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Autore	Simchi-Levi David
Titolo	The Logic of Logistics : Theory, Algorithms, and Applications for Logistics Management / / by David Simchi-Levi, Xin Chen, Julien Bramel
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Soggetti	Operations research Management science Production management Industrial engineering Production engineering Economics Operations Research, Management Science Operations Management Industrial and Production Engineering Economic Theory/Quantitative Economics/Mathematical Methods
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Convexity and Supermodularity -- Game Theory -- Worst-Case Analysis -- Average-Case Analysis -- Mathematical Programming Based Bounds -- Economic Lot Size Models with Constant Demands -- Economic Lot Size Models with Varying Demands -- Stochastic Inventory Models -- Integration of Inventory and Pricing -- Supply Chain Competition and Collaboration Models -- Procurement Contracts -- Process Flexibility -- Supply Chain Planning Models -- Facility Location Models -- The Capacitated VRP with Equal Demands -- The Capacitated VRP with Unequal Demands -- The VRP with Time Window Constraints -- Solving the VRP Using a Column Generation Approach -- Network Planning -- A Case Study: School Bus Routing.
Sommario/riassunto	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. This third edition includes new chapters on the subjects of game theory, the power of process flexibility, supply chain competition and collaboration. Among the other materials new to the edition are sections on discrete convex analysis and its applications to stochastic inventory models, as well as extended discussions of integrated inventory and pricing models. The material presents a timely and authoritative survey of the field that will make an invaluable companion to the work of many researchers and practitioners. Review of earlier edition: "The present book focuses on the application of operational research and mathematical modelling techniques to logistics and supply chain management (SCM) problems. The authors performed a substantial revision of the 1st edition and included a number of new subjects … . The book is carefully written and is an important reference for readers with a solid background in probability and optimisation theory … . the present book should be seen as a valuable guide describing techniques that can be applied or adapted to real-life situations." (OR News, Issue 25, 2005).