Preface

This book describes different ways of providing automated support for enterprise modelling. It firstly introduces different Enterprise Modelling methods and their relevance to an organisation. This provides an insight to how Enterprise Modelling methods may benefit organisations that use them. Technical knowledge is explained and illustrated by examples that give practical guidance. This book is therefore suitable for undergraduate students in their senior years and post-graduate students who are studying in business studies, computer science and/or artificial intelligence. It will also be suitable for practitioners in the fields of knowledge management, modelling and software engineering who wish to apply such technologies.

This book has used a business modelling method *IBM's BSDM Business Modelling* method as an exemplar to describe how logical methods may be used to provide automatic support thus help modeller to produce higher quality models in a controlled and speedy manner. Although this book focuses on one modelling method, the principles demonstrated in the book are generic and may be used for other modelling methods. Two knowledge based tools, *KBST-BM* and *KBST-EM* have been implemented based on the technology described in the book. They have been used to support twenty-seven different modelling methods in practice.

For learning purposes, this book includes normal exercises and advanced exercises at the end of most chapters. Normal exercises are designed for all readers of the book and most of the knowledge needed to answer these questions are included in the book. Advanced exercises are questions that require more in-depth understanding of the topic and may draw on related knowledge that is outside of the scope of the book (e.g. knowledge in Business and Knowledge Management, Artificial Intelligence, Computer Science and Programming) so these suit who may be taking related courses at the same time.

The content of this book (with the exception of the introductory chapter to Logic, originally written by Dave Robertson for undergraduate teaching) is an extension and adaptation of Yun-Heh Chen-Burger's PhD thesis. Some additional work is derived from AOEM (Air Operations Enterprise Modelling), AKT (Advanced Knowledge Technologies) IRC, CoAKTinG (Collab-

orative Advanced Knowledge Technologies in the Grid) and experience from commercial projects.

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