



Editorial on Special Issue: “Fuzzy Models for Business Analytics”

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The importance and impact of Business Analytics (BA) has been boosted in our society due to the digitalization processes that our world is suffering nowadays. The application of BA to Industry 4.0 is a clear manifestation of knowledge economy and knowledge society in recent years that has involved approaches coming from all areas of mathematical and computer sciences. The research and advances in BA has made the transformation of data into knowledge for supporting Decision Making accessible not only for big companies but also for small and medium ones, facilitating the development of competitive products and services as well as fostering good performance in markets. Among the different techniques, tools and methodologies used in BA, fuzzy logic and soft computing have a prominent position because the adaptive mechanisms to enable or facilitate intelligent behavior in complex and changing environments in which BA is usually applied.

This special issue offers a systematic overview of fuzzy models for BA, which will raise novel approaches, models, and systems in the field. It provides a leading forum for publishing the latest results of theoretical research, technological development, and real-world applications in the field, including agents based decision-making, investment and portfolio optimization, and methods in uncertain environments. It also illustrates advances in state-of-the-art fuzzy models for BA.

This special issue is conformed by eight high-quality, original and innovative research contributions. The accepted papers here fall into two groups. The one concerns fuzzy decision-making models and methodologies, including fuzzy multi-criteria approaches, fuzzy outranking relations, intuitionistic fuzzy preference relations and hesitant fuzzy information. Another group addresses different techniques for real-world applications including metaheuristics and Particle Swarm Optimization for portfolio selection, the use of fuzzy logic in supply risk assessment and continuous linguistic variables in data mining and time series. These papers fall into the issues related to fuzzy models for BA and represent important advances in the field.

We would like to express our sincere appreciation to the authors who have contributed with their recent research ideas, results and achievements to this special issue. Our recognitions also go to the reviewers that have help in the improving of the quality of submissions. Eventually, our special gratitude to the Editor in Chief of the International Journal of Fuzzy Systems for his support and guidance during this special issue.

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