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Titolo	Pro-active Dynamic Vehicle Routing [[electronic resource]] : Real-Time Control and Request-Forecasting Approaches to Improve Customer Service // by Francesco Ferrucci
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Disciplina	388.324042
Soggetti	Operations research Decision making Production management Sales management Computer simulation Operations Research/Decision Theory Operations Management Sales/Distribution Simulation and Modeling
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 -- Introduction to Tour Planning: Vehicle Routing and Related Problems -- The Considered RDOPG Applications -- Review of the Literature Related to the Considered RDOPG Applications -- A New Deterministic Real-Time Control Approach for RDOPG Applications.- A New Forecasting Approach for Generating Stochastic Knowledge.- The Proposed Tabu Search Solution Method. -- Computational Results -- Summary and Outlook on Future Work -- Appendix -- References.
Sommario/riassunto	This book deals with transportation processes denoted as the Real-time Distribution of Perishable Goods (RDOPG). The book presents three contributions that are made to the field of transportation. First, a model considering the minimization of customer inconvenience is formulated. Second, a pro-active real-time control approach is

proposed. Stochastic knowledge is generated from past request information by a new forecasting approach and is used in the pro-active approach to guide vehicles to request-likely areas before real requests arrive there. Various computational results are presented to show that in many cases the pro-active approach is able to achieve significantly improved results. Moreover, a measure for determining the structural quality of request data sets is also proposed. The third contribution of this book is a method that is presented for considering driver inconvenience aspects which arise from vehicle en-route diversion activities. Specifically, this method makes it possible to restrict the number of performed vehicle en-route diversion activities.
