

Preface

Methods, techniques, and practices for Enterprise Modeling have been a very important part of our professional lives during more than 15 years. We strongly believe that modeling is a key technique for understanding, capturing, and communicating organizational knowledge—and crucial for successfully mastering change and innovation processes in enterprises.

During the last years—when working on this book—we were involved in at least a dozen of Enterprise Modeling projects with different industrial enterprises or public authorities. In most of these projects it became obvious to us and other project participants that Enterprise Modeling methods and techniques are extremely valuable for understanding the present and preparing for the future—particularly in times of continuous organizational change, which is often caused by an increasing pace of innovation, collaboration with other organizations, new challenges in the market, societal changes, or technology advancements.

The idea for this book emerged from discussions with our students. All of us regularly teach Enterprise Modeling at our respective universities and so far the teaching material for our courses consisted of an early version of a method handbook for the predecessor of the 4EM Enterprise Modeling method described in this book and a collection of lecture notes and slides also including enhancements of the method. Many students asked for additional, more comprehensive course material about the 4EM method, the techniques and practices related to it, and the field of Enterprise Modeling as such. This initiated nearly 2 years of work on this book with quite a few discussions about its scope and required content. Quite quickly we agreed to neither focus on theories and general approaches to Enterprise Modeling nor to try and cover all developments in the field. Instead, we decided to focus on practical advice and to combine a detailed description of 4EM with the real life experiences collected in our projects. The book addresses modeling procedure, modeling language, and modeling practices in an integrated manner. On the same topic, enterprise modeling with 4EM, a German language book is available. At first glance, the content of both books might seem similar. However, this English language edition has been substantially extended and revised as compared to the German book.

When preparing the book we were surprised to learn how few books on Enterprise Modeling methods were published and that even fewer have a focus on how to do Enterprise Modeling in practice. A reason for this might be the large number of books on business process management, process modeling, and process optimization. Process modeling and Enterprise Modeling are often considered as different words for the same subject, but they definitely are not the same for us. Enterprises consist of much more than processes and hence modeling and managing only processes will not provide a complete and holistic understanding of the enterprise, which is required for properly addressing many challenges and problem-solving tasks.

This book would not have become a reality without the support of many people in our private and professional environments. First of all, we would like to thank all colleagues and friends who actively contributed to the development of 4EM and its predecessor, EKD. Since the list of people would be very long and the danger imminent that we would forget someone, we just want to mention Prof. emeritus Janis Bubenko Jr. at the Royal Institute of Technology (Sweden), Prof. Pericles Loucopoulos at Harokopio University of Athens (Greece), and Prof. Colette Roland at Université Paris 1 Panthéon—Sorbonne (France) who all were part of developing the first versions of what now has developed into the 4EM method.

Furthermore, we would like to thank our colleagues in Jönköping, Riga, Rostock, Skövde, and Stockholm who teach Enterprise Modeling, use 4EM or EKD, and contributed ideas, improvement proposals, and practices in many fruitful discussions and joint modeling sessions. You all know who you are!

Moreover, we would like to thank fellow researchers and practitioners that work in the area of Enterprise Modeling and in recent years have been part of forming an active community under the auspices of the IFIP Working Group 8.1 on Design and Evaluation of Information Systems and more specifically the Working Conference on the Practice of Enterprise Modeling (PoEM). Many ideas presented in this book have been put forward for discussion with our peers at these forums.

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 Stockholm, Sweden
 Skövde, Sweden
 Rostock, Germany
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Kurt Sandkuhl
 Janis Stirna
 Anne Persson
 Matthias Wißotzki

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Sandkuhl, K.; Stirna, J.; Persson, A.; Wißotzki, M.

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