

Khaled Gaaloul · Rainer Schmidt
Selmin Nurcan · Sérgio Guerreiro
Qin Ma (Eds.)

LNBIP 214

Enterprise, Business-Process and Information Systems Modeling

16th International Conference, BPMDS 2015

20th International Conference, EMMSAD 2015

Held at CAISE 2015, Stockholm, Sweden, June 8–9, 2015

Proceedings



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Preface

This book contains the proceedings of two long-running events held along with the CAiSE conferences relating to the areas of enterprise, business-process and information systems modeling: the 16th International Conference on Business Process Modeling, Development and Support (BPMDs 2015), the 20th International Conference on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2015). The two working conferences are introduced below.

BPMDs 2015

BPMDs has been held as a series of workshops devoted to business process modeling, development and support since 1998. During this period, business process analysis and design has been recognized as a central issue in the area of information systems (IS) engineering. The continued interest in these topics on behalf of the IS community is reflected by the success of the last BPMDs events and the recent emergence of new conferences and workshops devoted to the theme. In 2011, BPMDs became a two-day working conference attached to CAiSE (Conference on Advanced Information Systems Engineering). The basic principles of the BPMDs series are:

1. BPMDs serves as a meeting place for researchers and practitioners in the areas of business development and business applications (software) development.
2. The aim of the event is mainly discussions, rather than presentations.
3. Each event has a theme that is mandatory for idea papers.
4. Each event's results are, usually, published in a special issue of an international journal.

The goals, format, and history of BPMDs can be found on the website: <http://www.bpmds.org/>.

The intention of BPMDs is to solicit papers related to business process modeling, development and support (BPMDs) in general, using quality as a main selection criterion. As a working conference, we aim to attract papers describing mature research, but we still give place to industrial reports and visionary idea papers. To encourage new and emerging challenges and research directions in the area of business process modeling, development and support, we have a unique focus theme every year. Papers submitted as idea papers are required to be of relevance to the focus theme, thus providing a mass of new ideas around a relatively narrow but emerging research area. Full research papers and experience reports do not necessarily need to be directly connected to this theme (they still needed to be explicitly relevant to BPMDs though).

The focus theme for BPMDs 2015 idea papers was “Enabling value creation via business process modeling, development and support.” More than two decades after Hammer and Champy made the explicit link between business processes and value, this relationship is still unclear. For the 16th edition of the BPMDs conference, we invited

the interested authors to engage, through their idea papers and the discussions during the two days of BPMDS 2015 in Stockholm, in a deep discussion with all participants about what is value, how it is provided, and how it is captured through business process modeling, development and support.

BPMDS 2015 received 42 submissions from 25 countries (Argentina, Austria, Belgium, Brazil, Cameroon, Canada, France, Germany, Hong Kong, Iran, Israel, Italy, The Netherlands, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Tunisia, Turkey, UK, USA, Uruguay, Vietnam). The management of paper submission and reviews was supported by the EasyChair conference system. Each paper received at least three reviews. Eventually, 17 high-quality papers were selected; among them two experience reports and three idea papers. The accepted papers cover a wide spectrum of issues related to business process development, modeling, and support. They are organized under the following section headings:

- Enabling value creation
- Human centric paradigms
- Mining for processes
- Declarative approaches
- Understanding and sharing
- Quality and security issues
- New Areas for BPMDS

We wish to thank all the people who submitted papers to BPMDS 2015 for having shared their work with us, as well as the members of the BPMDS 2015 Program Committee, who made a remarkable effort in reviewing submissions. We also thank the organizers of CAiSE 2015 for their help with the organization of the event, and IFIP WG8.1 for the support.

April 2015

Selmin Nurcan
Rainer Schmidt

EMMSAD 2015

The field of information systems analysis and design includes numerous information modeling methods and notations (e.g., ER, ORM, UML, ArchiMate, EPC, BPMN, DEMO) that are typically evolving. Even with some attempts to standardize (e.g., UML for object-oriented software design), new modeling methods are constantly being introduced, many of which differ only marginally from previous approaches. These ongoing changes significantly impact the way information systems, enterprises, and business processes are being analyzed and designed in practice.

The EMMSAD conference focuses on exploring, evaluating, and enhancing modeling methods and methodologies for the analysis and design of information systems, enterprises, and business processes. Though the need for such studies is well recognized, there is a paucity of such research in the literature. The objective of the EMMSAD conference series is to provide a forum for researchers and practitioners interested

in modeling methods for systems analysis and design to meet, and exchange research ideas and results. It also provides the participants an opportunity to present their research papers and experience reports, and to take part in open discussions.

Whereas modeling techniques traditionally have been used to create intermediate artifacts in systems analysis and design, modern modeling methodologies take a more active approach. For instance in Business Process Management (BPM), Model-driven Software Engineering, Domain-specific modeling (DSM), Enterprise Architecture (EA), Enterprise modeling (EM), Interactive Models and Active Knowledge Modelling, the models are used directly as part of the information system of the organization. At the same time, similar modeling techniques are also used for sense-making and communication, model simulation, quality assurance, and requirements specification in connection with more traditional forms of information systems and enterprise development. Since modeling techniques are used in such a large variety of tasks with different goals, it is hard to assess whether a model is sufficiently good to achieve the goals. To provide guidance in this process, knowledge for understanding quality of models and modeling languages is needed.

June 2015

Khaled Gaaloul
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