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	Soggetti	Operations research Stochastic models Mathematical models Mathematical optimization Production management Operations Research and Decision Theory Stochastic Modelling Mathematical Modeling and Industrial Mathematics Optimization Operations Management
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	Nota di contenuto	Benchmarking -- An introduction to data envelopment analysis -- Probability Theory -- Stochastic data envelopment analysis -- Stochastic Network Data Envelopment Analysis -- Stochastic scale elasticity -- Managerial Ability in Deterministic and Stochastic Environments.
	Sommario/riassunto	This book introduces readers to benchmarking techniques in the stochastic environment, primarily stochastic data envelopment analysis (DEA), and provides stochastic models in DEA for the possibility of variations in inputs and outputs. It focuses on the application of theories and interpretations of the mathematical programs, which are

combined with economic and organizational thinking. The book's main purpose is to shed light on the advantages of the different methods in deterministic and stochastic environments and thoroughly prepare readers to properly use these methods in various cases. Simple examples, along with graphical illustrations and real-world applications in industry, are provided for a better understanding. The models introduced here can be easily used in both theoretical and real-world evaluations. This revised edition introduces three key updates: A new section on "Stochastic Data Envelopment Analysis in the Presence of Undesirable Outputs," extending Shephard's (1970) weak disposability assumption to a stochastic environment. A section on "Stochastic Scale Elasticity in the Presence of Undesirable Outputs" with an application to the power sector, incorporating both undesirable outputs and data uncertainty. Additionally, a new chapter on "Managerial Ability in Deterministic and Stochastic Environments" presents a two-step procedure using data envelopment analysis and regression analysis to assess managerial ability in the presence of multiple variables. This book is intended for graduate and PhD students, advanced consultants, and practitioners with an interest in quantitative performance evaluation.