

# Enterprise Modelling and Information Systems Architectures

An International Journal

Volume 6 | No. 2 May 2011

Special Issue on Service Systems Modelling



German Informatics  
Society



# 4th International Workshop on Enterprise Modelling and Information Systems Architectures

Concepts and Applications  
Call for Papers

## Objectives

The strategic importance of modelling is recognised by an increasing number of companies and public agencies. Enterprise modelling delivers the 'blueprints' for codesigning organisations and their information systems, so that they complement each other in an optimal way. Achieving this interplay requires a multi-perspective approach that takes into account technical, organisational and economic aspects. It also recommends the cooperation of researchers from different fields such as Information Systems, Business Informatics and Computer Science.

## Paper Submission

Authors are invited to submit papers limited to 14 pages in length (in English), by June 1, 2011. Papers have to be formatted according to the GI Lecture Notes in Informatics (LNI) guidelines. Accepted papers will be published in the GI LNI series and will compete for the EMISA 2011 Best Paper Award. Selected papers will be invited to a Special Issue of the Journal Enterprise Modelling and Information Systems Architectures (EMISA).

## Programme Committee Chairs

- Markus Nüttgens (University of Hamburg)
- Oliver Thomas (University of Osnabrück)
- Barbara Weber (University of Innsbruck)

## Location

University of Hamburg  
Co-located with the IFIP 8.6 Working Conference 2011,  
Governance and Sustainability in Information Systems – Managing the  
Transfer and Diffusion of IT

## Subject and Topics

The workshop will address all aspects relevant for enterprise modelling and for the design of information systems architectures. It will provide an international forum to explore new avenues by combining the contributions of different 'schools' of Information Systems, Business Informatics, and Computer Science. Therefore, the workshop is open for a broad range of subjects. Possible topics include, but are not limited to:

- enterprise modelling: languages, methods, and tools
- reference models
- patterns for enterprise modelling (e.g., process patterns)
- modelling services and service compositions in service-oriented architectures
- process modelling in process-aware information systems
- component-oriented software architectures
- model-driven system development
- model analysis and simulation
- ontologies for enterprise modelling
- model evolution, model life cycle management
- management of model variants and versions
- model quality (e.g., compliance between the system and model level)
- modelling cross-organizational cooperation
- emerging areas (e.g., value-based modelling)
- communities for developing open reference models

## Important Dates

Submission of papers:	June 1, 2011
Notification of authors:	July 7, 2011
Final version:	August 1, 2011
Workshop:	September 22-23, 2011



More information and registration on [www.wiso.uni-hamburg.de/conferences/emisa2011/](http://www.wiso.uni-hamburg.de/conferences/emisa2011/)

The workshop is jointly organized by the GI Special Interest Group on Modelling Business Information Systems (GI SIG-MoBIS) and the GI Special Interest Group on Design Methods for Information Systems (GI SIG-EMISA).

**SIG MoBIS**  
Special Interest Group  
on Modelling Business Information Systems

**SIG EMISA**  
Special Interest Group  
on Design Methods for Information Systems

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## Editorial Preface

The description of services by means of models has gained importance during the past few years. The increasing complexity and cross linking of service offerings also entails the systematic development and distribution of physical goods towards an interdisciplinary perspective. The demand is on Information Systems Research as an integrative discipline between business economics, engineering and information technology to make methodical contributions. In particular, the reciprocity between bundles of physical goods and intangible services enables new approaches to the design of market and customer interfaces in the form of hybrid value-adding concepts. Nevertheless, many areas of application are lacking the methodological equipment for describing products, processes and resources.

We address this circumstance with the present EMISA Special Issue for the field of service systems modelling. This issue gives an overview of what is state-of-the-art at the moment and presents current research problems, as well as possible solutions and future trends. The articles focus on the one hand, on models for the development and provision of services, and on the other hand on models of information systems, which support the development and/or provision of services. The contributions consider all of the life-cycle phases of services and all "dimensions" of the term "service" that represent a foundation for the development of resource models (structure dimension), process models (process dimension) and product models (outcome dimension). The special issue has an interdisciplinary orientation and combines business economics (e.g., production, service management, marketing), engineering (e.g., construction/design, product development, service engineering), information systems (e.g., modelling, information services) and informatics (e.g., data structures, software engineering).

All articles in this EMISA special issue were handed in by the authors in the course of the work-

shop "Service Modelling 2010" (DLM 2010, in German: Dienstleistungsmodellierung), examined by the program committee and finally chosen for conference presentation, as well as for publication.<sup>1</sup> The workshop itself took place on March 24, 2010 at the Alpen-Adria-University of Klagenfurt, Austria, in the course of the conference "Modelling 2010".<sup>2</sup>

Due to the high number of interesting and high quality submissions we applied a three-step acceptance process for the articles. First: Acceptance as a discussion paper: "Research in Progress"-papers were put up for discussion at the workshop and were published online in the CEUR-workshop proceedings, Vol. 577.<sup>3</sup> Second: Acceptance as a scientific article: Complete scientific articles were published in the German workshop proceedings "Thomas, O.; Nüttgens, M. (eds.), Dienstleistungsmodellierung 2010 – Interdisziplinäre Konzepte und Anwendungsszenarien, Berlin, Physica". Third: Acceptance as a scientific article with an additional recommendation for journal publication. As a result, the four best articles of "Service Modelling 2010" – with an acceptance rate of less than 20 % – were selected to be published in an extended form in this special issue of the EMISA journal on service systems modelling. The following is a brief synopsis of the contributions to this special issue:

The paper "Balancing Customer Requirements and IT Service Standardization – A Procedural Reference Model for Individualized IT Service Agreement Configurations" by Henrik Brocke, Falk Uebernicket and Walter Brenner introduces a three-phase procedural model of IT service agreement configuration. The authors paid special attention to keeping two possible areas of

<sup>1</sup>For more information about the workshop DLM 2010, see <http://www.imwi.uni-osnabrueck.de/DLM2010>.

<sup>2</sup>See <http://www.modellierung2010.org>.

<sup>3</sup>See <http://ceur-ws.org/Vol-577/>.

conflict, namely customer requirements and IT service standardisation, well-balanced.

The paper "Service Modelling as a Basis for Simulation" by Oliver Kloos, Volker Nissen, Mathias Petsch and Hagen Schorcht proposes an approach for model transformation with which service process models can be transferred into a simulation environment. The suggested transformation concept describes several transformation rules and is especially useful for preparing models for simulation, which are represented in modelling notations that do not contain all information necessary for performing simulations.

The paper "Conceptual Development of Industrial Product-Service Systems – A model-based Approach" by Tim Sadek and Matthias Köster presents a model-based methodology for the support of an Industrial Product-Service System (IPS<sup>2</sup>) designer during the process of generating IPS<sup>2</sup> concepts in early development phases. The authors have implemented their methodical framework as a computer-aided tool and provide an evaluation example.

The paper "Pricing of Value Bundles – A Multi-Perspective Decision Support Approach" by Jörg Becker, Daniel Beverungen, Ralf Knackstedt and Oliver Müller proposes a multi-perspective decision support approach for pricing value bundles. Pricing value bundles represents a complex decision problem that the authors present a modelling language for. This modelling language has three language extensions that support the pricing process from the perspectives of the customer, the provider, and the competitor.

We wish our readers many exciting moments in discovering the various facets of service systems modelling and gaining new insights.

Oliver Thomas  
Markus Nüttgens

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