BMSD’20: List of Accepted Papers

Session 1: ORGANIZATIONAL MODELING

Paper 1:
Organizations: Large Worlds or Small Worlds?
Presenter: Coen Suurmond
Author: Coen Suurmond

Session 2: RESILIENCE OF INFORMATION SYSTEMS, SERVICE PROVISIONING

Paper 3:
Making Enterprise Information Systems Resilient against Disruptive Events: A Conceptual View
Presenter: Boris Shishkov
Authors: Boris Shishkov, Alexander Verbraeck
Paper 4:
A Reference Model for a Service Level Agreement, in domain of Information Sharing Services
Presenter: Ella Roubtsova
Authors: Cor Hofman, Ella Roubtsova

Session 3: BUSINESS PROCESS MANAGEMENT

Paper 2:
Process Reference Models: Accelerator for Digital Transformation
Presenter: Mathias Kirchmer
Authors: Mathias Kirchmer, Peter Franz

Session 4: BUSINESS PROCESS MODELING AND PRODUCT LINE ENGINEERING

Paper 8:
Business Process Model Driven Approach for Automatic Use Case Model Generation
Presenter: Adel Taweel
Authors: Salam Turkman, Adel Taweel
Paper 9:
Integrated Process Model for Systems Product Line Engineering of Physical Protection Systems
Presenter: Bedir Tekinerdogan
Authors: Bedir Tekinerdogan, Sevil Yagiz, Kaan Özcan, Iskender Yakin

Session 5: BUSINESS PROCESS OPTIMIZATION, ARCHITECTURAL PATTERNS, AND GRAMMARS

Paper 5:
Graph-based Multi-Criteria Optimization for Business Processes
Presenter: Frank Nordemann
Authors: Frank Nordemann, Ralf Tünnjes, Elke Pulvermüller, Heiko Tapken
Paper 6:
Design Optimization of IoT Models: Structured Safety and Security Flaw Identification
Presenter: Julia Rauscher
Authors: Julia Rauscher, Bernhard Bauer
Paper 7:
From Business Modeling to Software Design
Presenter: Bert de Brock
Author: Bert de Brock

Session 6: WORKFLOW-BASED VARIABILITY MODELING AND AI/ML-BASED MODELING

Paper 10:
From Adaptive Business Processes to Orchestrated Microflows
Presenter: Andreas Sinnhofer
Authors: Andreas Sinnhofer, Roy Oberhauser, Christian Steger
Paper 11:
Model-Driven ML-Ops for Intelligent Enterprise Applications: Vision, Approaches and Challenges
Presenter: Willem-Jan van den Heuvel
Authors: Willem-Jan van den Heuvel, Damian A. Tamburri

Session 7: BUSINESS MODEL DEPENDENCIES AND CHANGE IMPACT ANALYSIS

Paper 16:
Business Model Dependencies: Towards Conceptualizing Dependencies for Extending Modeling Languages for Business Models
Presenter: Christian Vorbohle
Authors: Christian Vorbohle, Daniel Szopinski, Dennis Kundisch
Paper 17:
Concepts for Comparison in Models to Support Decision Making
Presenter: Ella Roubtsova
Authors: Ella Roubtsova, Rachelle Bosua
**Session 8:** KNOWLEDGE MANAGEMENT AND TRANSFER OF KNOWLEDGE

**Paper 12:**
Managing Human and Artificial Knowledge Bearers, The Creation of a Symbiotic Knowledge Management Approach  
Presenter: Marcus Grum  
Authors: Marcus Grum

**Paper 13:**
Presenter: Norbert Gronau  
Authors: Marcus Grum, Norbert Gronau

**Session 9:** VISUALIZATION OF ENTERPRISE ARCHITECTURES AND VIRTUAL REALITY

**Paper 14:**
VR-EAT: Visualization of Enterprise Architecture Tool Diagrams in Virtual Reality  
Presenter: Roy Oberhauser  
Authors: Roy Oberhauser, Pedro Sousa, Florian Michel

**Paper 15:**
Understanding the Augmented and Virtual Reality Business Ecosystem: An e³-value Approach  
Presenter: Julian Schuir  
Authors: Julian Schuir, Jannis Vogel, Frank Teuteberg, Oliver Thomas

**Session 10:** ADAPTATION TO CUSTOMER NEEDS

**Paper 18:**
Model-based Hypothesis Engineering for Supporting Adaptation to Uncertain Customer Needs  
Presenter: Sebastian Gottschalk  
Authors: Sebastian Gottschalk, Enes Yigitbas, Gregor Engels

**Session 11:** BUSINESS PROCESS MANAGEMENT, DECLARATIVE SEMANTICS, AND BUSINESS-TECHNICAL EIS INFRASTRUCTURES

**Paper 19:**
An Agent-Oriented Methodology for Business Process Management  
Presenter: Sara Zouad  
Authors: Sara Zouad, Mahmoud Boufaida

**Paper 20:**
Declarative Semantics of Actions and Instructions  
Presenter: Bert de Brock  
Author: Bert de Brock

**Paper 21:**
Bridging the Gap between Business and Technical Infrastructures of Enterprise Information Systems: Addressing the "Vertical Fit" Problems  
Presenter: Sahbi Zahaf  
Authors: Sahbi Zahaf, Khaoula Fatnassi, Faiez Gargouri

**Session 12:** DESIGN OF IoT SYSTEMS

**Paper 22:**
IoT System Design of a V2X Application  
Presenter: Evangelos Spyrou  
Authors: Evangelos Spyrou, Konstantinos Skoufas, Dimitris Mitrakos

**Session 13:** STAKEHOLDER INTERESTS AND BUSINESS MODELING

**Paper 23:**
Stakeholder Tensions in Decision-making for Opening Government Data  
Presenter: Ahmad Luthfi  
Authors: Ahmad Luthfi, Marijn Janssen, Joep Cromvoets

**Session 14:** DATA ANALYTICS AND e-LEARNING

**Paper 24:**
Automated System for Monitoring of Educational Processes: Collection, Management, and Modeling of Data  
Presenter: Lyazzat Atymtayeva  
Authors: Lyazzat Atymtayeva, Kanat Kozhakhmet, Alexander Savchenko

**Session 15:** DATA ANALYTICS AND BAYESIAN STATISTICS

**Paper 25:**
Exploration of Data Analytics for Ground Segment in Space Systems  
Presenter: Bedir Tekinerdogan  
Authors: Bedir Tekinerdogan, Bedia Acar, Çağrı Caboğlu, Damla Savaş, Nebi Vuran, Şenol Tekdal, Ümit Gürsoy

**Paper 26:**
Understanding Human Generated Decision Data  
Presenter: Johan Silvander  
Author: Johan Silvander
Session 16: VIRTUAL REALITY AND USER-DRIVEN MODELING

Paper 27:
Enabling Collaborative Business Process Elicitation in Virtual Environments
Presenter: Ludger Pöhler
Authors: Ludger Pöhler, Julian Schuir, Simon Lübbers, and Frank Teuteberg

Paper 28:
Business Processes and the Safety of Stakeholders: Considering the Electromagnetic Pollution
Presenter: Magdalena Garvanova
Authors: Magdalena Garvanova, Ivan Garvanov, Ivan Kashukeev