Preface

The concept of method engineering came into life because of the general problems of adopting information systems development methodology into project situations. For many years academics and researchers have been challenged with the lack of a tailorable automated support at the level of information systems designing.

Today information systems development is mostly about making improvements to available systems to include new functionality according to changing business requirements. Therefore, the information systems development process must be able to be adjusted to such changing organizational demands. For years academic and commercial initiatives have been undertaken to try and automate the information systems development process for including mechanisms for engineering systems development approaches. Considerable progress has been made by isolating particular issues and providing solutions with certain trade-offs of limited flexible modeling support, but to date the available solutions have failed to address the requirement for full flexibility when supporting an arbitrary modeling technique. Therefore, the main contribution of this book is about how to integrate the concept of Computer Aided Method Engineering into Computer Aided Systems Engineering environments that facilitate the design and construction of arbitrary modeling techniques to support information systems development.

Method engineering is a very young field. Generally, method engineering can be considered from engineering of an entire methodology for information systems development to engineering of modeling techniques according to project requirements. Computer Aided Method Engineering (CAME) is about generation and use of information systems design techniques according to user needs, Sometimes such environments are called generic tools or MetaCASE. CASE research in the last decade has addressed issues such as method integration, multiple user support, multiple representation paradigms, method modifiability and evolution, and information retrieval and computational facilities. In light of these developments, today there is a need for a comprehensive methodology for realization of a CASE repository that fulfils the requirements of a fully flexible CAME architecture. Therefore, this book presents a contribution on a methodology and architecture of a CASE repository, forwarding a theory that will bring about component-based development into CASE tool design and development covering a repository construction principal for the 21st century.

The work presented in this book is based on my dissertation, “CAME: An Environment to Support Flexible Information Modeling, 1997.” Even though a dissertation appears to be an individual achievement, there are a number of people to whom I am indebted. Acknowledgments are due first to Henk Sol and Jan Dietz for the involvement and trust invested in this study. In particular to Henk Sol for providing the opportunity to conduct this research at Delft University of Technol-

ogy, for his inspiration, and for his talented managerial guidance throughout the research.

The publication of this work would not be the same without many others who contributed to the research described in it. I would like to acknowledge some of these contributions explicitly. Starting with Dick Welke (State University of Georgia), for initiating my scientific career at Erasmus University Rotterdam and my interest in information systems development methods, techniques, and more specifically in CASE environments. Gert Florijn (SERC) for offering me a chance to bridge the academic world and practice in industry. Gerard Wijers (ID Research) for guiding me in finding a suitable environment to pursue this research. Arthur ter Hofstede (Queensland University of Technology) for reading and commenting on my early versions of formal specifications and pointing the way to refinements. Denis Verhoef (ID Research) for reading the whole manuscript and providing many constructive comments.

Delft University of Technology has provided me with the opportunity to carry out, and the environment for, this research during the last four years. I thank all my colleagues in the Information Systems Department for providing an inspiring environment. Many students have been involved in my thesis; they have invested a great deal of time and effort in important parts of this research. Thanks go to the following: Marcel Ammerlaan, Robbert van Dalen, Peter van't Hoff, Marcel van Lohuizen, Derk van Mourik and Goudelope Salazar-Zarate, and to Huub Bouma. Finally, I gratefully acknowledge the encouragement of Waltraud Gerhadt to publish this work and the patience and support of my family, Ruwan, Sankha and Paba during this process.

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November 2000, Leiden