

Contents

BPMDS 2016

Process Execution Support

Enabling Self-adaptive Workflows for Cyber-physical Systems	3
<i>Ronny Seiger, Steffen Huber, Peter Heisig, and Uwe Assmann</i>	
Using the Guard-Stage-Milestone Notation for Monitoring BPMN-Based Processes	18
<i>Luciano Baresi, Giovanni Meroni, and Pierluigi Plebani</i>	
Modelling the Process of Process Execution: A Process Model-Driven Approach to Customising User Interfaces for Business Process Support Systems	34
<i>Udo Kannengiesser, Richard Heininger, Tobias Gründer, and Stefan Schedl</i>	

Improving Usability of Process Models

Integrating Textual and Model-Based Process Descriptions for Comprehensive Process Search	51
<i>Henrik Leopold, Han van der Aa, Fabian Pittke, Manuel Raffel, Jan Mendling, and Hajo A. Reijers</i>	
Application of Business Process Diagrams' Complexity Management Technique Based on Highlights.	66
<i>Gregor Jošt and Gregor Polančič</i>	
A Methodology and Implementing Tool for Semantic Business Process Annotation	80
<i>Beniamino Di Martino, Antonio Esposito, Salvatore Augusto Maisto, and Stefania Nacchia</i>	

Social and Human Perspective

Considering Social Distance as an Influence Factor in the Process of Process Modeling	97
<i>Michael Zimoch, Jens Kolb, and Manfred Reichert</i>	

What Have We Unlearned Since the Early Days of the Process Movement? . . .	113
<i>Gil Regev, Olivier Hayard, and Alain Wegmann</i>	

New Directions in Process Modeling

Towards Impact Analysis of Data in Business Processes	125
<i>Arava Tsoury, Pnina Soffer, and Iris Reinhartz-Berger</i>	
Semi-automatic Derivation of RESTful Interactions from Choreography Diagrams	141
<i>Adriatik Nikaj, Fabian Pittke, Mathias Weske, and Jan Mendling</i>	
Controlling Time-Awareness in Modularized Processes	157
<i>Andreas Lanz, Roberto Posenato, Carlo Combi, and Manfred Reichert</i>	

Consistency, Correctness and Compliance

A Systematic Literature Review of Consistency Among Business Process Models	175
<i>Afef Awadid and Selmin Nurcan</i>	
Automatic Signature Generation for Anomaly Detection in Business Process Instance Data	196
<i>Kristof Böhmer and Stefanie Rinderle-Ma</i>	
Hybrid Diagnosis Applied to Multiple Instances in Business Processes	212
<i>Rafael Ceballos, Diana Borrego, María Teresa Gómez-López, and Rafael M. Gasca</i>	

Process and Data Mining

Connecting Databases with Process Mining: A Meta Model and Toolset	231
<i>E. González López de Murillas, Hajo A. Reijers, and Wil M.P. van der Aalst</i>	
Towards a Formal Framework for Business Process Re-design Based on Data Mining.	250
<i>Thai-Minh Truong and Lam-Son Lê</i>	
Repairing Alignments: Striking the Right Nerve	266
<i>Borja Vázquez-Barreiros, Sebastian J. van Zelst, Joos C.A.M. Buijs, Manuel Lama, and Manuel Mucientes</i>	

Process Variability

- A Process Variant Modeling Method Comparison: Experience Report 285
Banu Aysolmaz, Ali Yaldiz, and Hajo Reijers

EMMSAD 2016

Fundamental Issues in Modeling

- Representing Dynamic Invariants in Ontologically Well-Founded
 Conceptual Models 303
John Guerson and João Paulo Almeida

Requirements and Regulations

- MATRA: A Framework for Assessing Model-Based Approaches on the
 Transformation Between Requirements and Architecture 321
Carlos E. Salgado, Ricardo J. Machado, and Rita S.P. Maciel

Enterprise and Software Ecosystem Modeling

- Data Accountability in Socio-Technical Systems 335
*Kristian Beckers, Jörg Landthaler, Florian Matthes,
 Alexander Pretschner, and Bernhard Walzl*
- Analysis of Imprecise Enterprise Models 349
Hector Florez, Mario Sánchez, and Jorge Villalobos
- Enterprise Process Modeling in Practice – Experiences from a Case Study
 in the Healthcare Sector 365
Snorre Fossland and John Krogstie

Information and Process Model Quality

- How Modeling Language Shapes Decisions: Problem-Theoretical
 Arguments and Illustration of an Example Case 383
Alexander Bock
- On Suitability of Standard UML Notation for Relational Database Schema
 Representation 399
Drazen Brdjanin, Slavko Maric, and Zvezdan Spasic Pavkovic

Meta-modeling and Domain Specific Modeling and Model Composition

- Towards a Meta-Model for Networked Enterprise 417
Gabriel Leal, Wided Guédria, Hervé Panetto, and Erik Proper

PoN-S: A Systematic Approach for Applying the Physics of Notation (PoN). . .	432
<i>Maria das Graças da Silva Teixeira, Glaice Kelly Quirino,</i> <i>Frederik Gailly, Ricardo de Almeida Falbo, Giancarlo Guizzardi,</i> <i>and Monalessa Perini Barcellos</i>	
How Cognitively Effective is a Visual Notation? On the Inherent Difficulty of Operationalizing the Physics of Notations.	448
<i>Dirk van der Linden, Anna Zamansky, and Irit Hadar</i>	
 Modeling of Architecture and Design	
Modeling and Analysis of Vehicles Platoon Safety in a Dynamic Environment Based on GSPN.	465
<i>Mohamed Garoui</i>	
Use Case Diagrams for Mobile and Multi-channel Information Systems: Experimental Comparison of Colour and Icon Annotations.	479
<i>Sundar Gopalakrishnan and Guttorm Sindre</i>	
Author Index	495

Enterprise, Business-Process and Information Systems
Modeling

17th International Conference, BPMDS 2016, 21st
International Conference, EMMSAD 2016, Held at CAiSE
2016, Ljubljana, Slovenia, June 13-14, 2016 ,
Proceedings

Schmidt, R.; Guédria, W.; Bider, I.; Guerreiro, S. (Eds.)

2016, XVI, 496 p. 169 illus., Softcover

ISBN: 978-3-319-39428-2