Logistics Engineering Management 6th Edition

Logistic engineering is a term presenting the simultaneous evaluation and control of vital activities such as production scheduling, transportation, supply, maintenance, repair and inventory control. The author of this work covers the systematic proactive planning of an organization and describes how to carry out a cost-effective and efficient logistics programme.

Technology/Engineering/General A top-down, step-by-step, life-cycle approach to systems engineering In today's environment, there is an ever-increasing need to develop

*and produce systems that are robust, reliable, high quality, supportable, cost-effective, and responsive to the needs of the customer or user. Reflecting these worldwide trends, System Engineering Management, Fourth Edition introduces readers to the full range of system engineering concepts, tools, and techniques, emphasizing the application of principles and concepts of system engineering and the way these principles aid in the development, utilization, and support of systems. Viewing systems engineering from both a technical and a management perspective, this fully revised and updated edition extends its coverage to include: * The changing areas of system requirements * Increasing system complexities * Extended system life cycles versus shorter technology cycles * Higher costs and*

*greater international competition * The interrelationship of project management and systems engineering as they work together at the project team level Supported by numerous, real-life case studies, this new edition of the classic resource demonstrates-step by step-a comprehensive, top-down, life-cycle approach that system engineers can follow to reduce costs, streamline the design and development process, improve reliability, and win customers.*

These proceedings contain research presented at the 6th International Conference on Dynamics in Logistics, held in February 2018.The integration of dynamics within the modeling, planning and control of logistic processes and networks has shown to contribute massively to the improvement of the latter. Moreover, diversification of

markets and demand has increased both the complexity and the dynamic changes of problems within the area of logistics. To cope with these challenges, it must become possible to identify, describe and analyze such process changes. Moreover, logistic processes and networks must be revised to be rapidly and flexibly adaptable to continuously changing conditions. This book presents new ideas to solve such problems, offering technological, algorithmic and conceptual improvements. It primarily addresses researchers and practitioners in the field of industrial engineering and logistics.

Despite its importance, logistics engineering often lags industry requirements, especially in terms of engineering-based needs. Filling the gap between education and

practice, this brief but comprehensive volume covers the most basic material in the field of logistics engineering, making is suitable for those who require an overview of the topic. The book discusses logistics from historical and economic perspectives, covers the basic tools required for the study and practice of logistics, and reviews the metrics that can be used to evaluate progress. It then delves into activities that commonly fill the workdays of logisticians. The book closes with an excellent chapter on logistics as an integrating systems function.

Logistics Management for International Business

Supply Chain Engineering and Logistics Handbook

A Systems Approach to Planning, Scheduling, and Controlling

A Key to Effective Serviceability and Maintenance Management
Logistics 4.0
The Handbook of Logistics and Distribution Management

This title incorporates SI units along with corresponding U.S. Customary System units. It is valuable for anyone preparing for the Certified Professional Logistician exam. It is useful to both the military and commercial sectors

In a context of global competition, the optimization of logistics systems is inescapable. Logistics Systems: Design and Optimization falls within this perspective and presents twelve chapters that well illustrate the variety and the complexity of logistics activities. Each chapter is

written by recognized researchers who have been commissioned to survey a specific topic or emerging area of logistics. The first chapter, by Riopel, Langevin, and Campbell, develops a framework for the entire book. It classifies logistics decisions and highlights the relevant linkages to logistics decisions. The intricacy of these linkages demonstrates how thoroughly the decisions are interrelated and underscores the complexity of managing logistics activities. Each of the chapters focus on quantitative methods for the design and optimization of logistics systems.

This handbook begins with the history of Supply Chain (SC) Engineering, it goes on to explain how the SC is

connected today, and rounds out with future trends. The overall merit of the book is that it introduces a framework similar to sundial that allows an organization to determine where their company may fall on the SC Technology Scale. The book will describe those who are using more historic technologies, companies that are using current collaboration tools for connecting their SC to other global SCs, and the SCs that are moving more towards cutting edge technologies. This book will be a handbook for practitioners, a teaching resource for academics, and a guide for military contractors. Some figures in the eBook will be in color. Presents a decision model for choosing the best Supply Chain Engineering

(SCE) strategies for Service and Manufacturing Operations with respect to Industrial Engineering and Operations Research techniques Offers an economic comparison model for evaluating SCE strategies for manufacturing outsourcing as opposed to keeping operations in-house Demonstrates how to integrate automation techniques such as RFID into planning and distribution operations Provides case studies of SC inventory reductions using automation from AIT and RFID research Covers planning and scheduling, as well as transportation and SC theory and problems Welcome to the proceedings of the Sixth International Conference on Management Science and Engineering

Management (ICMSEM2012) held from November 11 to 14, 2012 at Quaid-i-Azam University, Islamabad, Pakistan and supported by Sichuan University (Chengdu, China), Quaid-i-Azam University (Islamabad, Pakistan) and The National Natural Science Foundation of China. The International Conference on Management Science and Engineering Management is the annual conference organized by the International Society of Management Science and Engineering Management. The goals of the Conference are to foster international research collaborations in Management Science and Engineering Management as well as to provide a forum to present current research results. The papers are

classified into 8 sections: Computer and Networks, Information Technology, Decision Support System, Industrial Engineering, Supply Chain Management, Project Management, Manufacturing and Ecological Engineering. The key issues of the sixth ICMSEM cover various areas in MSEM, such as Decision Support System, Computational Mathematics, Information Systems, Logistics and Supply Chain Management, Relationship Management, Scheduling and Control, Data Warehousing and Data Mining, Electronic Commerce, Neural Networks, Stochastic models and Simulation, Heuristics Algorithms, Risk Control, and Carbon Credits.

Facility Logistics

Introduction to Logistics Systems Management
Innovative Strategies and Practical Solutions
Logistics Engineering Handbook
Affordable Reliability Engineering
Increasing Capacity, Service Level and Safety with Optimization Algorithms

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

transport; benchmarking; environmental matters; and vehicle and depot security. Thecontentofthisbookismotivatedbytherecentchangesinglobalmarketsandthe availability of new transportation services. Indeed, the complexity of current supply chains suggests todecision makers in logisticsto work witha set ofef?cient (Pare- optimal) solutions, mainly to capture different economical aspects that, in general, one optimal solution related to a single objective function is not able to capture - tirely. Motivated by these reasons, we study freight transportation systems with a speci?c focus on multi-objective modelling. The goal is to

provide decision m- ers with new methods and tools to implement multi-objective optimization models in logistics. The book combines theoretical aspects with applications, showing the advantages and the drawbacks of adopting scalarization techniques, and when it is worthwhile to reduce the problem to a goal-programming one. Also, we show - plications where more than one decision maker evaluates the effectiveness of the logistic system and thus a multi-level programming is sought to attain meaningful solutions. After presenting the general working framework, we analyze logistic - sues in a maritime terminal. Next, we

study multi-objective route planning, relying on the application of hazardous material transportation. Then, we examine freight distribution on a smaller scale, as for the case of goods distribution in metropolitan areas. Finally, we present a human-workforce problem arising in logistic platforms. The general approach followed in the text is that of presenting mathematics, al- rithms and the related experimentations for each problem.

A new edition of the most popular book of project management case studies, expanded to include more than 100 cases plus a "super case" on the Iridium Project Case studies are an

important part of project management education and training. This Fourth Edition of Harold Kerzner's Project Management Case Studies features a number of new cases covering value measurement in project management. Also included is the well-received "super case," which covers all aspects of project management and may be used as a capstone for a course. This new edition: Contains 100-plus case studies drawn from real companies to illustrate both successful and poor implementation of project management Represents a wide range of industries, including medical and pharmaceutical,

aerospace, manufacturing, automotive, finance and banking, and telecommunications Covers cutting-edge areas of construction and international project management plus a "super case" on the Iridium Project, covering all aspects of project management Follows and supports preparation for the Project Management Professional (PMP®) Certification Exam Project Management Case Studies, Fourth Edition is a valuable resource for students, as well as practicing engineers and managers, and can be used on its own or with the new Eleventh Edition of Harold Kerzner's landmark reference, Project Management: A Systems

Approach to Planning, Scheduling, and Controlling. (PMP and Project Management Professional are registered marks of the Project Management Institute, Inc.)

An authoritative exploration of logistics management within the engineering design and development process, this book concentrates on the design, sustaining maintenance and support of systems. Deals with "logistics" from a total systems/life cycle perspective and includes those activities associated with the determination of requirements, the design, development, production, utilization, sustaining maintenance and support, and retirement of

systems. Emphasizes the importance of addressing logistics in the early phases of the system life cycle, including: design engineering aspects and design of systems for supportability.

Logistics Operations and Management

Decision Models in Engineering and Management

Approaches and Solutions to Next Generation Challenges

Current Practice and Future Applications

Life-Cycle Cost Analysis for Sustainability & Logistical Support

Global Logistics Management

Handbook

Achieving state-of-the-art excellence and attaining the cost reductions associated with outstanding logistics efforts is an obvious gain in terms of competitive edge and profitability. As logistics tools evolve in comprehensiveness and complexity, and the use of these new tools becomes more pervasive, maintaining a position of leadership in logistics functions also becomes increasingly difficult. And in spite of its importance not only to the bottom line but also to the functionality of your operations, logistics improvement often lags industry requirements. Taking a unique engineering

approach, the Logistics Engineering Handbook provides comprehensive coverage of traditional methods and contemporary topics. The book delineates basic concepts and practices, provides a tutorial for common problems and solution techniques, and discusses current topics that define the state of the logistics market. It covers background information that defines engineering logistics, activities and implementation, transportation management, enabling technologies, and emerging trends. Each chapter includes either a brief case study overview of an industrially motivated problem or a tutorial using fabricated data

designed to highlight important issues. Presentation, organization, and quality of content set this book a part. Its most distinctive feature is the engineering focus, instead of the more usual business/supply chain focus, that provides a mathematically rigorous treatment without being overly analytical. Another important characteristic is the emphasis on transportation management, especially freight transportation. The section on emerging and growing trends makes the handbook particularly useful to the savvy logistics professional wishing to exploit possible future trends in logistics practice. The handbook is a one-stop shopping location for

logistics engineering reference materials ranging from basics to traditional problems, to state-of-the-market concerns and opportunities.

Logistics Engineering and ManagementPearson College Division

Sustainable Production and Logistics: Modeling and Analysis Subject Guide: Engineering - Industrial & Manufacturing This book presents issues faced by planners of production and distribution operations in terms of smart manufacturing and sustainability, using efficient quantitative techniques in a variety of decision-making situations. Addressing the state-of-the-art of the smart and sustainable sides of

production and distribution planning operations, it highlights how a current issue can be effectively approached and what particular quantitative technique can be used. The book goes on to provide a foundation in the new and fast-growing digital journey, and includes logistics 4.0 inside Industry 4.0, along with case studies. The information in this book is useful worldwide, especially in the Americas, Europe, Turkey, and Japan. It is written for academicians, researchers, practitioners, and students.

Digital Transformation of Supply Chain Management

Project Management

Proceedings of the Sixth International Conference on Management Science and Engineering Management
Maintainability
Lean Six Sigma Logistics
Concepts and Models

In today's globalised economic development, international transactions form an integral part of economic activities. Logistics Management encompasses planning and management of all activities, involving sourcing and procurement of cargo by effective and

economically feasible coordination and collaboration with channel partners, and provision of product and service packages from point-of-origin to point-of-consumption at the right time and at the right place. This book gives, with theoretical and practical expertise, a comprehensive coverage of the logistic concepts, techniques, and their applications in the world cargo industry. Besides, it provides an in-depth understanding of the strategic

framework of Logistics Management, the technologies, and the components used in logistic operations. It also covers export-import trade and documentations, shipping formalities, warehouse and inventory management, ERP concepts, logistics operation of major ports—and more. Key Feature : Case Studies are provided at the end of most chapters, which tend a practical orientation to the subject. This book is primarily intended as a text for postgraduate

students of Management (MBA/MIB) and Commerce (M.Com.IB). It will also prove useful for the students of those engineering disciplines where the subject is prescribed as an elective course. In addition, practising managers in international business will find the book valuable as a reference This book provides a comprehensive overview of how to strategically manage the movement and storage of products or materials from any point in the

manufacturing process to customer fulfillment. Topics covered include important tools for strategic decision making, transport, packaging, warehousing, retailing, customer services and future trends. An introduction to logistics Provides practical applications Discusses trends and new strategies in major parts of the logistic industry

A practical, step-by-step guide to total systems management Systems

Engineering Management, Fifth Edition is a practical guide to the tools and methodologies used in the field. Using a "total systems management" approach, this book covers everything from initial establishment to system retirement, including design and development, testing, production, operations, maintenance, and support. This new edition has been fully updated to reflect the latest tools and best practices, and includes rich discussion

on computer-based modeling and hardware and software systems integration. New case studies illustrate real-world application on both large- and small-scale systems in a variety of industries, and the companion website provides access to bonus case studies and helpful review checklists. The provided instructor's manual eases classroom integration, and updated end-of-chapter questions help reinforce the material. The challenges faced by

system engineers are candidly addressed, with full guidance toward the tools they use daily to reduce costs and increase efficiency. System Engineering Management integrates industrial engineering, project management, and leadership skills into a unique emerging field. This book unifies these different skill sets into a single step-by-step approach that produces a well-rounded systems engineering management framework. Learn

the total systems lifecycle with real-world applications Explore cutting edge design methods and technology Integrate software and hardware systems for total SEM Learn the critical IT principles that lead to robust systems Successful systems engineering managers must be capable of leading teams to produce systems that are robust, high-quality, supportable, cost effective, and responsive. Skilled, knowledgeable professionals are in demand across

engineering fields, but also in industries as diverse as healthcare and communications. Systems Engineering Management, Fifth Edition provides practical, invaluable guidance for a nuanced field.

High-Tech and High-Touch Logistics Solutions for Supply Chain Challenges

In today's fast-paced and customer-oriented business environment, superior supply chain performance is a prerequisite to getting and staying

competitive. Supply Chain Strategy is based on world-class logistics practices in place in successful supply chain organizations, the latest academic breakthroughs in logistics system design, and the logic of logistics. It presents the proven pillars of success in logistics and supply chain management. Part of McGraw-Hill's Logistics Management Library, Supply Chain Strategy is organized according to author Dr. Ed Frazelle's

breakthrough logistics master planning methodology. The methodology leads to metrics, process designs, system designs, and organizational strategies for total supply chain management, total logistics management, customer response, inventory planning and management, supply, transportation, and warehousing. Concise yet complete, Dr. Frazelle's book shows how to develop a comprehensive logistics and supply chain strategy, one that will both

complement and support a company's strategic objectives and long-term success. Logisticsthe flow of material, information, and money between consumers and suppliershas become a key boardroom topic. It is the subject of cover features in business publications from Wall Street Journal to BusinessWeek. Annual global logistics expenditures exceed $3.5 trillion, nearly 20 percent of the world's GDP, making logistics perhaps the last

frontier for major corporations to significantly increase shareholder and customer value. And at the heart of every effort to improve organizational logistics performance? Supply chain efficiency. Supply Chain Strategy is today's most comprehensive resource for up-to-the-minute thinking and practices on developing supply chain strategies that support a company's overall objectives. Covering world-class practices and systems, taken from the

files of Coca-Cola, Wal-Mart, General Electric, and other companies, it covers essential supply chain subjects including: Logistics data miningfor identifying the root cause of material and information flow problems, pinpointing opportunities for process improvements, and providing an objective basis for project-team decision making Inventory planning and managementpresenting metrics, processes, and systems for forecasting,

demand planning, and inventory control, yielding lower inventory levels and improved customer service Logistics information systems and Web-based logisticshelping to substitute information for inventory and work content Transportation and distributionfor connecting sourcing locations with customers at the lowest cost by, among other things, leveraging private and third-party transportation systems Logistics organization

developmentincluding the seven disciplines that link enterprises across the supply chain, as well as logistics activities within those enterprises Supply Chain Strategy explains and demonstrates how decision makers can use today's technology to enhance key logistics systems at every point in the supply chain, from the time an idea or product is conceived through its delivery to the final user. It describes the major steps in

developing an effective, workable logistics management programone that will reduce operating expenses, minimize capital investment, and improve overall customer service and satisfaction.

Models and Applications

Focused on Electrical and Information Technology

System Engineering Management

Sustainable Production and Logistics

Supportability Engineering Handbook

Logistics Engineering and Management

This book offers complete coverage of logistics, examining modes, general issues, logistics in specific regions, free-trade zones, innovations in international logistics, case studies and a look at the future. Introduction to logistics - Reliability, maintainability, and availability measures - The measures of logistics and system support - The system engineering process - Logistics and supportability analysis - Logistics in system design and development - Logistics in the production/construction phase - Logistics in the system utilization, sustaining support, and retirement phases - Logistics management.

Industrial revolutions have impacted both,

manufacturing and service. From the steam engine to digital automated production, the industrial revolutions have conduced significant changes in operations and supply chain management (SCM) processes. Swift changes in manufacturing and service systems have led to phenomenal improvements in productivity. The fast-paced environment brings new challenges and opportunities for the companies that are associated with the adaptation to the new concepts such as Internet of Things (IoT) and Cyber Physical Systems, artificial intelligence (AI), robotics, cyber security, data analytics, block chain and cloud technology. These emerging technologies facilitated and expedited the

birth of Logistics 4.0. Industrial Revolution 4.0 initiatives in SCM has attracted stakeholders' attentions due to it is ability to empower using a set of technologies together that helps to execute more efficient production and distribution systems. This initiative has been called Logistics 4.0 of the fourth Industrial Revolution in SCM due to its high potential. Connecting entities, machines, physical items and enterprise resources to each other by using sensors, devices and the internet along the supply chains are the main attributes of Logistics 4.0. IoT enables customers to make more suitable and valuable decisions due to the data-driven structure of the Industry 4.0 paradigm. Besides that, the system's

ability of gathering and analyzing information about the environment at any given time and adapting itself to the rapid changes add significant value to the SCM processes. In this peer-reviewed book, experts from all over the world, in the field present a conceptual framework for Logistics 4.0 and provide examples for usage of Industry 4.0 tools in SCM. This book is a work that will be beneficial for both practitioners and students and academicians, as it covers the theoretical framework, on the one hand, and includes examples of practice and real world.

Global Logistics and Supply Chain Management is a comprehensive, fully up-to-date introduction to the subject. Addressing both practical and strategic

perspectives, this revised and updated fourth edition offers readers a balanced and integrated presentation of Logistics and Supply Chain Management (LSCM)concepts, practices, technologies, and applications. Contributions from experts in specific areas of LSCM provide readers with real-world insights on supply chain relationships, transport security, inventory management, supply chain designs, the challenges inherent to globalization and international trade, and more. The text examines how information, materials, products, and services flow across the public and private sectors and around the world. Detailed case studies highlight LSCM practices and strategies in a wide range of contexts, from

humanitarian aid and pharmaceutical supply chains to semi-automated distribution centers and port and air cargo logistics. Examples of LSCM in global corporations such as Dell Computer and Jaguar Land Rover highlight the role of new and emerging technologies. This edition features new and expanded discussion of contemporary topics including sustainability, supply chain vulnerability, and reverse logistics, and places greater emphasis on operations management.

Implementation, Measurement and Management

Inventory and Production Control

Global Logistics

Case Studies

Logistics Management and Strategy
Global Logistics and Supply Chain Management

Technology in Supply Chain Management and Logistics: Current Practice and Future Applications analyzes the implications of these technologies in a variety of supply chain settings, including block chain, Internet of Things (IoT), inventory optimization, and medical supply chain. This book outlines how technologies are being utilized for product planning, materials management and inventory, transportation and distribution, workflow, maintenance, the environment, and in health and safety. Readers will gain a better understanding of the implications of these technologies with respect to value creation, operational effectiveness, investment level, technical migration and general industry acceptance. In addition, the book features case studies, providing a real-world look at supply

chain technology implementations, their necessary training requirements, and how these new technologies integrate with existing business technologies. Identifies emerging supply chain technologies and trends in technology acceptance and utilization levels across various industry sectors Assists professionals with technology investment decisions, procurement, best values, and how they can be utilized for logistics operations Features videos showing technology application, including optimization software, cloud computing, mobility, 3D printing, autonomous vehicles, drones and machine learning

Speed to market, reducing costs, and accelerating leadtimes are vital for survival in today's competitiveenvironment. Inventory is no longer considered an asset,and strategies are needed to operate with minimalinventories. Lean Six Sigma Logistics provides thevehicle

to solidify strategic position, win overcustomers, and achieve ..... The aim of this book is to present qualitative and qualitative aspects of logistics operations and supply chain management which help to implement the sustainable policy principles in the companies and public sector's institutions. Authors in individual chapters address the issues related to reverse network configuration, forward and reverse supply chain integration, CO2 reduction in transportation, improvement of the production operations and management of the recovery activities. Some best practices from different countries and industries are presented. This book will be valuable to both academics and practitioners wishing to deepen their knowledge in the field of logistics operations and management with regard to sustainability issues.

Designed by practitioners for practitioners, Supply Chain

Management and Logistics: Innovative Strategies and Practical Solutions provides a wide-spectrum resource on many different aspects involved in supply chain management, including contemporary applications. With contributions from leading experts from all over the world, the book includes innovative strategies and practical solutions that address problems encountered by enterprise in management of supply chain and logistics. It details general techniques and specific approaches to a broad range of important, inspiring, and unanswered questions in the field. The book is organized around four major research themes in supply chain management: 1) supply chain strategy and coordination, 2) supply chain network optimization, 3) inventory management in supply chain, and 4) financial decisions in supply chain. The sequence of these themes helps transition from an enterprise-wide framework to

network design to operational management to financial aspects of the supply chain. Each individual theme also addresses the answer to a challenging question as to how to go about applying quantitative tools to real-life operations, resulting in practical solutions. As the world moves toward more competitive and open markets, effective supply chain management is of critical importance to the success or failure of an enterprise. Despite a large amount of research achieved in the past decades on the supply chain management topic, many researchers and practitioners are still devoting considerable efforts on the emerging new problems. Designed to give you a collection of topics that bridge the gap between the academic arena and industrial practice, the book supplies a contemporary and up-to-date review on the advanced theory, applications, and practices of supply chain management,

making it a rich resource for the design, analysis, and implementation of supply chain management problems arising in a wide range of industries.

Technology in Supply Chain Management and Logistics

Supply Chain Engineering

Shipping and Logistics Management

Supply Chain Management and Logistics

Logistics Systems: Design and Optimization

Maintenance and Reliability Best Practices

Utilize the Latest Supportability Tools and Methods to Design Durable and Maintainable Systems Engineers in both the commercial and military sectors can rely on the Supportability Engineering Handbook for complete

support criteria that ensure the performance of products ranging from automobiles to spacecraft. This one-of-a-kind resource offers the latest supportability tools and methods for designing complex systems that will last a long time and be easy to maintain in actual use. World-renowned supportability and logistics expert James V. Jones shows readers how to create supportable design solutions through effective system architecting, system and design engineering, and integration. He fully analyzes reliability, maintainability, and testability, and also explores every aspect of supportability. In addition, the author presents detailed coverage of reliability-centered maintenance...safety and human factors engineering...cost

of ownership...supportability assessment and testing... configuration management and control...and much more. The Supportability Engineering Handbook features: Step-by-step guidelines for implementing supportability State-of-the-art measurement methods and tools A wealth of cutting-edge system design knowledge An expert critique of commercial off-the-shelf applications Achieve Optimal Supportability in the Design of Complex Systems • The Evolving Supportability Design Solution • Creating the Design Solution through System Architecting, System Engineering, Design Engineering, and Integration Engineering • Reliability, Maintainability, and Testability Engineering • Supportability Characteristics • Reliability

Centered Maintenance • Safety and Human Factors Engineering • Cost of Ownership • Supportability Analysis • Supportability Assessment and Testing • Configuration Management and Control • Special Considerations: Software, Off the Shelf Items • Abbreviations and Acronyms • Glossary of Terms

The landmark project management reference, now in a new edition Now in a Tenth Edition, this industry-leading project management "bible" aligns its streamlined approach to the latest release of the Project Management Institute's Project Management Body of Knowledge (PMI®'s PMBOK® Guide), the new mandatory source of training for the Project Management Professional

(PMP®) Certificat-ion Exam. This outstanding edition gives students and professionals a profound understanding of project management with insights from one of the best-known and respected authorities on the subject. From the intricate framework of organizational behavior and structure that can determine project success to the planning, scheduling, and controlling processes vital to effective project management, the new edition thoroughly covers every key component of the subject. This Tenth Edition features: New sections on scope changes, exiting a project, collective belief, and managing virtual teams More than twenty-five case studies, including a new case on the Iridium Project covering all aspects of project

management 400 discussion questions More than 125 multiple-choice questions (PMI, PMBOK, PMP, and Project Management Professional are registered marks of the Project Management Institute, Inc.)

Introduction to Logistics Systems Management is the fully revised and enhanced version of the 2004 prize-winning textbook Introduction to Logistics Systems Planning and Control, used in universities around the world. This textbook offers an introduction to the methodological aspects of logistics systems management and is based on the rich experience of the authors in teaching, research and industrial consulting. This new edition puts more emphasis on the organizational context in which logistics

systems operate and also covers several new models and techniques that have been developed over the past decade. Each topic is illustrated by a numerical example so that the reader can check his or her understanding of each concept before moving on to the next one. At the end of each chapter, case studies taken from the scientific literature are presented to illustrate the use of quantitative methods for solving complex logistics decision problems. An exhaustive set of exercises is also featured at the end of each chapter. The book targets an academic as well as a practitioner audience, and is appropriate for advanced undergraduate and graduate courses in logistics and supply chain management, and should also serve as a

methodological reference for practitioners in consulting as well as in industry.

Providing a comprehensive overview of various methods and applications in decision engineering, this book presents chapters written by a range experts in the field. It presents conceptual aspects of decision support applications in various areas including finance, vendor selection, construction, process management, water management and energy, agribusiness , production scheduling and control, and waste management. In addition to this, a special focus is given to methods of multi-criteria decision analysis. Decision making in organizations is a recurrent theme and is essential for

business continuity. Managers from various fields including public, private, industrial, trading or service sectors are required to make decisions. Consequently managers need the support of these structured methods in order to engage in effective decision making. This book provides a valuable resource for graduate students, professors and researchers of decision analysis, multi-criteria decision analysis and group decision analysis. It is also intended for production engineers, civil engineers and engineering consultants.

Multi-objective Management in Freight Logistics

Logistics Operations, Supply Chain Management and Sustainability

Dynamics in Logistics
Competing Through the Supply Chain

Strategic Development to Operational Success

Gets professionals quickly on-line with all the crucial designconcepts and skills they need to dramatically improve themaintainability of their products or systems Maintainability is a practical, step-by-step guide to implementinga comprehensive maintainability program within your organization'sdesign and development function. From program scheduling,organizational interfacing, cost estimating, and supplieractivities, to maintainability prediction, task analysis, formaldesign

review, and maintainability tests and demonstrations, itdescribes all the planning and organizational aspects ofmaintainability for projects under development and * Schools readers in state-of-the-art maintainability designtechniques * Demonstrates methods for quantitatively measuring maintainabilityat every stage of the development process * Shows how to increase effectiveness while reducing life-cyclecosts of already existing systems or products * Features numerous case studies, sample applications, and practiceexercises * Functions equally well as a professional reference and aclassroom text Independent cost analysis studies indicate that an inordinatelylarge percentage of the overall life-cycle cost of mostsystems/products is

currently taken up by maintenance and support.In fact, for many large-scale systems, maintenance and support havebeen shown to account for as much as 60% to 75% of overalllife-cycle costs. At a time of fierce global competition, long-termcost effectiveness is a major competitive advantage thatmanufacturers simply cannot afford to underestimate. Clearly then,to remain competitive in today's international marketplace,companies must institute programs for reducing system maintenanceand support costs--comprehensive programs that are an integralpart of the design and development process from its earliestconceptual stages. This book shows you how to implement such a program within yourorganization's

design and development function. From programscheduling, organizational interfacing, cost estimating, andsupplier activities, to maintainability prediction, task analysis,formal design review, and maintainability tests and demonstrations,it describes all the planning and organizational aspects ofmaintainability for projects under development while schooling youin the use of the full range of proven design techniques--includingmethods for quantitatively measuring maintainability at every stageof the development process. The authors also clearly explain howthe principles and practices outlined in Maintainability can beapplied to the evaluation of systems/products now in use both toincrease their

effectiveness and reduce long-term costs. While theoretical aspects of maintainability are discussed, theauthors' main purpose in writing this book is to help getprofessionals quickly on-line with the essential maintainabilityconcepts and skills. Hence, in addition to clarity of presentationand a rational hierarchical format, Maintainability features manycase studies and sample applications that help to clarify thepoints covered, and numerous practice exercises that help engineersto test their mastery of the concepts and techniques covered. Maintainability is an invaluable professional tool for engineersfrom all disciplines who are involved with the design, testing,prototyping, manufacturing, and maintenance of products andsystems. It also serves as

a superior course book forgraduate-level programs in those disciplines.

Introduction Vision, Mission and Strategy Maintenance Basics Planning and Scheduling Parts, Materials and Tools Management Reliability Operational Reliability M&R Tools Performance Measure - Metrics Human Side of M&R Best Practices/Benchmarking Maintenance Excellence Appendices

Global Logistics Management focuses on the evolution of logistics in the last two decades, and highlights recent developments from a worldwide perspective. The book details a wide range of application-oriented studies, from metropolitan bus routing problems to relief logistics, and introduces the state of the art on

some classical applications. The book addresses typical logistic problems, most specifically the vehicle routing problem (VRP), followed by a series of analyses and discussions on various logistics problems plaguing airline and marine systems. The text addresses problems encountered in continuous space, and discusses the issue of consolidation, scheduling, and replenishment decisions together with routing. It proposes a methodology that supports decision making at a tactical and operational level associated with daily inventory management, and also examines the three-echelon logistic network. This material provides numerous examples and additional topics that include: An analysis for the airline industry and a novel

approach for airline logistics including fare pricing and seat inventory control The berth-crane allocation problem in container terminals A marine system logistics application Ice navigation problems and factors that affect ice navigation Pharmaceutical warehouse route design problems An application in healthcare logistics in which medical suppliers are evaluated through a fuzzy linguistic representation model A real data-driven simulation model that outputs a new shuttle system A model that integrates routing and batching problems Joint replenishment and transportation problems Global Logistics Management clearly illustrates logistic problems encountered in many different application areas, and provides you with the

latest advances in classical applications.
The design of facilities, warehouses, and material-handling systems as well as the management of logistics operations significantly impact the success of industrial projects. Facility Logistics: Approaches and Solutions to Next Generation Challenges explores recent developments in the technology, industrial practices, and business environments of facility logistics. The book first discusses the main trends impacting facility logistics operations, including visibility, security, flexibility, labor, globalization, and sustainability. It then examines the functionalities and capabilities of warehouse management systems (WMS) and outlines a comprehensive yet simple method for the

quick assessment of warehouse performance. The following chapters present a set of solutions to emerging challenges in the design and management of facility logistics, along with procedures to better plan and manage the logistics activities within a production or storage facility. The final chapter reviews educational resources and offers examples of how multimedia tools can be used to develop new teaching material. With more globalization and outsourcing occurring as well as a greater emphasis on facility sustainability, new facility logistics challenges have emerged. By evaluating the impact of these issues on facility logistics, this volume helps you improve the design and management of your facility.

Logistics: Principles and Applications, Second Edition
Logistics of Production and Inventory
Introduction to Logistics Engineering
Text and Cases
Logistics Engineering
Supply Chain Strategy

Winner of 2013 IIE/Joint Publishers Book-of-the-Year AwardEmphasizing a quantitative approach, Supply Chain Engineering: Models and Applications provides state-of-the-art mathematical models, concepts, and solution methods important in the design, control, operation, and management of global supply chains. The text provides an understanding of

Shipping and Logistics Management serves to consolidate the knowledge its authors have acquired from being educators and observers of the shipping industry. Against the background of a global business environment, it explains how the shipping market functions, examining the strategic and operational issues that affect entrepreneurs in this industry. The authors discuss global trends and strategies in the shipping business, looking at the role of logistics service providers and at how the use of information technology can help shipping operations. Shipping and Logistics Management

also aims to answer several important questions in the shipping industry, including: what are the shipping cost structures?, what are the patterns of sea transport? and how do companies in the shipping industry operate? An invaluable source of information for researchers and advanced, or graduate, students, Shipping and Logistics Management is also a useful reference for shipping practitioners and consultants.

How Can Reliability Analysis Impact Your Company's Bottom Line? While reliability investigations can be expensive, they can

also add value to a product that far exceeds its cost. Affordable Reliability Engineering: Life-Cycle Cost Analysis for Sustainability & Logistical Support shows readers how to achieve the best cost for design development testing and evaluation and compare options for minimizing costs while keeping reliability above specifications. The text is based on the premise that all system sustainment costs result from part failure. It examines part failure in the design and sustainment of fielded parts and outlines a design criticality analysis procedure that reflects system design and sustainment.

Achieve the Best Cost for Life-Cycle Sustainment Providing a framework for managers and engineers to develop and implement a reliability program for their organizations, the authors present the practicing professional with the tools needed to manage a system at a high reliability at the best cost. They introduce analytical methods that provide the methodology for integrating part reliability, failure, maintainability, and logistic math models. In addition, they include examples on how to run reliability simulations, highlight tools that are commercially available for such analysis,

and explain the process required to ensure a design will meet specifications and minimize costs in the process. This text: Demonstrates how to use information gathered from reliability investigations Provides engineers and managers with an understanding of a reliability engineering program so that they can perform reliability analyses Seeks to resolve uncertainty and establish the value of reliability engineering Affordable Reliability Engineering: Life-Cycle Cost Analysis for Sustainability & Logistical Support focuses on reliability-centered maintenance and is an ideal resource for

reliability engineers and managers. This text enables reliability professionals to determine the lowest life-cycle costs for part selection, design configuration options, and the implementation of maintenance practices, as well as spare parts strategies, and logistical resources.

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Modeling and Analysis