GUEST EDITORIAL PREFACE

Special Issue Comprised of Selected Papers from the SoEA4EE Workshop

Selmin Nurcan, University Paris 1, Panthéon Sorbonne, France
Rainer Schmidt, Munich University of Applied Sciences, Munich, Germany

Enterprise Engineering (EE) is the application of engineering principles to the design of Enterprise Architectures (EA). It allows deriving the Enterprise Architecture from the enterprise goals and strategy and aligning it with the enterprise resources.

Enterprise architecture maps the enterprise goals and strategy to the enterprise's resources such actors, assets and IT supports and manages the evolution of this mapping. Services are the governing principle for enterprise architecture. Nearly all newly created enterprise architectures are service-oriented. Cloud-computing, public and private, uses services as paradigm.

Service-oriented Enterprise Engineering as the methodological approach for designing service-oriented enterprise architectures is attracting an increasing attention in research. This is also shown by the success of the workshop series Service-Oriented Enterprise Engineering for Enterprise Architecture initiated by Selmin Nurcan and Rainer Schmidt. The SoEA4EE workshop series has been created as a full day

workshop in conjunction with EDOC'09, in Auckland, New Zealand. In the following years, SoEA4EE followed EDOC to Victoria (Brasil), Helsinki (Finland), Beijing (China), Vancouver (Canada). 2014 SoEA4EE takes place in Ulm (Germany).

In 2012, the SoEA4EE workshop organizers invited the authors of the selected papers from the four previous editions to submit an extended version of their workshop paper to a special journal issue of the International Journal of Information Systems in the Service Sector (IJISSS). Eight extended papers have been submitted and this shows the interest of the scientific community on the topics underlying the SoEA4EE workshop.

We are happy to present four carefully selected papers covering a broad spectrum of themes in Service Oriented Enterprise Architecture Engineering from technical to conceptual and managerial themes.

In their paper, "A Dynamic Services Discovery Model for better leveraging BPM and

SOA integration", Alexandre Perin De Souza and Ricardo J. Rabelo strive for increasing the agility of enterprises by improving the integration of business and IT. To achieve this goal the authors introduce a dynamic discovery model for selecting web services according to their adequateness to a given business process model. Further selection criteria are context information and Quality of Service restrictions. Alexandre Perin De Souza and Ricardo J. Rabelo apply an inter-organizational scenario consisting of multiple service providers in a distributed and heterogeneous environment.

Valère Dussaux and Pierre Boiron provide an important insight into the important theme of cloud-computing with their paper "Software services delivered from the cloud: a rising revolution for the implementation of healthcare workflows". They describe the "Région sans Film" ("Filmless Region") program for improving Picture Archiving and Communications systems using a cloud-based architecture. By this means, reduction in cost and the creation of new services shall be enabled Valère Dussaux and Pierre Boiron introduce several architectural approaches and compare their properties. They also describe new workflow capabilities fostering the sharing of expertise.

The third paper "Towards Smart Service Networks: An Interdisciplinary Diagnostic Framework" Yan Wang, Yehia Taher and Willem-Jan van Den Heuvel is devoted to service networks. Organic peer-to-peer interactions enable the co-production of new knowledge and services in service networks. To discover anomalies in the collaboration, cooperation and coordination between network participants, a novel diagnosing method based on the systems thinking mindset is developed. It allows the tuning and optimization of service networks as same as the tracing of the involved service operations.

The paper "Value-oriented Specification of Service Systems - Modelling the Contribution Perspective of Enterprise Networks" from João Pombinho, David Aveiro and Jose Tribolet addresses shortcomings of existing approaches in enterprise engineering and service science, in particular the lack of capability to model in a structured way the purpose and value of service systems. To guide the current and future development efforts, the authors' research focuses on three perspectives: construction, function and contribution. Their results enable the clear specification how each component of an enterprise system provides a service.

We would like to thank the members of the program committee of the special issue and the members of the SOEA4EE Program Committees 2009 - 2012 for their valuable work and comments:

Joao Paulo Almeida Eric Andonoff **Judith Barrios** Khalid Benali Maria Bergholtz Marco Brambilla Florie Bugeaud Ayon Chakraborty Marta Indulska Ron S. Kenett Rania Khalaf Peter Kueng Marc Lankhorst Michel Léonard Lin Liu Heiko Ludwig Hui Ma Henderik Proper Gil Regev Colette Rolland Miguel-Angel Sicilia James Spohrer

We hope you enjoy the issue!

Selmin Nurcan Rainer Schmidt Guest Editors **IJISSS**

Selmin Nurcan is an associate professor at the University Paris 1 Panthéon-Sorbonne and a senior researcher at the 'Centre de Recherche en Informatique' (CRI). She has a Ph.D, an accreditation to direct researches (HDR), and an engineering degree in Computer Science. Her research activities include enterprise computing, business process management, change modelling, business/IS alignment, IS governance, process (re)engineering and IS engineering and CSCW. She has actively participated in research projects in collaboration with the industry. Selmin Nurcan is co-organizer of the BPMDS series at CAISE, the BPMS2 workshop series at BPM since 2008, the SoEA4EE workshop series at EDOC since 2009, and member of IFIP WG 8.1. She is acting as a program committee member of a number of international conferences and workshops and she is serving on the editorial board of International Journal of Innovation and Learning, International Journal of Information Systems in the Service Sector, Requirements Engineering Journal, International Journal on Advances in Life Sciences, on the editorial advisory board of the Advances in End-User Computing Book Series, and she is the associate editor of the e-journal on Advances in Enterprise Systems. She is a member of IFIP WG 8.1 and Program Co-Chair of the International Conference RCIS'2013.

Rainer Schmidt is a professor for business information systems at Munich University of Applied Sciences. He has a Ph.D. and an engineering degree in Computer Science. His current research areas include service science, enterprise computing, business process management, social software, business/IS alignment and the integration of these themes. He has industrial experience as management consultant and researcher. Rainer Schmidt is co-organizer of the BPMDS working conference at CAISE, the BPMS2 workshop series at BPM since 2008, the SoEA4EE workshop series in EDOC since 2009 and member of the program committee of several workshops and conferences. Rainer Schmidt is serving on the editorial boards of International Journal of Information Systems in the Service Sector and International Journal on Advances in Internet Technology. Rainer Schmidt applies his research in a number of projects and cooperation with industry.