Call for Book Chapters
“Data-Enabled Analytics: DEA for Big Data”

Editors:
Joe Zhu, Foisie Business School, Worcester Polytechnic Institute, USA
Vincent Charles, School of Management, University of Bradford, UK

Data envelopment analysis (DEA) has been and continues to be a widely-used technique both in performance and productivity measurement, having covered a plethora of challenges and debates within the modelling framework. Over the past four decades, DEA models have been applied in almost every major field of study. Despite this, however, DEA has not been used to its fullest extent. As the inter- and intra-disciplinary research grows, DEA could be used in potentially many other ways. DEA could be viewed as a data-oriented data science tool for data-enabled analytics, benchmarking, performance evaluation, and developing composite indexes, among other new uses, in addition to the traditional uses, such as production efficiency and productivity measurement. One opportunity is brought by the existence of big data. Although big data have existed for a while now, gaining its popularity among insight seekers, we are still in incipient stages when it comes to taking full advantage of its potential. As the amount of (big) data keeps growing in an exponential manner, so does its complexity; in this sense, various types of data are surfacing, whose study and examination could shed new light on phenomena of interest.

A quick review of existing literature shows that big data is a new entrant within the DEA framework. Recently, there has been an increasing interest in bringing the two concepts together, with research studies aiming to integrate DEA and big data concepts within a single framework. Despite this, however, more work is needed to fully explore the value of their intersection. It is thus time to view DEA considering its potential usage in new fields or new usage within the existing fields, under the big data umbrella. Otherwise stated, it is time to view DEA models beyond their present scope to mine new insights for better data-driven decision-making. This book seeks new DEA developments that are tailored for big data research and data-enabled analytics.

We wish to invite you to contribute to this edited book. As such, we invite you to submit an extended abstract to the Editors (mentioning in the subject of the email: "Data-Enabled Analytics: DEA for Big Data") by 30/Jun/2020, clearly indicating the objectives of your proposed chapter, its originality, and methodology employed.

Important dates:

30/Jun/2020 Submission deadline for extended abstract
15/Aug/2020 Communication of decisions from editors
01/Nov/2020 Submission of full chapters
31/Jan/2021 Notification of first round of review results
30/Apr/2021 Submission of revised chapters
15/Jun/2021 Notification of second round of review results
31/Jul/2021 Final decisions notifications

The expected publication date of the book is December 2021.
For further information or clarifications about this Call for Book Chapters, please do not hesitate to contact the Editors directly, via email.

(jzhu@wpi.edu; editor.profvc@gmail.com)