
Editorial

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Biographical notes: Kurt J. Engemann is the Director of the Centre for Business Continuity and Risk Management and a Professor of Information Systems and Business Analytics in the School of Business at Iona College, USA. He is the Editor-in-Chief of the *International Journal of Business Continuity and Risk Management* and the *International Journal of Technology, Policy and Management*. He has consulted professionally in the area of risk modelling for major organisations and has been instrumental in the development of comprehensive business continuity management programs. He has a PhD in Operations Research from New York University and is a Certified Business Continuity Professional.

Antonio Terceño is Professor in the Department of Business Management at the Faculty of Business and Economics (University Rovira i Virgili), Spain. PhD in Economics and Business from the University of Barcelona. He has published more than 150 papers in journals, books and conference proceedings including journals such as *Fuzzy Sets and System*, *European Journal of Operational Research*, *Journal of Risk and Insurance*, *Emerging Market Review*, *The International Journal of Uncertainty, Fuzziness and Knowledge-based Systems*, *Economic Computation and Economic Cybernetics Studies and Research*, and *Computer Science and Information Systems*. Currently, he is the Dean of the Faculty of Business and Economics.

M. Glòria Barberà-Mariné is an Associate Professor in the Department of Business Management at the University Rovira i Virgili (URV), Spain. She was dean of the Faculty of Business and Economics of the URV, between 2007 and 2015. She received her PhD in Business Administration from the University Rovira i Virgili in 2001. She has published in journals such as *Fuzzy Sets and Systems*, *Economic Computation and Economic Cybernetics Studies and Research*, *Computer Science and Information Systems*, *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems*, *Fuzzy Economic Review*, and in editorials as World Scientific, Kluwer and Springer.

The most salient feature of the late 20th century was the scale of changes affecting social, economic and corporate life. Our environment is changing at a rate which would once have been unthinkable, and the speed of events has now become astonishing. The problems posed by these new situations are increasingly complex and changeable and traditional models based on determinism and chance are no longer able to cope with this reality. Nowadays problems which affect people have appeared suggesting that the need to bring together all those individuals, companies and institutions which wish to collaborate in the development and promotion of new techniques to adapt to this context.

International Association for Fuzzy-Set Management and Economy (SIGEF) has been set up to encourage research about social issues as well as economy and corporate management problems within the above-mentioned context. In order to achieve this objective, we believe that it is essential to include all people who are concerned for the future of our societies, be they researchers or professionals, or organisations and institutions. The SIGEF founder members wish to approach this task in open-minded so that the exchange of knowledge or opinions benefit of all society.

For these reasons, SIGEF organise meetings, conferences, talks and similar activities allowing members to air their concerns, and to present ideas and work in progress. In July 2017 SIGEF organised the XIX Congress held at Iona College (New Rochelle, NY, USA) entitled “Methods for the treatment of risk and uncertainty”. As a result of this congress some works were selected to publish in this special issue, “Developments in Technology Management using Fuzzy Set Techniques” of *IJTPM*.

The five selected papers were improved and submitted for publication in the journal.

The first paper is a bibliometric analysis of publications with Chilean authors in the field of business management. This study analyses the period 1991–2015 and uses the Web of Science database. The increase about the publications on the field is verified and also the relation of the number of papers with the increase of the competitive projects achieved by the research groups is established.

The following paper describes the application of the soft graph colouring problem to different instances of colouration such as minimal colouring, weak graphic colouring, equitable colouring and robust colouring. In addition, the paper details each of the particularities of the problems that allow mapping them in the Soft Graph model.

The third paper analyses the use of simulations of the virtual reality in education. The incorporation of this instrument opens immense possibilities in the educational field. The paper includes the implementations of simulations classified by thematic areas, which facilitates the search for teachers interested in the topic.

The fourth paper presents the functionalities of the application of the March model as a virtual laboratory of organisational design, computational laboratory of organisational design (CLOD). In addition to the classic organisational design model, a fuzzy version is implemented to approach to environmental complexity.

Finally, the last paper carries out a systematic review of the literature (SLR) on business failure. The study covers the period 1968–2016 and uses the Scopus database. The paper is useful to researchers on the topic of business failure because it allows them to know the scientific production, the most interested journals, the most cited papers... Moreover, this study allows to have detect research gaps.

We would like to thank to all the authors, reviewers, plenary speakers, and the scientific and organising committee for their support and kind cooperation with XIX SIGEF Congress. Thanks to Professor Ronald R. Yager, president of the scientific committee, and to Professors Kurt J. Engemann, José M. Merigó and M. Teresa Sorrosal-Forradas, chairs of the Congress.

Finally, we would like to express our gratitude for the support to the editors of the *International Journal of Technology, Policy and Management*.