

## **Preface of the 3rd International Workshop on Practicing Open Enterprise Modelling within OMiLAB (PrOse)**

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Enterprise modeling is a quintessential discipline for understanding, analyzing and developing enterprises. It provides important inputs to designing complex information systems and enterprise digital transformation by introducing new technologies such as Data Analytics, Internet of Things, Factories of the Future, and Cyber-Physical Systems. Enterprise models represent various interrelated aspects of enterprises and are used as communication vehicles among all parties involved. The principle of openness and collaboration is essential for these purposes as well as the need for methods and tools supporting collaborative development of complex systems.

The openness and collaboration imply that enterprise models are based on open modeling foundations (i.e., meta-models and tools) and sharing of models to derive best practices of enterprise modeling. These principles are promoted by OMiLAB (Open Models Initiative Laboratory). OMiLAB is a scientific experimentation space for the conceptualization, development, and deployment of modeling methods and the models designed with them. Thereby, the term “open” in OMiLAB reflects that the initiative is open for any modeling approach. Besides the physical OMiLABs in Austria and South Korea there is a virtual OMiLAB accessible at [www.omilab.org](http://www.omilab.org) which allows scientists and practitioners from all over the world to join this initiative.

In this context, the PrOse workshop focuses on how open enterprise models, enterprise modeling methods, and enterprise modeling tools are: (1) used, (2) adopted, and (3) evaluated in education, industry, and research in the scope of the aforementioned challenges. In 2019, the PrOse workshop was held in conjunction with the 12th IFIP WG 8.1 working conference on the Practice of Enterprise Modelling (PoEM) in Luxembourg.

This year six papers were accepted for presentation at the PrOse workshop. The authors represent five countries. The papers were rigorously reviewed by the Program Committee. They cover different aspects of open enterprise modeling with a particular

focus on tool support for enterprise modeling methods and enterprise methods for process improvement and enterprise transformation.

Concerning the tool support Achim Reiz and Kurt Sandkuhl in their paper “Retrieval of Enterprise Models from PowerPoint: Solving Semantical Heterogeneities” investigate usage of PowerPoint presentations in discovery of enterprise models. Although such “lightweight” tools facilitate adoption of enterprise modeling, that might cause semantic discrepancies, which need to be resolved against the meta-model.

Sunghyun Lee and Moonkun Lee use the ADOxx Meta-Modeling Platform to model and verify safety requirements in smart IoT systems. The formal rules for analysis are derived and implemented in the platform.

4EM is one of enterprise modeling techniques supported by the ADOxx Meta-Modeling Platform. The paper “Evaluating Notations for Product-Service Modeling in 4EM: General Concept Modeling vs. Specific Language” by Birger Lantow, Maria Dehne and Felix Holz extends 4EM to support Product-Service modeling.

In the area of enterprise modeling for transformation, Lauma Jokste, Rūta Pirta, Kristaps Pēteris Rubulis, Edgars Savčenko and Jānis Vempers in the paper on “Knowledge Sharing in BI Ecosystems: Case of E-Municipalities” argue that chunks of enterprise modeling can be used to define knowledge on developing and using business intelligence solutions. Open knowledge sharing is the key promoting usage of these solutions.

Steven Alter in his paper “Using a Framework for Describing Theoretical Perspectives to Identify High-Level Design Choices about the Scope and Content of Enterprise Models” reflects on the characteristics and design choices for enterprise modeling methods. The paper proposes a generic framework for describing theoretical perspectives of enterprise modeling methods and applies it to the work system modeling method. The concepts of the framework are comprehensively described.

Martina Tomičić Furjan, Igor Pihir and Katarina Tomičić-Pupek contributed a paper on “Digital Transformation Playground Operationalization – How to Select Appropriate Technologies for Business Improvement Initiatives”. The paper proposes instruments for playing in the Digital Transformation Playground and envisions implementation of the instruments as open modeling tools.

We would like to thank everyone who contributed to the PrOse 2019 workshop. We thank the authors for contributing and presenting their research, we appreciate invaluable contribution of the members of the Program Committee and we thank all members of the local organization team from the Luxembourg Institute of Science and Technology (LIST) for handling organizational matters. We acknowledge the EasyChair development team for providing such a convenient tool for managing the submission and review process and the CEUR publishing team for their collaboration. Last but not least we thank the PoEM conference Steering Committee and conference chairs for their support and we hope that PrOse 2019 was a valuable addition to the further development of the PoEM conference series and enterprise modeling community.

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