SIG MoBIS

Special Interest Group
on Modelling Business Information Systems

Enterprise Modelling and Information Systems Architectures

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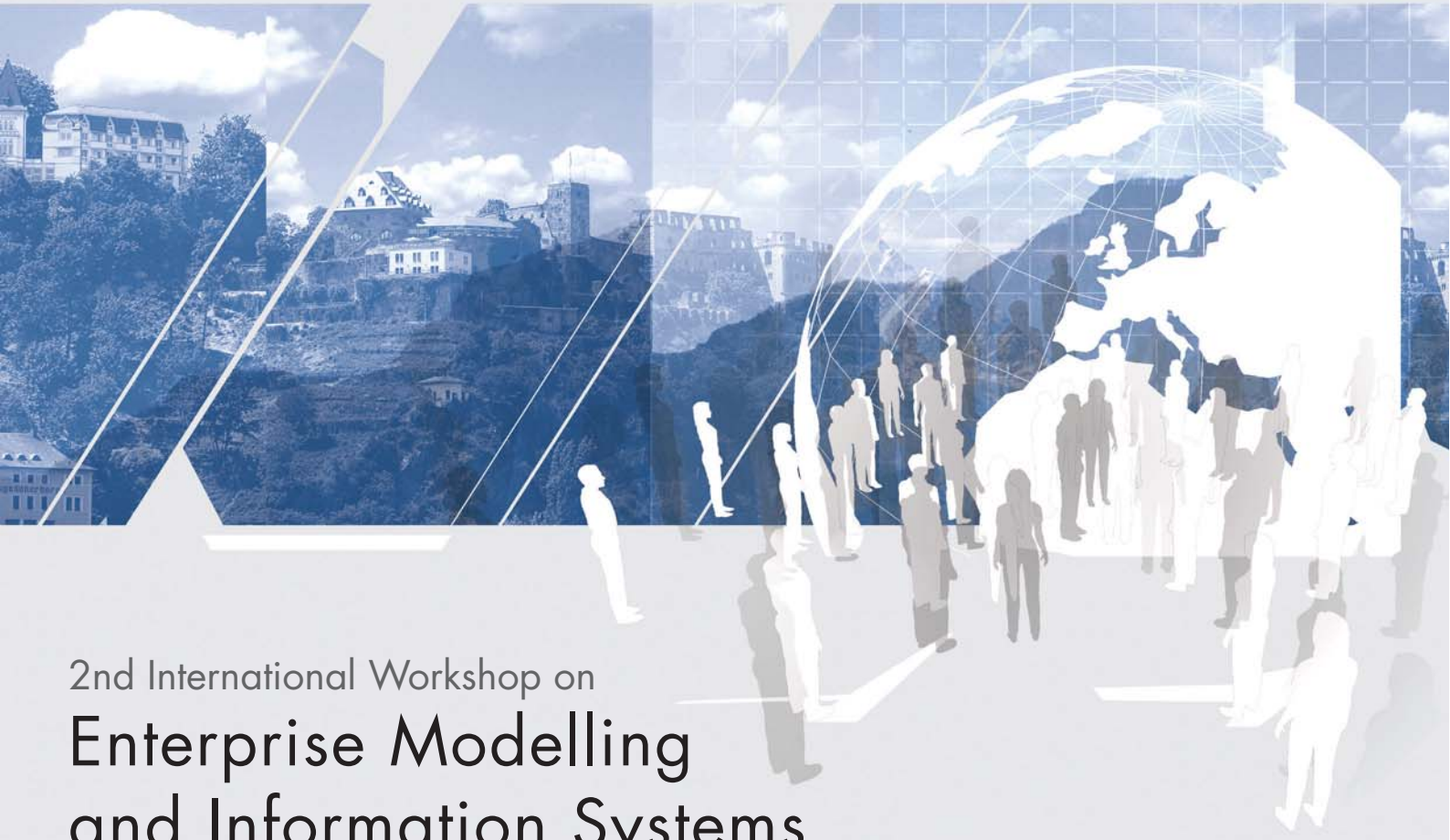

2nd International Workshop on

Enterprise Modelling and Information Systems Architectures

Concepts and Applications

Call for Papers

Objectives

The strategic importance of modelling is recognized 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 formatted according to the GI Lecture Notes in Informatics (LNI) style guide by July 6th, 2007. Accepted papers will be published in the GI LNI series, and selected papers will be invited for submission to renowned journals.

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

More information and registration on **www.icb.uni-due.de/emisa07**

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

In ‚Wirtschaftsinformatik' and Applied Computer Science it has been a consensus for long that conceptual models are the pivotal instrument to cope with the complexity of analyz-ing and designing corporate information systems. However, many business firms seemed to be reluctant to appreciate conceptual modelling. In part, this attitude was probably fostered by the time lack between investment in conceptual models and the benefits to be expected from them. In recent times conceptual modelling is getting more attention in practice. Professional magazines that address IT managers emphasize the economic advantages promised by concep-tual models, namely a higher level of system integration, reusability and maintainability. The OMG's marketing activi-ties may have contributed to the growing popularity of mod-els. The increasing awareness of the challenges imposed by IT management and IT business alignment is also accompanied by a demand for corresponding models – such as business process models associated with models of IT resources – that help managing complexity and improving communication between various stakeholders.

However, despite the undisputed benefits of conceptual models in general, of enterprise models in particular, they are not the silver bullet of software development and man-agement per se. For conceptual models to fulfil their prom-ises, it is essential that they are of high quality. In other words: they should be based on carefully developed ab-stractions that account adequately for the purpose a model should serve. Typically, this includes identifying variance that may occur over time or in different reuse scenarios. Abstraction of this kind is a challenging activity. It requires remarkable intellectual skills and recommends a solid aca-demic education. It also recommends staying in touch with new developments in research as well as exchanging ideas and experience with others.

In this issue, you find four papers that cover various topics of research on conceptual modelling. Jörg Ackermann ad-dresses the composition of application systems from prefab-ricated software components. Reusing a component prop-erly requires an elaborate specification. While such a speci-fication is usually limited to a component's interface, Jörg Ackermann suggest to provide an additional abstraction of the internal data structure that he calls a "specification data model". While service-oriented architectures (SOA) have been a topic that has raised remarkable attention in recent years, the challenges implied by managing service-oriented information systems remained widely ignored. Rainer Berbner, Tobias Grollius, Nicolas Repp et al. present an approach to support the management of service-oriented information systems. For this purpose, they enhance SOA with concepts that account for management requirements. Mission critical systems recommend a careful validation that is at best based on a formal specification. While UML is a widely used family of modelling languages, it lacks a com-prehensive formal foundation. In his article, Thouraya Boua-bana-Tebibel is focusing on the specification of dynamic aspects expressed in UML. For this purpose he suggests a transformation into Object Petri Nets which are used to validate OCL expressions. Architectures can be regarded as models of information systems. Depending on the purpose they serve, these models vary to a remarkable extend. Furthermore, the notion of information systems architecture is used in a confusing variety. Farhad Arbab, Frank de Boer, Marcello Bonsagnue et al. address this subject by develop-ing a concept of information systems architecture that differ-entiates symbolic, semantic and subjective models. Based on this conception they present an architectural language and a corresponding tool that support the integration of different kinds of architectural models.

The vision of reference models, i. e. conceptual models that serve as blueprints for building a class of systems, has inspired research in 'Wirtschaftsinformatik' for long. How-ever, so far, only few reference models have emerged. This is caused by various reasons. However, there is no doubt that reference models are extremely attractive with respect to building affordable integrated systems of high quality. For reference models to succeed, there is need for various stakeholders, such as modelling experts, business experts, system analysts and software developers to cooperate – both from academia and practice. This implies establishing effective incentives for those who participate. Inspired by one of the most remarkable phenomena in IT history, the Open Source Software movement, the 'Open Model' initia-tive has been founded last year. It is aimed at fostering the development of 'open' reference models, inviting everybody who is interested in contributing and (re-) using conceptual models. I would like to draw your attention to the portal (see advertisement in this issue). Maybe this is the start of a new movement which will eventually result in the success, the idea of reference models deserves.

Ulrich Frank