future directions for Operations Management. The
authors offer several insights into the future evolution of the field. The book begins with the
keynote address given by El Buffa at the start of the conference on November 2, 1991.

Using strategic supply chain network design, companies can drive consistent dramatic savings
throughout their global supply chains. Logistics experts at IBM and Northwestern University
have brought together the rigorous principles and the practical applications supply chain
designers need to improve the flow of physical products across the globe.

Supply Chain Design and Management introduces the concept of a sharing mechanism that
will ensure the sustainability of a supply chain by fair distribution of costs and benefits. This
book provides a holistic view of the supply chain from product development, purchasing,
manufacturing, distribution and storage, to retailing. The presentation of the enabling
technologies in supply chain management will help companies better understand their options.
Ø Provides a step-by-step framework for designing supply chains at the strategic level
Ø Written for those who deal with the supply chains on a day-to-day basis as well as those new
to the field
Ø Provides a synthesis of best practices for managing supply chains at the tactical
level
Ø Provides a review of the state-of-the-art in enabling information technologies and
business applications § Explains the concepts with examples from the industry and simple mathematical formulations § Is accessible to graduate students for an excellent understanding of how supply chains work and can join the industry armed with the knowledge of the workings of supply chains

Copyright: 77c645c04e2fd28ec7a43e6936c1bf30