Editorial

Jason Papathanasiou*

Department of Marketing and Operations Management, University of Macedonia, 49 Ag. Dimitriou Str., Edessa 58200, Greece E-mail: jasonp@uom.gr *Corresponding author

Shaofeng Liu

School of Management, University of Plymouth, Drake Circus, Plymouth, PL4 8AA, UK E-mail: shaofeng.liu@plymouth.ac.uk

Pascale Zarate

Toulouse University – IRIT 118 route de Narbonne, F-31062 Toulouse Cedex 9, France E-mail: zarate@irit.fr

Biographical notes: Jason Papathanasiou is a Lecturer at the Department of Marketing and Operations Management, University of Macedonia, Greece. He received his PhD in Operational Research and Informatics and a degree in Physics, both from the Aristotle University of Thessaloniki. He has organised and participated in international scientific conferences and workshops and has published papers in international scientific peer refereed journals; in all he has more than 50 papers published in conferences, books and journals. He has participated in research projects in FP6, FP7, Interreg and COST, and he is a member of the Committee of Senior Officials of COST.

Shaofeng Liu is an Associate Professor in Operations Management and Decision Making at the University of Plymouth, UK. She obtained her PhD degree from Loughborough University, UK, specialised in knowledge and information management for global manufacturing coordination decisions. Her main research interests and expertise are in knowledge-based techniques. She has undertaken a number of influential research projects funded by UK research councils and the European Commission. She has published widely on high quality international journals; she is currently on the Coordination Board for the Euro Working Group on Decision Support Systems (EWG-GSS).

Pascale Zarate is a Professor at Toulouse 1 Capitole University and researches at the IRIT Laboratory. She received her PhD in Computer Sciences/Decision Support from the Paris Dauphine University and her Master in Computer Science from the Paul Sabatier University; as well as her Bachelors degree in Toulouse. Her current research interests include among others cooperative decision making. She is the Editor-in-Chief of the

226 J. Papathanasiou et al.

International Journal of Decision Support Systems Technologies. She is the Head of the Euro Working Group on DSS; published several studies and works in international journals, conferences and volumes and she belongs to the editorial board of three international journals.

The Euro Working Group on Decision Support Systems (EWG-DSS. http://ewgdss.wordpress.com/) is a working group within EURO, the Association of the European Operational Research Societies. The EURO Summer Institute on DSS in Madeira, Portugal in 1989 marks the birth of the EWG-DSS and since then the members of the group have increased significantly, reaching 152 members by today. The group organises one or two workshops annually in different European countries and actively participates in major events like the EURO Conferences, organising the DSS streams.

The aim of the EWG-DSS group is to create a science interface between researchers in different countries and encourage the state-of-the-art high quality research and collaboration work within the international DSS community. It is to this end, that during June 23rd and 24th, 2011 the EWG-DSS London-2011 Workshop was organised in London, UK. There were 36 presentations plus three special talks in a rigorous and fast paced event; the *IJIDS* special issue call was distributed among the participants and after their oral presentations at the workshop a two-stage blind review followed; at the end six papers were selected to be published in this special.

In the first paper in this issue, Pereira and Santoro argue that the success of a business process depends on the way its participants perform their tasks. The ability, knowledge and experience of a participant are decisive to carry out his tasks and deal with changes that might occur. Besides the understanding of each activity of a business process, it is also relevant to understand the contextual information involved in particular situations. However, to promote this understanding, contextual information should be available. In this sense, cognitive decision making process is an important contextual element, since it could help to describe how an activity was performed. Nevertheless, it is still a challenge to make this contextual information available because of the difficulty to make an individual mental process or the rationale of a decision explicit. They present in their paper an approach for capturing and representing cognitive decision making process as contextual knowledge surrounding activities in the business process and discuss the results of case studies made.

Dabrowska and Hausenblas continue suggesting that film post-production is a very creative process that also involves some non-creative activities. Such activities often require a significant amount of effort, thus, become a distraction to creative tasks. Common approaches to this problem focus on creation of tools that promote and directly support creativity and impose their use. In contrast to the above view, their work proposes a novel approach that significantly differs from the commonly suggested direct support for creativity. Instead, they argue that creativity can be supported indirectly through minimisation of effort related to the non-creative activities. They demonstrate how this idea can be applied with the post-production assistant (PPA), a tool that gives suggestions for solving problems arising from non-creative activities. Thus, they promote a process, where the creative part of the postproduction is only marginally distracted. Their paper presents the design of the PPA tool including an overview of the crucial technologies used and discusses their application in specific post-production use cases

Editorial

and scenarios. In this context, they emphasise applicability and usefulness of semantic web technologies in the creative processes of film making.

In the third paper, Ngan, Brodsky and Lin propose a multidimentional time-point model and algorithm to solve multi-event expert query parametric estimation (ME-EQPE) problems over multivariate time series. Their proposed model and algorithm combine the strengths of both domain-knowledge-based and formal-learning-based approaches to learn optimal decision parameters for maximising utility over multivariate time series. More specifically, their approach solves the decision optimisation problems to maximise the utility from multiple decision time points, as well as maintaining an optimality of the learned multiple sets of decision parameters in their respective events during the computations. They show that their approach produces a reasonable forecasting result by using the learned multiple sets of decision parameters.

Keenan reports that while academic researchers in the field of decision support systems (DSS) tend to emphasise the technology independent nature of the decision support concept, they also need to assess the role of new technology; cloud computing is one such new technology. His paper suggests that the specific nature of DSS means that cloud computing is of limited relevance in most sectors of DSS application. However, spatial DSS is a distinct area of DSS application where large volumes of generic data are needed from outside the organisation making the decision. Consequently, a number of issues arise in the provision of data for SDSS which are not typical of the DSS field. Spatial data infrastructure (SDI) projects provide large collections of spatial data and can make use of technologies such as cloud computing. This paper argues that cloud computing can contribute to spatial DSS applications which use these large data resources. Spatial DSS remains a form of DSS which continues to push the limits of technology and developments in this sector can inform our understanding of the progression of the DSS field.

Arduin, Grundstein and Rosenthal-Sabroux present a paper that introduces an approach developed at AXA, a main French insurance company, in order to retain the knowledge acquired by outsourcing teams. This approach is based on the assumption that sharing and disseminating knowledge are two key factors for actually getting knowledge retention. It has been used, tested and improved within AXA France's industrial environment. By presenting the problem raised by knowledge retention within organisations and the different ways envisaged to improve it, they propose a discussion about their efficiency, and describe their approach in order to retain knowledge in a specific case. This approach, based on our approach of knowledge management, has implied collaborative decision making, which will be highlighted in this paper. Bridging knowledge management and collaborative decision making has been a means to reinforce the ability of the stakeholders to actually retain knowledge and to easily elaborate a consensus, the starting point of an efficient collaborative decision making.

In the final paper of this issue, Sun, Zong, Scott and Liu believe that social network analysis is one of the most important instruments to study collective decision making by assessing personal support networks in whole communities. Although cost-benefit analysis is a fundamental method for analysing decision making in human migration, the decisions made by villagers about rural-urban migration are also directly or indirectly affected by the ties of an ego (villager) connected to an alter (other villager), the whole network structure and the attribute characteristic of both ego and alter. The aim of this research, based on a case study, is to draw attention to these support network processes.

228 J. Papathanasiou et al.

An empirical study considering rural-urban migration in China has been undertaken to discuss and explore the relevance of social network analysis associated for migration decision making under the government's favourable migration policy, where cost-benefit considerations have a non-significant effect on villagers' decision process.

The guest editors of this special issue would like to sincerely thank all of the authors of the papers presented here and the anonymous reviewers for their time and efforts to fulfil this endeavour. They would also like especially to thank the publishers and the Editor-in-Chief of *IJIDS* for their trust, help and confidence to a successful outcome.