VMBO 2025

18th International Workshop on Value Modelling and Business Ontologies

University of Twente Enschede, The Netherlands

3-4 March 2025

Preface

The importance of modeling the essence of enterprises at a level that abstracts from operational details is increasingly recognized. Abstraction is needed to achieve interoperability and data integration, for instance. Ontological inquiry has received renewed interest because of the advent of complex information systems that rely on robust and coherent, formal representations of their subject matter. Two established enterprise modeling approaches are value modeling and business ontology. Value modeling is a business modeling approach that focuses on the value objects exchanged in business networks. Business ontology provides abstract descriptions of enterprises in their business context, focusing on what is needed to create and transfer value. Research in these fields is conducted using instruments like the REA Ontology (Resources, Events, Agents), the Unified Foundational Ontology (UFO), the OntoUML language, the Business Model Canvas, the e3value toolset, the Value Delivery Modeling Language (VDML), and the Enterprise Engineering framework.

The goal of the VMBO workshop series is two-fold:

- to bring together researchers with an interest in value modeling and business ontology to present and discuss the current state of the art
- to identify key areas for further research

In 2025, VMBO was organized by the Semantic, Cybersecurity & Services (SCS) and Data Management & Biometrics (DMB) departments within the Faculty of Electrical Engineering, Mathematics, and Computer Science (EEMCS) at the University of Twente, The Netherlands. The workshop took place in Enschede as an in-person event.

VMBO 2025 received eleven submissions, which were reviewed by at least three members of its program committee in a single-blind process. As this workshop focuses on early-stage research, the reviews primarily focused on relevance to the topics of interest, originality, and potential. After the review process, seven submissions were selected for in-person presentation at the workshop. Three are included in this proceedings volume as full papers, three as short papers, and one as an abstract.

The workshop was complemented by two masterclasses, organized in cooperation with the Netherlands Research School for Information and Knowledge Systems (SIKS). Giancarlo Guizzardi delivered the first, on "Data Semantics, Explanation and Interoperability", and Roel Wiering delivered the second, on "Digital Business Ecosystems."

We would like to express our gratitude to the authors, program committee members, masterclass speakers, and all participants for their contributions to this event.

Enschede, November 2025 Tiago Prince Sales and Faiza Bukhsh VMBO 2025 Program Chairs

VMBO 2025 Organization

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