Editorial

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Biographical notes: Paolo Ceravolo is an Assistant Professor at the Computer Science Department of the University of Milan. His research interests include ontology-based knowledge extraction and management, process monitoring, semantic web technologies, emergent process applied to semantics, uncertain knowledge and soft computing. On these topics he has published several scientific papers and book chapters. Recently, he has published TEKNE and SecureSCM projects. Currently, he is involved in the ARISTOTELE FP7 project. He is involved in the organization of different conferences such as for naming a few: Symposium on Data-Driven Process Discovery and Analysis (SIMPDA), OTM Academy, Knowledge Management in Organizations (KMO). Since 2014 he is chair of the IFIP 2.6 Working Group on Database Semantics. Since 2009 he is executive editor of the *Journal of Knowledge and Learning*.

Davy Monticolo is currently an Assistant Professor in the ERPI Laboratory, Institut National Polytechnique de Lorraine, Nancy, France. He has been recently appointed Assistant Professor in the Department of Industrial Engineering at the ENSGSI Engineering School, Nancy France. He received his PhD (2008) in the UTBM university and his MS (2005) degrees in the University of Savoie, France. His research interests are in: multi-agents systems, knowledge engineering and modelling, semantic web services, ontologies. A selected list of recent publications may be found here. My personal objectives are to research and teach in the field of applied computer science and informatics, in an international environment.

The fifth International Workshop on Knowledge Acquisition, Reuse and Evaluation (KARE 2012), held in conjunction with the 8th IEEE international conference on Signal-Image Technology & Internet Based Systems (SITIS 2012), brought together researchers, scientists, engineers, and scholar students to exchange and share their experiences, new ideas, and research results about all aspects of Knowledge, Ontology and Semantic Web Services Engineering. The practical challenges encountered and the solutions adopted were discussed.

To improve the quality of the contributions the workshop fostered the discussion during the presentation, giving authors the opportunity to improve their work and extend the presented results. For this reason, authors of accepted papers were invited to submit extended articles to this special issue of the *International Journal on Knowledge and Learning*. There were 27 submissions and 9 papers were accepted for publication.

This special issue focuses on the theoreticians and practitioners concerned with developing methods and systems that assist the knowledge management process and assessing the suitability of such methods. Thus, the issue includes all aspects of acquiring, modelling and managing knowledge, and their role in the construction of knowledge-based systems. Knowledge acquisition still remains the bottleneck for building a knowledge-based system. Reuse and sharing of knowledge bases are major issues and no satisfactory solutions have been agreed upon yet. There is a wide range of research. Much of the work in this field has been knowledge acquisition. The advent of the age of digital information has brought the problem of knowledge reuse and knowledge evaluation. Our ability to analyse, evaluate and assist the user in reusing knowledge present a great challenge of the next years. A new generation of computational techniques and tools is required to support the acquisition, the reuse and the evaluation of useful knowledge from the rapidly growing volume of information. All of these are to be discussed within this issue.

We gratefully acknowledge the strong research community that gathered around the research problems related to process data analysis and the high quality of their research work, which is hopefully reflected in the papers of this issue. We also would like to express our deep appreciation for the referees' hard work and dedication. Above all, thanks are due the authors for submitting the best results of their work to this special issue.

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