

Guest Editorial Preface

Special Issue from the Conference of the Hellenic Operational Research Society on Operations Research and Information Systems in Support of Development and Production Models

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HELORS (Hellenic Operational Research Society) was founded nearly 60 years ago (in 1963) by pioneer Greek scientists aiming to promote teaching and use of Operational Research methodologies for the benefit of the Greek economy and society. HELORS was developed as a scientific society with an important presence in the scientific and economical life of Greece with more than 300 members and several activities. As a part of its efforts to promote and stimulate scientific research and disseminate knowledge at a national level, Hellenic Operational Research Society is organizing special conferences where students are willfully encouraged to participate in order to induct them to the scientific and academic principles of OR. These conferences aim at disseminating knowledge and information effectively, at driving students to co-author publications and in general, at taking initiatives prosperous for the promotion of the OR.

The 6th student meeting of HELORS took place as part of a meeting series, realized over the previous years. We consider the success of those meetings as a clear sign of the intensive research by Greek scholars of the field. The conference has been organized by the Democritus University of Thrace, and it was held in its premises on February 28 – March 2 2019. The national community has demonstrated particular interest in submitting its research work and participating to the conference activities. Out of the forty nine (49) works originally presented, 12 works were selected to be invited to this special issue. Moreover, we published an open call for papers through the publisher's site. After a thorough peer-review process, we finally selected six (6) articles to be hosted in this Special Issue.

In the first paper, Trevlopoulos, Tsalis, and Nikolaou, examine if environmental regulations, under certain circumstances, could have positive effects on corporate environmental and economic performance (the Porter hypothesis). They conducted an empirical analysis to a set of firms from the metallurgy industry sector to reach a conclusion that Green Intellectual Capital could be a significant mediating factor between environmental legislation and environmental performance of firms. We shall highlight the benchmarking-scoring framework that authors suggest to draw useful and valuable information from corporate sustainability reports, which is a departure from the ordinary

questionnaire-based surveys on normative models and on relative information at country level that is the dominant pattern in related works.

Dimitriou, Sartzetaki, and Kalenteridou deal with the evaluation of passenger's satisfaction, which is an inherently complex problem mainly due to passengers' quality attitudes, expectations and experiences. Authors develop a methodological framework to assessing Level of Service Quality at airports, adopting two evaluation layers: the level of service (efficiency to manage traffic demand); and the level of expectation (performance to accommodate traveler's needs). They validate the framework through an application at a local airport to illustrate the consistency of the level of airport service and passengers' level of expectations.

In the next chapter, Pistofidis, Botsaris, and Giotsalitis discuss contemporary educational mechanisms for distance and asynchronous training and in particular, the ability of photorealistic 3D models and interactive 3D objects to support engineering education. Authors focus on photorealism and interactivity to allow the trainee to better control the functional behavior of machine elements. They also attach the feedback they captured after developing such models as exercise material for a Lab of Mechanical Design.

The fourth paper by Chronis, Xanthopoulos, and Koulouriotis study the production line of a door industry through discrete event simulation. The paper contains a detailed documentation of the production processes, the product types as well as the stages of production and equipment. The simulation model was verified using actual production data and real customer orders. Four simulation experiments were executed, where the effect of alternative shifts on the manufacturing line's efficiency was investigated. The results suggest that the shift configuration achieves increased productivity while maintaining relatively low labor costs.

Next, Goumas et al. highlight tourism as a dynamic and fast-growing sector of the national economy. They argue that reliable and accurate forecasting of touristic demand is necessary in making decisions for effective and efficient planning of tourism policy. To this end, they use a variety of quantitative forecasting models to model and forecast the international tourist arrivals to the island of Crete, Greece, using longitudinal data.

The last paper by Blouchoutzi et al. challenges the European Union member states response towards migration. They focus on the labor market integration of immigrants and they aim at evaluating the performance of the Member States to their labor market integration policies using the Zaragoza indicators for employment. The multi-criteria method PROMETHEE is applied to deliver ten final rankings of the countries. Results suggest that the Nordic and a few Central European countries seem to take lower positions in the ranking than the Mediterranean countries, despite the various economic problems that affected the integration policies of the latter.

Being the guest editors of this issue, we would like to thank the authors of the papers and the anonymous reviewers for their time and efforts to fulfill this endeavor. We would also like especially to thank Professor John Wang, the Editor-in-Chief of IJORIS, for his trust, support, and confidence to a successful outcome.

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