Lecture Notes in Business Information Processing

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Business Modeling and Software Design

First International Symposium, BMSD 2011 Sofia, Bulgaria, July 27-28, 2011 Revised Selected Papers



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Preface

This book contains extended and revised versions of a set of selected papers from the First International Symposium on Business Modeling and Software Design (BMSD 2011), held in Sofia, Bulgaria. The symposium was organized and sponsored by the Interdisciplinary Institute for Collaboration and Research on Enterprise Systems and Technology (IICREST), in cooperation with the Center for Telematics and Information Technology (CTIT), the Institute for Systems and Technologies of Information, Control and Communication (INSTICC), and the Technical University of Sofia, and was technically co-sponsored by Sofia Municipality and QlikTech Netherlands B.V.

The purpose of BMSD 2011 was to bring together researchers and practitioners interested in business modeling and its relation to software design. The theme of BMSD 2011 was: "Business Models and Advanced Software Systems," and the scientific areas of interest to the symposium were: (a) business models and requirements; (b) business models and services; (c) business models and software; (d) information systems architectures.

Building adequate business models is of huge importance not only for understanding and re-engineering an organization but also for automating (part of) its processes by means of software systems. Not grasping correctly and exhaustively a business system would inevitably lead to consequent software failures. BMSD 2011 addressed these challenges, by considering a large number of research topics: from more abstract ones, such as essential business models, to more technical ones, such as software specification, from more business-oriented ones, such as business process management and coordination, and requirements specification to IT architectures -related topics.

BMSD 2011 received 58 paper submissions from which 22 papers were selected for publication in the symposium proceedings. From these, 10 papers were selected for a 30-minute oral presentation (Full Papers), leading to a "full-paper" acceptance ratio of 17%; this shows the intention of preserving a high-quality forum for the next editions of this symposium. The 8 papers published in the current book were selected from the BMSD 2011 Full Papers. In all BMSD 2011 selections, a double-blind paper evaluation method was used: each paper was reviewed by at least two internationally known experts from the BMSD Program Committee.

The high quality of the BMSD 2011 program was enhanced by four keynote lectures, delivered by distinguished guests who are renowned experts in their fields, including (alphabetically): Mehmet Aksit (University of Twente, The Netherlands), Dimitar Christozov (American University in Bulgaria - Blagoevgrad, Bulgaria), Hermann Maurer (Graz University of Technology, Austria), and Bart Nieuwenhuis (University of Twente, The Netherlands). Their lectures

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inspired the participants to gain a deeper understanding of the business modeling and software design fields.

We hope that you will find these papers interesting and consider them a helpful reference in the future when addressing any of the research areas mentioned above.

February 2012 Boris Shishkov

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 $\operatorname{Bulgaria}$

Hermann Maurer Graz University of Technology, Austria Bart Nieuwenhuis University of Twente, The Netherlands

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