



CALL FOR FULL CHAPTERS

Bentham Science

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Full Chapter Submission Deadline: 9th September, 2021

Advanced Optimization in Analytics for Managing Sustainable Businesses

A book edited by Professor Dr. Elias Munapo (*NWU - Mafikeng Campus, South Africa*),
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Submission via email only

Introduction

In the modern world, meta-heuristics and optimization play a vital role in sustainable decision making to transform business analytics. These techniques are changing the world of analytics and data science. The new emergence of Novel Optimization techniques and its related methodology remain a hazy conception among the minds of young researchers. Moreover, recent trends illustrate that extensive research needs to be done on different optimization tools, and their implementation in various industries and business sectors need to be demonstrated.

Objective of the Book

In the modern world, meta-heuristics optimization is at the forefront of technological advances that help in sustainable decision making. Different Industries and Business Areas implement optimization techniques for optimal resource allocation and extraction of maximum benefits from optimal resource. It deals with recent research trends and novel techniques implemented to predict the optimum solutions for different industries. It provides a detailed overview of optimization techniques and Meta-heuristics techniques followed by their use in diverse sectors such as Business, Data science, Energy, Resource allocation, and Materials. It deals with topics such as novel meta-heuristics techniques and their performance in solving modern-days problems, their implementation as optimization techniques and meta-heuristics to predict solutions for multi-objective problems.

Recent developments and rapid urbanization leads to a depletion and scarcity of resources. This attracted the attention of various decision-makers, academia as well as professionals from the business world to allocate resources precisely for today's price-sensitive markets. This book discusses the use of different optimization strategies to protect the growing business from future threats. Due to resource depletion, citizens of the world face issues related to sustainability. Therefore, meta-heuristics optimization techniques play a crucial role in the precise management of resources and safeguarding the business from future threats by predicting the optimum solution as accurate as possible.

This book will aid the learning and research attitude of the readers to solve real-world optimization problems implementing appropriate methods from emerging techniques, such as evolutionary algorithms, swarm intelligence, mathematical optimization, infinite programming, optimal control, quantum-inspired computational strategies, computational intelligence and multi-objective problems, thus reducing the research gaps yet given. Broadly speaking, the book is divided in the following section: Firstly, application of optimization techniques in industries and business related to energy sectors. Secondly, implementation of optimization techniques related to business associated with separator, process plant, selection of optimum plant site, and pre-treatment units are discussed. Thirdly, the book deals with industrial applications in material engineering, mainly focuses on emerging sectors in the concerned



industries. Finally, the book is concerned with the agricultural sectors and their related industries. This proposed book aims to reduce the research gap related to the methodology and application of meta-heuristics and conventional optimization techniques in its implementation on business analytics for sustainable decision making. The book aids the selection process of appropriate meta-heuristics and optimization techniques for sustainable decision making by engineers, decision-makers, and industry executives.

Target Audience

Policy makers, Governmental officer, Ministers, Directors, General managers, Chief executive officers, Professors of colleges and universities, People associated with research and development, Research scholars such as senior research fellows, post-doctoral fellow, junior research fellows, and PhD students, UG and PG students, Decision makers, and Business leaders.

Recommended topics include, but are not limited to, the following:

Meta-heuristics algorithms, Evolutionary algorithm, Classical optimization techniques, Hybrid algorithm, Adaptive Neuro fuzzy inference systems, Artificial neural network, Fuzzy logic, Implementation in Business and Industries, Operational research, Quantum computing strategies, Business analytics, Machine learning, Automation, Robotics, Data science and technology, Artificial intelligence, Swarm intelligence, Renewable energy, Smart agriculture, Nature inspired algorithms, Resource management and allocation, Data mining, RFM optimization model, Models related to logistics and production, Marketing models, Data warehousing, The Link to Mathematics.

Submission Procedure

Researchers and practitioners are invited to submit the full chapter on or before **9th September 2021**. Authors will be notified by **24th September 2021** about the status of their full chapters. All submitted chapters will be reviewed on a double-blind review basis. Contributors may also be requested to serve as reviewers for this project.

Note: There are **no submission or acceptance fees** for manuscripts submitted to this book publication, ***Advanced Optimization in Analytics for Managing Sustainable Businesses***. All manuscripts are accepted based on a double-blind peer review editorial process.

Publisher

This book is scheduled to be published by Bentham Science Publishers Pte. Ltd

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<https://benthambooks.com/index.php>

Guideline for manuscript preparation is given below:

Full chapters of **10,000 to 12,000** words are expected to be submitted and all interested authors must consult the guidelines for manuscript submissions at

<https://benthambooks.com/manuscript-organization.php>

Important Dates

9th September, 2021: Full Chapter Submission

24th September 2021: Review Results Returned

4th October, 2021: Final Acceptance Notification

20th October, 2021: Final Chapter Submission

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