

Preface of the 1st International Workshop on Practicing Open Enterprise Modelling within OMiLAB (PrOse)

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1 Introduction

The digital transformation opens new research fields such as Internet of Things, Factories of the Future and Cyber-Physical Systems. Thereby enterprises face information systems with increasing scope, flexibility and distribution. At the same time, enterprises rely on highly flexible, tightly integrated business processes, which enforce the integration of the underlying information systems. Conceptual models, aiming to simplify complexity, are eligible instruments for designing and managing such complex systems. OMiLAB (Open Models Initiative Laboratory, www.omilab.org) is a scientific experimentation space for the conceptualization, development, and deployment of modelling methods and the models designed with them.

The PrOse workshop focuses on how open enterprise models, enterprise modelling methods and enterprise modelling tools are: (1) used, (2) adopted, and (3) evaluated in education, industry, and research in the scope of the aforementioned challenges and within OMiLAB. In 2017, the PrOse workshop was held in conjunction with the 10th IFIP WG 8.1 working conference on the Practice of Enterprise Modelling (PoEM) in Leuven, Belgium.

After a thorough, double-blind peer review process, five papers have been selected for presentation at the workshop:

In the paper entitled ‘PRISM: A Knowledge Engineering Tool to Model Collective Behaviors of Real-time IoT Systems’ Rahmani et al. report on a new method called PRISM that enables the model-driven specification of domain knowledge in form of behaviour ontologies. The method has been developed with the ADOxx metamodeling platform. The paper further shows an illustrative example of how the PRISM method can be applied in the emergency medical service domain.

The paper entitled ‘Integrating Processes, Cases, and Decisions for Knowledge-Intensive Process Modelling’ reports on the integrated modelling with Business Process Model and Notation (BPMN), Decision Model and Notation (DMN), and Case Management Model and Notation (CMMN). Although the standards claim for in-

teroperability, the authors identify possible threats to consistency and derive some sample solutions ensuring consistency between the multiple models.

The paper ‘Viable Systems Model: More Support Tools Needed’ by Marite Kirikova raises awareness to the necessity of proper tool support for the Viable Systems Model (VSM) approach. After a thorough introduction to the VSM approach, the paper reports on concrete challenges and requirements for a VSM modelling tool.

The paper authored by Thilo Maximilian Glässner et al. reports on the experiences of implementing the Structured-Entity-Relationship Modelling (SERM) method with the ADOxx platform. Based on the gathered experience, the paper concludes with guidelines for teachers and students interested in conducting similar tool implementation projects.

The paper entitled ‘Engineering the Cooking Recipe Modelling Method: a Teaching Experience Report’ by Buchmann and Ghiran also reports on how metamodelling can be conducted in university teaching. A focus of this paper is on how to enable students to identify domain-specific requirements and how to transform them into modelling method designs by referring to a modelling method’s building blocks. As a running example, the paper introduces a cooking recipe modelling method which shall be developed and revised in an agile manner by the students.

The PrOse 2017 workshop program was further enriched by an invited keynote. We are very thankful that Prof. Dr. Kurt Sandkuhl from the University of Rostock accepted our invitation. Prof. Sandkuhl’s talk is entitled ‘Digitalization, Cyber-physical Systems and Industry 4.0: Challenges and Implications for Enterprise Modelling.’

We want to thank all authors for submitting their research to the workshop; we want to thank Prof. Sandkuhl for giving a keynote; and we want to thank all the program committee members who contributed with their expertise in order to finalize such an interesting program.

2 Workshop Organization

2.1 Workshop Chairs

- Dominik Bork, University of Vienna, Austria
- Dimitris Karagiannis, University of Vienna, Austria
- Jan Vanthienen, Katholieke Universiteit Leuven, Belgium

2.2 Program Committee

- Xavier Boucher, Ecole Nationale Supérieure des Mines de St. Etienne, France
- Robert Andrei Buchmann, Babes Bolyai University, Romania
- Hans-Georg Fill, University of Bamberg, Germany
- Yoshinori Hara, Kyoto University, Japan
- Birger Lantow, University of Rostock, Germany

- Moon Kun Lee, Chonbuk University, Korea
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- Andrea Polini, University of Camerino, Italy
- Janis Stirna, Stockholm University, Sweden
- Jelena Zdravkovic, Stockholm University, Sweden