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Titolo	Handbook on Data Envelopment Analysis [[electronic resource] /] / edited by William W. Cooper, Lawrence M. Seiford, Joe Zhu
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ISBN	1-4419-6151-8
Edizione	[2nd ed. 2011.]
Descrizione fisica	1 online resource (512 p.)
Collana	International Series in Operations Research & Management Science, , 0884-8289 ; ; 164
Disciplina	658.40301
Soggetti	Operations research Decision making Econometrics Management science Industrial engineering Production engineering Operations Research/Decision Theory Operations Research, Management Science Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Data Envelopment Analysis: History, Models and Interpretations -- Returns to Scale in DEA -- Sensitivity Analysis in DEA -- Choices and Uses of DEA Weights -- Malmquist Productivity Index and DEA -- Qualitative Data in DEA -- Congestion: Its Identification and Management with DEA -- Slacks-based Measure of Efficiency - SBM -- Chance Constrained DEA -- Performance of the Bootstrap for DEA Estimators and Iterating the Principle -- Statistical Tests Based on DEA Efficiency Scores -- Modeling DMU's Internal Structures: Cooperative and Non-cooperative Approaches -- Assessing Bank and Bank Branch Performance: Modeling Considerations and Approaches -- Engineering Applications of Data Envelopment Analysis: Issues and Opportunities -- Applications of Data Envelopment Analysis in the Service Sector -- Health Care Applications: From Hospitals to Physicians, From Productive Efficiency to Quality Frontiers.

This handbook covers DEA topics that are extensively used and solidly based. The purpose of the handbook is to (1) describe and elucidate the state of the field and (2), where appropriate, extend the frontier of DEA research. It defines the state-of-the-art of DEA methodology and its uses. This handbook is intended to represent a milestone in the progression of DEA. Written by experts, who are generally major contributors to the topics to be covered, it includes a comprehensive review and discussion of basic DEA models, which, in the present issue extensions to the basic DEA methods, and a collection of DEA applications in the areas of banking, engineering, health care, and services. The handbook's chapters are organized into two categories: (i) basic DEA models, concepts, and their extensions, and (ii) DEA applications. First edition contributors have returned to update their work. The second edition includes updated versions of selected first edition chapters. New chapters have been added on:

- Different approaches with no need for a priori choices of weights (called "multipliers) that reflect meaningful trade-offs.
- Construction of static and dynamic DEA technologies.
- Slacks-based model and its extensions
- DEA models for DMUs that have internal structures
- network DEA that can be used for measuring supply chain operations.
- Selection of DEA applications in the service sector with a focus on building a conceptual framework, research design and interpreting results.
