Supply Chain Configuration

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.

Advances in Product Design Engineering

"This book describes original, innovative works on IT systems for mass customization, and provides a multitude of solutions, tools, concepts and successful realizations of IT systems for mass customization. It discusses state-of-the-art mass customization while depicting the importance of IT in making the strategy function efficiently in order to support the business processes required for manufacturing individualized products"—Provided by publisher.

Mass Customization: Concepts - Tools - Realization

The basics of industrial and supply-chain excellence in less than 200 pages! This book for self-learning offers a step-by-step presentation of the best practices of modern manufacturing and logistic management, which have been moving beneath the surface, like tectonic plates, over the last few years. Thanks to their proven operational effectiveness, they have emerged as an interlocking group of "five basics": - Voice of the Customer for innovation and development - production activities with and without added value - postponement or mass customization and modular thinking - dependent and independent customer demand - the two levels of the supply chain: strategic and operational The integration of these best practices gives Lean Supply
Postponement Strategy in Supply Chain Management

Postponement strategy is one of the major supply chain management (SCM) practices that has a discernible impact on firms' competitive advantage and organizational performance. Postponement is a mass customization strategy that captures the advantages of both mass production and mass customization. Recent research studies have identified four common postponement strategies, namely pull, logistics, form and price postponement. The former three postponement strategies are linked to production and manufacturing, while the last one is a pure pricing strategy. They aim at balancing the costs and benefits of mass production and mass customization. Practical examples of postponement can be found in the high-tech industry, food industry and other industries that require high differentiation. However, empirical studies have found that postponement may not be an evident SCM practice compared to the other practices. In addition, postponement has both positive and negative impacts on a supply chain. The advantages include following the JIT principles, reducing end-product inventory, making forecasting easier and pooling risk. The high cost of designing and manufacturing generic components is the main drawback of postponement. Thus, the evaluation of postponement strategy is an important research issue and there have been many qualitative and quantitative models for analyzing postponement under different scenarios.

Adaptive Supply Chain Management

Adaptive Supply Chain Management

Adaptive Supply Chain Management is a strategy that involves continuous changes and adjustments to the supply chain to meet the changing demands of the market. This strategy requires a dynamic approach to decision-making and collaboration among all members of the supply chain. It is characterized by the ability to quickly respond to changes in customer demand, technology, and market conditions. The implementation of adaptive supply chain management involves the use of technology, data analytics, and performance metrics to continuously monitor and adjust the supply chain operations. The ultimate goal of adaptive supply chain management is to improve supply chain responsiveness, efficiency, and profitability.
Mass Customization

Roger Moser analyses the relationships between business priorities and PSM strategy and shows in detail how business strategies influence PSM. He develops a PSM strategy concept which enables supply managers to break down strategic priorities from a business strategy level to a PSM level and to define appropriate actions when dealing with suppliers, supply markets and internal customers.

Operations Management

This book brings several original contributions to research and practical applications in the field of mass customization from the designer, manufacturer, and customer perspectives respectively. It presents advancements in product design for mass customization, design of assembly and supply chain processes, variety induced complexity models, complexity management, marketing tools, information systems to support decision-making, and critical success factors of this manufacturing and marketing strategy. A special focus of interest is also on the use of product configurators in practice and sustainability assessment for mass customization strategy. The aim is to disseminate current developments and approaches for further theoretical investigation and practical applications of mass customized manufacturing systems.

Supply Chain Management of Mass Customized Automobiles

Mass customization (MC) has been hailed as a successful operations strategy across manufacturing and service industries for the past three decades. However, the wider implications of using MC approaches in the broader industrial and economic environment are not yet clearly understood. Mass Customization: Engineering and Managing Global Operations presents emerging research on the role of MC and personalization in today's international operations context. The chapters cover MC in the context of global industrial economics and operations. Moreover, the book discusses MC topics that are relevant to the manufacturing and service sectors, such as: • product platforms; • learning curve modeling; • additive manufacturing; and • service customization. Case studies in manufacturing (e.g., apparel and transportation) and services (e.g., banking and virtual worlds) are also included. Mass Customization: Engineering and Managing Global Operations is a valuable text for mass customization researchers and practitioners. Researchers will find a selection of chapters prepared by internationally renowned authors, comprising most of their recent research in MC. Engineering professionals will be drawn by the vivid discussion of operational aspects and methods of MC, as well as by the selection of cases illustrating their practical application.

One-of-a-Kind Production

This book defines the parameters of the emerging business strategy of mass customization, covering the main categories in a systematic examination of: manufacturing systems and mass customization; supply chain management and mass customization; and information systems and mass customization. The book provides a conceptual framework for mass customization, its tools, its solutions, and real-world examples of successful implementations of the business strategy.

Supply Chain Management Workbook

Supply Chain Management with APO

'Operations Management: policy, practices, performance improvement' is the latest state-of-the-art approach to operations management. It provides new cutting edge input into operations management theory and practice that cannot be found in any other text. Discussing both strategic and tactical inputs it combines and balances service and manufacturing operations. * Cutting edge techniques accompanied by brand new case studies * Challenges standard approaches * Comprehensive coverage of strategic supply management * Critical sample questions to aid discussion * Reading lists and articles to support learning * Additional lecturer support material This outstanding author team is from the Operations Management Group at the University of Bath. Their expertise and knowledge is apparent in the text, and they bring to it their original research and experience in the field of operations management.

Connective Technologies in the Supply Chain
Mass Customization: A Supply Chain Approach is a text on the emerging topic of mass customization in manufacturing. The contributed chapters in this book provide a unified treatment to the topic by offering coverage in four main categories - concepts and current state of research; problem solving frameworks, models, and methodologies; supportive techniques and technologies for enabling mass customization; and future research agenda. The book blends theory and practice and includes prototypical applications to illustrate this complex, yet emerging field of inquiry.

Mass Customization: A Supply Chain Approach

Mass Customization: A Supply Chain Approach is a text on the emerging topic of mass customization in manufacturing. The contributed chapters in this book provide a unified treatment to the topic by offering coverage in four main categories - concepts and current state of research; problem solving frameworks, models, and methodologies; supportive techniques and technologies for enabling mass customization; and future research agenda. The book blends theory and practice and includes prototypical applications to illustrate this complex, yet emerging field of inquiry.

Production and Operations Management Systems

Mass Customization examines the business opportunities, considerations, and challenges manufacturers in various industries must weigh before committing to the significant investment in machinery and software needed to go to mass customization. For manufacturers who decide that it's time to take the plunge, the author describes the proven methods and latest technologies for making mass customization work seamlessly and profitably on the factory floor. Mass customization—the automated manufacturing bespoke products, profitably combining the low unit costs of mass production with the flexibility of building custom products to order—has been touted as the next big thing for more than a quarter of a century. Until recently, however, mass customization made only modest inroads in a few industries. Now, the convergence of new ICT and manufacturing technologies with traditional CNC technologies means that mass customization's moment has arrived for breaking out into a wide range of industries. Hans Kull is an engineer and mathematician who applies his expertise in combinatorial optimization, programming, and engineering to devising end-to-end automated solutions for mass customization, automating and optimizing all processes—from bespoke parts supply, order processing, production, and waste minimization to packing and delivery. He shares with his readers practical lessons for making mass customization succeed, case studies from various industries, and an insider's vision of the business implications of mass customization's coming of age.

Moving into Mass Customization

This title offers an intelligent and easy-to-digest roadmap for successfully implementing a lean and agile value chain transformation program. Although the benefits of applying lean concepts or improving the flexibility of a value chain are clear and desperately needed in today's competitive environment, none of the current literature provides guidance on how to do this. Lean and Value Chain Management fills that gap by providing a comprehensive roadmap that shows organizations, step-by-step, how to successfully implement a lean and agile value chain transformation program. It brings together the latest advances in the field in an easy-to-digest format, and offers practical, proven tactics and detailed guidance on every aspect of the value chain redesign process - including how to map the existing process, intelligently leverage new technologies, build a strategy for strengthening relationships with suppliers and customers, identify comprehensive related metrics, and much more.

Mass Customization

Despite the numerous competitive advantages of one-of-a-kind production (OKP), the low efficiency and high costs associated with OKP companies threaten to push their business opportunities into the hands of cheaper overseas suppliers. One-of-a-Kind Production introduces a novel strategy and technology to help OKP companies to efficiently mass-produce customized products. In One-of-a-Kind Production, case studies from OKP companies are used to validate the feasibility and effectiveness of the OKP strategy and technology. These case studies include: a structural steel construction company, a manufacturer of specifically ordered compressors and refrigeration systems, a customized high pressure vessel manufacturing company, and a custom window and door manufacturer. To help readers understand OKP strategy and technology, the authors offer a year's free access to the OKP Management and Control Software System. This system is based on a new integrated production control and management concept, namely product production structure. It is a useful tool – and One-of-a-Kind Production is a valuable guide – for production engineers and managerial staff in manufacturing companies, as well as for university researchers and graduate students.
Information and Management Systems for Product Customization

Pathways to Supply Chain Excellence

Surviving Supply Chain Integration

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.

Mass Customization

Supply Chain Management, Mass Customization, Automobile, Outsourcing, Flexibility, Inventory, Distribution, Panel Data Analysis.

Advances in Production Management Systems. Sustainable Production and Service Supply Chains

Fashion Retail Supply Chain Management: A Systems Optimization Approach is a comprehensive reference source that provides the state-of-the-art findings on many important emerging research issues related to retail supply chain management and optimization problems. The book takes an explicit systems approach, and discusses retailed fashion supply ch

Mass Customization

Adaptive Supply Chain Management develops new viewpoints on the SCM goal paradigm, problem semantics, and decision-making support. Drawing upon years of research and practical experience, and using numerous examples, the authors unite conceptual considerations of supply chains with a constructive level of engineering and solutions to real-world problems. Adaptive Supply Chain Management provides advanced insights into dynamics, complexity, and uncertainty in supply chains from the perspectives of systems analysis, control theory, and operations research. It also considers supply chain adaptability, stability, and crisis-resistance. Providing readers with a comprehensive view of advanced SCM concepts, constructive mathematical techniques and models, Adaptive Supply Chain Management is an invaluable text for practitioners and researchers who specialize in SCM and operations.

Principles of Supply Chain Management

'Supply Chain Management Workbook' provides an overview of the supply chain process and addresses the key aspects involved in a supply chain. A checklist is included to enable an assessment of a company's procedures and the facilities it offers. By working through this list of questions the weaknesses in the management of the supply chain can be identified and subsequently addressed. The combination of theoretical underpinning along with a means of self evaluation results in a practical guide which will be invaluable for companies wishing to improve their supply chain management. Published in Association with The Institute of Operations Management, http://www.iomnet.org.uk.

International Asia Conference on Industrial Engineering and Management Innovation (IEMI2012) Proceedings

In today's competitive environment, manufacturing and service companies are intensifying their customization processes.
Customization means companies must meet the challenge of providing individualized products and services, without introducing high costs. Therefore, companies must address both customization and cost factors to gain a competitive advantage. While product customization is the manufacturing of products according to individual customer needs, it does not involve any focus on the cost perspective. Information and Management Systems for Product Customization will concentrate on both product customization and costs' efficiency, which is termed as mass customization. Moreover, mass customization with its multi-dimensions is the new business paradigm challenging today's manufacturing companies.

Mass Customization

Three Essays on Mass Customization

Customer Interaction and Customer Integration

The International Conference on Industrial Engineering and Engineering Management is sponsored by the Chinese Industrial Engineering Institution, CMES, which is the only national-level academic society for Industrial Engineering. The conference is held annually as the major event in this arena. Being the largest and the most authoritative international academic conference held in China, it provides an academic platform for experts and entrepreneurs in the areas of international industrial engineering and management to exchange their research findings. Many experts in various fields from China and around the world gather together at the conference to review, exchange, summarize and promote their achievements in the fields of industrial engineering and engineering management. For example, some experts pay special attention to the current state of the application of related techniques in China as well as their future prospects, such as green product design, quality control and management, supply chain and logistics management to address the need for, amongst other things low-carbon, energy-saving and emission-reduction. They also offer opinions on the outlook for the development of related techniques. The proceedings offers impressive methods and concrete applications for experts from colleges and universities, research institutions and enterprises who are engaged in theoretical research into industrial engineering and engineering management and its applications. As all the papers are of great value from both an academic and a practical point of view, they also provide research data for international scholars who are investigating Chinese style enterprises and engineering management.

Supply Chain Management

Mass Customization leads the strategy of today's well succeeded companies. It indulges the customer with the so long yearned for product and/or service that exactly fits his desires and specifications. This book compiles a hand-selected variety of testimonies from Mass Customization experts worldwide with different experiences both on an academic research basis as well as on practical case studies. This diversity makes it a compulsory guide to use in any enterprise throughout the world that wants to take its business into new and more ambitious dimensions. Furthermore, its contents are structured in a way that will help everyone that wants to learn, teach or put into practice the concepts of Mass Customization.

Research in Mass Customization and Personalization

Strategic Purchasing and Supply Management

The Advanced Planner and Optimizer (APO) is the software from SAP dedicated to supply chain management. This book addresses the question how to implement APO in a company. It is written from a long years' experience in implementation projects and aims to provide project managers and team members with the necessary know how for a successful implementation project. The focus of the book lies in introducing modelling approaches and explaining the structure and interdependencies of systems, modules and entities of APO. Another concern is the integration with the R/3 system(s), both technically and from a process point of view. Since APO projects differ significantly from other SAP projects, some key issues and common mistakes concerning project management are pointed out as well.

Designing an Integrative Supply Chain Management System for the Mass Customization
Environment

The two volumes IFIP AICT 414 and 415 constitute the refereed proceedings of the International IFIP WG 5.7 Conference on Advances in Production Management Systems, APMS 2013, held in University Park, PA, USA, in September 2013. The 133 revised full papers were carefully reviewed and selected for inclusion in the two volumes. They are organized in 4 parts: sustainable production, sustainable supply chains, sustainable services, and ICT and emerging technologies.

Operations Management: Policy, Practice and Performance Improvement

This book is written for practitioners and researchers who are currently working in the field of supply chain management and operations management. It provides a thorough explanation of the supply chain configuration problem as well as offers solutions that combine the mathematical aspects of problem solving with applications in modern information technology.

Build-to-order & Mass Customization

This work presents a comprehensive model of supply chain management. Experienced executives from 20 companies clearly define supply chain management, identifying those factors that contribute to its effective implementation. They provide practical guidelines on how companies can manage supply chains, addressing the role of all the traditional business functions in supply chain management and suggest how the adoption of a supply chain management approach can affect business strategy and corporate performance.

Fashion Retail Supply Chain Management

Variety Induced Complexity in Mass Customization

A growing heterogeneity of demand, the advent of 'long tail markets', exploding product complexities, and the rise of creative consumers are challenging companies in all industries to find new strategies to address these trends. Mass customization (MC) has emerged in the last decade as the premier strategy for companies in all branches of industry to profit from heterogeneity of demand and a broad scope of other customer demands. The research and practical experience collected in this book presents the latest thinking on how to make mass customization work. More than 50 authors from academia and management debate on what is viable now, what did not work in the past, and what lurks just below the radar in mass customization, personalization, and related fields. Edited by two leading authorities in the field of mass customization, both volumes of the book discuss, among many other themes, the latest research and insights on customization strategies, product design for mass customization, virtual models, co-design toolkits, customization value measurement, open source architecture, customization communities, and MC supply chains. Through a number of detailed case studies, prominent examples of mass customization are explained and evaluated in larger context and perspective.

Five Basic Principles of Production and Supply Chain Management

Principles of Supply Chain Management, Second Edition

Rapid time-to-market expectations and the demand for custom-tailored products present real challenges for the rigid and fixed linear supply chains that compete in today's economy. Connective technologies meet these challenges head on by integrating the necessary people, information, and products beyond their current limitations. Connective Technologies in the Supply Chain illustrates the impact that connective technologies have across supply chains. It provides strategic frameworks, conceptual and analytical models, and case studies that focus on the design, development, and implementation of these technologies as they pertain to the management of engineering and manufacturing operations. Placing particular emphasis on RFID, the book addresses issues that include those involving GPS, inventory management, quality control, mobile technology, and security challenges. The book presents an overview of RFID applications, its underlying concepts and principles, and a macro perspective on its implementation in the manufacturing and service sectors. It also provides a feasible design of the technology's enabled knowledge-based supply chain management system. Connective Technologies in the Supply Chain is an essential resource for those who would like to expand their knowledge of-and increase their success with-these applications.
Lean and Agile Value Chain Management

The second edition of this popular textbook presents a balanced overview of the principles of supply chain management. Going beyond the usual supply chain text, Principles of Supply Chain Management not only details the individual components of the supply chain, but also illustrates how the pieces must come together. To show the logic behind why supply chain management is essential, the text examines how supply chains are evolving, looks ahead to new developments, and provides a balanced look at supply chains with a focus on both the customer side and the supplier side of supply chains. See What’s New in the Second Edition: Expanded coverage of current topics such as e-commerce, risk management, outsourcing and reshoring, sustainability, project management, and data analytics Increased emphasis on how customers are becoming more influential in steering product design Additional coverage of the use of data analytics to evaluate customer preferences and buying patterns A new chapter devoted to logistics and its increasing importance in supply chains Company profiles of organizations with effective supply chains that illustrate the main theme of each chapter A "Hot Topic" for each chapter, providing a description of a critical management issue to stimulate class discussion A complete set of instructor materials for each chapter, including presentation slides, test banks, class exercises, discussion questions, and more From the point of distribution to the final customer, all the way back to the point of origin at the mine or farm, the text provides examples and case histories that illustrate a proven approach for achieving effective supply chain integration. This self-contained resource provides readers with a realistic appraisal of the state of the art in supply chain management and the understanding needed to build and manage effective supply chains in a wide range of industries. Most importantly, it emphasizes the need for building and maintaining collaboration among all members of the supply chain.

Mass Customization Information Systems in Business

Over the last decade, supply chain management has advanced from the warehouse and logistics to strategic management. Integrating theory and practices of supply chain management, this book incorporates hands-on literature on selected topics of Value Creation, Supply Chain Management Optimization and Mass-Customization. These topics represent key building blocks in management decisions and highlight the increasing importance of the supply chains supporting the global economy. The coverage focuses on how to build a competitive supply chain using viable management strategies, operational models, and information technology. It includes a core presentation on supply chain management, collaborative planning, advanced planning and budgeting system, risk management and new initiatives such as incorporating anthropometry into design of products.

Copyright code : 5b8cfc727232a37035f5738f5a3fd6a5