1. Record Nr. UNINA9910726276403321

Titolo	Applications of Operational Research in Business and Industries : Proceedings of 54th Annual Conference of ORSI / / edited by Angappa Gunasekaran, Jai Kishore Sharma, Samarjit Kar
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	9789811980121 9789811980114
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (512 pages)
Collana	Lecture Notes in Operations Research, , 2731-0418
Disciplina	658.403
Soggetti	Operations research Mathematical optimization Big data Machine learning Artificial intelligence - Data processing Operations Research and Decision Theory Optimization Big Data Machine Learning Data Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1: Optimization of an inventory model with demand dependent on selling price and stock, nonlinear holding cost along with trade credit policy -- Chapter 2: Software Defect Prediction Through a Hybrid Approach Comprising of a Statistical Tool and a Machine Learning Model -- Chapter 3: Conservation of a prey species through optimal taxation: a model with Beddington-DeAngelis Functional Response -- Chapter 4: Investigate the reason for students' absenteeism in Engineering College in Fuzzy MCDM environment -- Chapter 5: Optimal inventory management policies for substitutable products considering non-instantaneous decay and cost of substitution. .
Sommario/riassunto	Effective decision-making while trading off the constraints and

conflicting multiple objectives under rapid technological developments, massive generation of data, and extreme volatility is of paramount importance to organizations to win over the time-based competition today. While agility is a crucial issue, the firms have been increasingly relying on evidence-based decision-making through intelligent decision support systems driven by computational intelligence and automation to achieve a competitive advantage. The decisions are no longer confined to a specific functional area. Instead, business organizations today find actionable insight for formulating future courses of action by integrating multiple objectives and perspectives. Therefore, multi-objective decision-making plays a critical role in businesses and industries. In this regard, the importance of Operations Research (OR) models and their applications enables the firms to derive optimum solutions subject to variousconstraints and/or objectives while considering multiple functional areas of the organizations together. Hence, researchers and practitioners have extensively applied OR models to solve various organizational issues related to manufacturing, service, supply chain and logistics management, human resource management, finance, and market analysis, among others. Further, OR models driven by AI have been enabled to provide intelligent decision-support frameworks for achieving sustainable development goals. The present issue provides a unique platform to showcase the contributions of the leading international experts on production systems and business from academia, industry, and government to discuss the issues in intelligent manufacturing, operations management, financial management, supply chain management, and Industry 4.0 in the Artificial Intelligence era. Some of the general (but not specific) scopes of this proceeding entail OR models such as Optimization and Control, Combinatorial Optimization, Queuing Theory, Resource Allocation Models, Linear and Nonlinear Programming Models, Multi-objective and multi-attribute Decision Models, Statistical Quality Control along with AI, Bayesian Data Analysis, Machine Learning and Econometrics and their applications vis-à-vis AI & Data-driven Production Management, Marketing and Retail Management, Financial Management, Human Resource Management, Operations Management, Smart Manufacturing & Industry 4.0, Supply Chain and Logistics Management, Digital Supply Network, Healthcare Administration, Inventory Management, consumer behavior, security analysis, and portfolio management and sustainability. The present issue shall be of interest to the faculty members, students, and scholars of various engineering and social science institutions and universities, along with the practitioners and policymakers of different industries and organizations.