

Editorial

Operational Research

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1. Introduction

Operations research or operational research (OR) is a discipline that deals with the application of advanced analytical methods to help make better decisions. Employing techniques from other mathematical sciences, such as mathematical modelling, statistical analysis, mathematical optimization, and operations research arrives at optimal or near-optimal solutions to complex decision-making problems. The main focus of this special issue will be on the new research ideas and results for the OR. Considering the wide applications of OR, it seems natural that this journal selected it as the theme of its special issue.

2. Overview of Works Presented in This Special Issue

This special issue includes 19 high-quality papers that deal with different fields in OR. These papers have been accepted among 54 manuscripts. These papers contain some new, novel, and innovative techniques and ideas which can be developed and extended in the further scientific works.

The subjects in data envelopment analysis (DEA) have occupied three contributions. The DEA is a nonparametric

efficiency estimating technique. One of these papers proposed is “Modified Malmquist productivity index based on present time value of money.” The other papers were devoted to interval scale of efficiency and ranking subjects. Also, two papers have studied road congestion pricing problem. There are also three contributions on the applications of fuzzy set theory. Furthermore, five works have been presented about the different methods of optimization. Also, two papers presented in this special issue are closely related to the risk models. A new bandwidth allocation model is studied in one of the published papers. One of the published papers proposed a model for estimating car delays at bus stops. One of the contributions reviewed the theories of process control. Finally, one of the accepted papers considered stochastic P -function, stochastic P_0 -function, and stochastic uniformly P -function.

3. Conclusions

The operational research and its applications are one of the most important fields of applied mathematics. So, this special issue focuses on this subject. The aim of this special issue is to present and extend the applications of the relatively new approaches and theories for the OR and its applications. The

editors hope that the special issue will provide new ideas in the development of OR.

Acknowledgments

In closing this editorial, we would like to express our deepest gratitude to many reviewers, whose useful comments guaranteed the high quality of the selected papers.

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