



# Enterprise Modeling for Business Agility

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Enterprise modeling (EM) addresses business-IT alignment in a holistic manner by providing the techniques, languages, tools, and best practices for using models to represent organizational knowledge and information systems from different perspectives. Complex business and technology conditions mean that EM plays an important role in reaching such an alignment. Quality attributes such as agility, sensitivity, responsiveness, adaptability, autonomy, and interoperability are emerging as the norms for advanced enterprise models. Achieving these qualities will allow all components of an enterprise to operate together in a cooperative manner for the purpose of maximizing overall benefit to the enterprise.

A particular challenge in enterprise modeling is business agility. This concerns the modeling effort to create the initial enterprise models (as-is and to-be), to maintain these models, and to use the models to transform the enterprise. This special issue focuses on such agility in EM.

The special issue attracted 15 submissions from which four papers were finally accepted after a rigorous review process. The first paper “Security Requirements Elicitation from Airline Turnaround Processes” addresses the issue of including security aspects in process models. The proper handling of such concerns becomes increasingly urgent as more and more cross-organizational processes are automated. The second paper “Process Modeling Recommender Systems – A Generic Data Model and its Application to a Smart Glasses-based Modeling Environment” reports on the creation of a recommender system data model that eases the development of process models by utilizing a repository of re-usable process models. The third paper “Modeling Simultaneous Cooperation and Competition among Enterprises” discusses how cooperation between enterprises can be analyzed when the participating enterprises are competitors for shared resources or markets. The paper “Enabling Normalized Systems in Practice: Exploring a Modeling Approach” investigates the use of Normalized Systems theory for EM to produce more agile and evolvable models.

Further included is the research note “From Expert Discipline to Common Practice: A Vision and Research Agenda for Extending the Reach of Enterprise Modeling”, which is the result of the Dagstuhl seminar thematically close to this special issue. This paper underwent a separate review process.

The special issue is rounded up by an interview with Anne Persson. Anne is the co-developer of the 4EM enterprise modeling method and co-founder of the PoEM (Practice of Enterprise Modeling) conference, which is organized under the umbrella of IFIP WG 8.1. The conference emphasizes the interaction between academics and practitioners in EM. We learn from Anne how this goal was

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implemented and which challenges she sees for the future of EM.

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The field of EM is still developing and maturing. The special issue sheds light on the current state of the art. More research, standardization, and dissemination efforts must be undertaken to uncover the full advantage of EM, to use EM for making enterprises more agile.