



# **Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science)**

*By Joe Zhu*

[Download now](#)

[Read Online](#) ➔

**Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science)** By Joe Zhu

The author is one of the prominent researchers in the field of Data Envelopment Analysis (DEA), a powerful data analysis tool that can be used in performance evaluation and benchmarking. This book is based upon the author's years of research and teaching experiences.

It is difficult to evaluate an organization's performance when multiple performance metrics are present. The difficulties are further enhanced when the relationships among the performance metrics are complex and involve unknown tradeoffs. This book introduces Data Envelopment Analysis (DEA) as a multiple-measure performance evaluation and benchmarking tool. The focus of performance evaluation and benchmarking is shifted from characterizing performance in terms of single measures to evaluating performance as a multidimensional systems perspective.

Conventional and new DEA approaches are presented and discussed using Excel spreadsheets ? one of the most effective ways to analyze and evaluate decision alternatives. The user can easily develop and customize new DEA models based upon these spreadsheets.

DEA models and approaches are presented to deal with performance evaluation problems in a variety of contexts. For example, a context-dependent DEA measures the relative attractiveness of similar operations/processes/products. Sensitivity analysis techniques can be easily applied, and used to identify critical performance measures. Two-stage network efficiency models can be utilized to study performance of supply chain. DEA benchmarking models extend DEA's ability in performance evaluation. Various cross efficiency approaches are presented to provide peer evaluation scores.

This book also provides an easy-to-use DEA software ? *DEAFrontier*. This *DEAFrontier* is an Add-In for Microsoft® Excel and provides a custom menu of DEA approaches. This version of *DEAFrontier* is for use with Excel 97-2013 under Windows and can solve up to 50 DMUs, subject to the capacity of Excel Solver. It is an extremely powerful tool that can assist decision-makers in benchmarking and analyzing complex operational performance issues in manufacturing organizations as well as evaluating processes in banking, retail, franchising, health care, public services and many other industries.

 [Download Quantitative Models for Performance Evaluation and ...pdf](#)

 [Read Online Quantitative Models for Performance Evaluation a ...pdf](#)

# **Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science)**

*By Joe Zhu*

**Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu**

The author is one of the prominent researchers in the field of Data Envelopment Analysis (DEA), a powerful data analysis tool that can be used in performance evaluation and benchmarking. This book is based upon the author's years of research and teaching experiences.

It is difficult to evaluate an organization's performance when multiple performance metrics are present. The difficulties are further enhanced when the relationships among the performance metrics are complex and involve unknown tradeoffs. This book introduces Data Envelopment Analysis (DEA) as a multiple-measure performance evaluation and benchmarking tool. The focus of performance evaluation and benchmarking is shifted from characterizing performance in terms of single measures to evaluating performance as a multidimensional systems perspective.

Conventional and new DEA approaches are presented and discussed using Excel spreadsheets – one of the most effective ways to analyze and evaluate decision alternatives. The user can easily develop and customize new DEA models based upon these spreadsheets.

DEA models and approaches are presented to deal with performance evaluation problems in a variety of contexts. For example, a context-dependent DEA measures the relative attractiveness of similar operations/processes/products. Sensitivity analysis techniques can be easily applied, and used to identify critical performance measures. Two-stage network efficiency models can be utilized to study performance of supply chain. DEA benchmarking models extend DEA's ability in performance evaluation. Various cross efficiency approaches are presented to provide peer evaluation scores.

This book also provides an easy-to-use DEA software – *DEA Frontier*. This *DEA Frontier* is an Add-In for Microsoft® Excel and provides a custom menu of DEA approaches. This version of *DEA Frontier* is for use with Excel 97-2013 under Windows and can solve up to 50 DMUs, subject to the capacity of Excel Solver. It is an extremely powerful tool that can assist decision-makers in benchmarking and analyzing complex operational performance issues in manufacturing organizations as well as evaluating processes in banking, retail, franchising, health care, public services and many other industries.

**Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu**  
**Bibliography**

- Sales Rank: #2355877 in Books

- Published on: 2015-01-09
- Ingredients: Example Ingredients
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .94" w x 6.14" l, 1.75 pounds
- Binding: Hardcover
- 414 pages

 [Download Quantitative Models for Performance Evaluation and ...pdf](#)

 [Read Online Quantitative Models for Performance Evaluation a ...pdf](#)

**Download and Read Free Online Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu**

---

## **Editorial Review**

### **Review**

From the reviews:

"Joe Zhu provides a well-crafted book on data envelopment analysis (DEA) ??? . The book includes ??? an Excel add-in program that allows for the implementation of the models. ??? The book is written effectively ??? . The material is visually appealing ??? . qualified individuals who are looking for effective ways to evaluate the performance of an organization would find this book to be helpful. It would also make an excellent textbook for a graduate course in DEA ??? ." (John Maleyeff, *Benchmarking*, Vol. 12 (2), 2005)

From the reviews:

"Joe Zhu provides a well-crafted book on data envelopment analysis (DEA) a ] . The book includes a ] an Excel add-in program that allows for the implementation of the models. a ] The book is written effectively a ] . The material is visually appealing a ] . qualified individuals who are looking for effective ways to evaluate the performance of an organization would find this book to be helpful. It would also make an excellent textbook for a graduate course in DEA a ] ." (John Maleyeff, *Benchmarking*, Vol. 12 (2), 2005)

From the Back Cover

Based upon the author's years of research and teaching experiences, this 3<sup>rd</sup> Edition introduces Data Envelopment Analysis (DEA) as a data analysis tool for multiple-measure performance evaluation and benchmarking. The focus of performance evaluation and benchmarking is shifted from characterizing performance in terms of single measures to evaluating performance as a multidimensional systems perspective.

Conventional and new DEA approaches are presented and discussed using Excel spreadsheets ? one of the most effective ways to analyze and evaluate decision alternatives. The user can easily develop and customize new DEA models based upon these spreadsheets.

DEA models and approaches are presented to deal with performance evaluation problems in a variety of contexts. For example, a context-dependent DEA measures the relative attractiveness of similar operations/processes/products. Sensitivity analysis techniques can be easily applied, and used to identify critical performance measures. Two-stage network efficiency models can be utilized to study performance of supply chain. DEA benchmarking models extend DEA's ability in performance evaluation. Various cross efficiency approaches are presented to provide peer evaluation scores.

This book also provides an easy-to-use DEA software ? *DEAFrontier*. This *DEAFrontier* is an Add-In for Microsoft® Excel and provides a custom menu of DEA approaches. This version of *DEAFrontier* is for use with Excel 97-2013 under Windows and can solve up to 50 DMUs, subject to the capacity of Excel Solver.

## About the Author

Professor Joe Zhu is one of the prominent researchers in the field of Data Envelopment Analysis (DEA). His research interests are in the areas of operations and business analytics, productivity modeling, and performance evaluation and benchmarking. He has published over 100 articles in peer-reviewed journals including Operations Research, Sloan Management Review, European Journal of Operational Research, Journal of the Operational Research Society, Naval Research Logistics, IIE Transactions, Journal of Banking and Finance, OMEGA, and others. He is an Area Editor of OMEGA, an Associate Editor of INFOR, and the Associate Series Editor of Springer's International Series in Operations Research and Management Science.

He is a Japan Society for Promotion of Science (JSPS) fellow and a William Evans Visiting Fellow of University of Otago, New Zealand. His research has been supported by KPMG Foundation, National Institute of Health, and Department of Veterans Affairs.

## Users Review

### From reader reviews:

#### **Babara Lopez:**

What do you with regards to book? It is not important to you? Or just adding material when you need something to explain what the one you have problem? How about your extra time? Or are you busy man? If you don't have spare time to try and do others business, it is gives you the sense of being bored faster. And you have extra time? What did you do? All people has many questions above. They need to answer that question since just their can do that. It said that about e-book. Book is familiar in each person. Yes, it is right. Because start from on kindergarten until university need this kind of Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) to read.

#### **Katherine Belcher:**

This book untitled Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) to be one of several books this best seller in this year, that is because when you read this publication you can get a lot of benefit on it. You will easily to buy that book in the book retailer or you can order it by using online. The publisher on this book sells the e-book too. It makes you more easily to read this book, as you can read this book in your Mobile phone. So there is no reason to you personally to past this e-book from your list.

#### **Eleanor Walker:**

Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) can be one of your nice books that are good idea. Most of us recommend that straight away because this reserve has good vocabulary that may increase your knowledge in language, easy to understand, bit entertaining but nonetheless delivering the information. The writer giving his/her effort to put every word into enjoyment arrangement in writing Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis

with Spreadsheets (International Series in Operations Research & Management Science) although doesn't forget the main point, giving the reader the hottest in addition to based confirm resource information that maybe you can be considered one of it. This great information may drawn you into brand new stage of crucial imagining.

**David Burch:**

You could spend your free time to learn this book this e-book. This Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) is simple to bring you can read it in the park, in the beach, train as well as soon. If you did not have much space to bring typically the printed book, you can buy often the e-book. It is make you better to read it. You can save the actual book in your smart phone. So there are a lot of benefits that you will get when one buys this book.

**Download and Read Online Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu #QTJXNPFDZVB**

# **Read Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu for online ebook**

Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu books to read online.

## **Online Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu ebook PDF download**

**Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu Doc**

**Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu Mobipocket**

**Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu EPub**

**QTJXNPFZVB: Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets (International Series in Operations Research & Management Science) By Joe Zhu**