

Lecture Notes in Business Information Processing

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The Practice of Enterprise Modeling

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Preface

The ever-growing penetration of organizations with IT demands for approaches that support the design and implementation of information systems that are aligned to an organization's operations and its strategy. Enterprise modeling (EM) is addressing this demand. It refers to the explicit representation of knowledge according to some structured framework that facilitates different perspectives on an enterprise. An enterprise model integrates models of the organizational action system such as goal models or business process models with models of the corresponding information system such as object models or component models. It does not only contribute to reducing complexity, but also fosters communication and collaboration between various groups of stakeholders. By providing an integrated representation of the business and the information system, an enterprise model can serve as a laboratory for elaborate investigations of complex phenomena such as the alignment between enterprise strategy and technology strategy as well as between enterprise operations and respective application systems. At the same time, an enterprise model facilitates creating or generating code. As a research field, EM builds on contributions from computer science and information systems. Over the past 20 years a number of different languages, methods, and tools have emerged both in academia and in industry. Consequently, there is substantial empirical evidence on various aspects of EM.

The PoEM (Practice of Enterprise Modeling) series of conferences aims to provide a forum where such evidence is critically evaluated and new needs of industry and commerce are examined with a view to identifying challenges for researchers and developers. PoEM 2014, supported by the IFIP WG8.1, was the seventh conference in this series. This year's conference was held in Manchester, UK, hosted by the Manchester Business School of the University of Manchester.

The proceedings comprise 16 full papers and four short papers. The majority of contributions are focused on various aspects of business process modeling. Sepideh Ghanavaty, Silvia Ingolfo, and Alberto Siena present an approach to explore legal business process paths. Merethe Heggset, John Krogstie, and Harald Wesenberg report on experiences from a case study that involves large-scale collections of industrial processes. Anis Boubaker, Dhouha Cherif, Abderrahmane Leshob, and Hafedh Mili investigate how to discover value chains from business process models. Richard Braun and Werner Esswein present a classification of domain-specific extensions of BPMN. Thomas Baier, Andreas Rogge-Solti, Jan Mendling, and Mathias Weske analyze business process models with respect to the matching of events and activities. Finally, Isel Moreno-Montes de Oca, Monique Snoeck, and Gladys Casas-Cardoso use the technology acceptance model to investigate business process modeling guidelines.

Four papers deal with aspects of enterprise architecture. Sarah Boone, Maxime

Bernaert, Ben Roelens, Steven Mertens, and Geert Poels analyze the visualization of an enterprise architecture approach for SMEs. Mika Cohen presents a simulation approach for enterprise architecture. Wanda Opprecht, Jolita Ralyté, and Michel Léonard outline a framework for steering the evolution of enterprise information systems. Georgios Plataniotis, Sybren De Kinderen, and Henderik Proper present a case study on capturing design rationales in enterprise architecture.

A further topic is the investigation of EM methods. Alexander Bock, Monika Kaczmarek, Sietse Overbeek, and Michael Heß present an elaborate comparison of four selected approaches to enterprise modeling. Kurt Sandkuhl and Hasan Koç report on experiences with a component-based approach to method development. Anne Persson and Janis Stirna propose recommendations for the organizational adoption of enterprise modeling methods.

Two papers focus on requirements engineering issues. Jelena Zdravkovic, Janis Stirna, Jan-Christian Kuhr, and Hasan Koç present an approach to requirements engineering for capability-driven development. Tong Li, Jennifer Horkoff, and John Mylopoulos use goal models to integrate security patterns with security requirements analysis.

Further contributions deal with more specific aspects of EM. Frank Wolff proposes an approach to partition enterprise modeling governance by stressing a usage perspective. Alimohammad Shahri, Mahmood Hosseini, Keith Phalp, Jacqui Taylor, and Raian Ali look at gamification as an approach to interact with enterprise models and propose creating a respective code of ethics. Soroosh Nalchigar, Eric Yu, and Steve Easterbrook link system dynamics and the business intelligence model to present a novel approach to business intelligence. Wen Chen, Alan Wassyng, and Tom Maibaum focus on the analysis of large enterprise systems presenting an approach to analyze the impact of software changes. Constantinos Giannoulis and Jelena Zdravkovic present an empirical study on model-driven alignment of business and IT.

Finally, we would like to thank the authors and the members of the Program Committee, whose work resulted in a program that we regard as very attractive. The reviewing process and the creation of the proceedings were supported by EasyChair.

November 2014

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