Contents

Process Modeling

Temporal Network Representation of Event Logs for Improved Performance Modelling in Business Processes .................................................. 3
   Arik Senderovich, Matthias Weidlich, and Avigdor Gal

Synthesizing Petri Nets from Hasse Diagrams. ................................. 22
   Robin Bergenthal

PE-BPMN: Privacy-Enhanced Business Process Model and Notation. ........ 40
   Pille Pullonen, Raimundas Matulevičius, and Dan Bogdanov

Process Mining 1

Learning Hybrid Process Models from Events: Process Discovery Without Faking Confidence ................................................................. 59
   Wil M.P. van der Aalst, Riccardo De Masellis,
   Chiara Di Francescomarino, and Chiara Ghidini

Multi Instance Anomaly Detection in Business Process Executions ........ 77
   Kristof Böhmer and Stefanie Rinderle-Ma

   Koen Daenen

Assorted BPM Topics

AB-BPM: Performance-Driven Instance Routing for Business Process Improvement ................................................................. 113
   Suhrid Satyal, Ingo Weber, Hye-young Paik, Claudio Di Ciccio,
   and Jan Mendling

Optimized Execution of Business Processes on Blockchain ................ 130
   Luciano García-Bañuelos, Alexander Ponomarev, Marlon Dumas,
   and Ingo Weber

Efficient Migration-Aware Algorithms for Elastic BPMaaS. .............. 147
   Guillaume Rosinosky, Samir Youcef, and François Charoy
Uncovering the Hidden Co-evolution in the Work History of Software Projects ........................................... 164
   Saimir Bala, Kate Revoredo, João Carlos de A.R. Gonçalves, Fernanda Baião, Jan Mendling, and Flavia Santoro

Decisions and Understanding

Towards a Holistic Discovery of Decisions in Process-Aware Information Systems ........................................ 183
   Johannes De Smedt, Faruk Hasić, Seppe K.L.M. vanden Broucke, and Jan Vanthienen

Effect of Linked Rules on Business Process Model Understanding .............. 200
   Wei Wang, Marta Indulska, Shazia Sadiq, and Barbara Weber

On the Performance Overhead of BPMN Modeling Practices ..................... 216
   Ana Ivanchikj, Vincenzo Ferme, and Cesare Pautasso

Process Knowledge

Weak, Strong and Dynamic Controllability of Access-Controlled Workflows Under Conditional Uncertainty ......................... 235
   Matteo Zavatteri, Carlo Combi, Roberto Posenato, and Luca Viganò

An Eye into the Future: Leveraging A-priori Knowledge in Predictive Business Process Monitoring ..................................... 252
   Chiara Di Francescomarino, Chiara Ghidini, Fabrizio Maria Maggi, Giulio Petrucci, and Anton Yeshchenko

Analysis of Knowledge-Intensive Processes Focused on the Communication Perspective ......................................... 269
   Pedro Henrique Piccoli Richetti, João Carlos de A.R. Gonçalves, Fernanda Araujo Baião, and Flávia Maria Santoro

Process Mining 2

TESSERACT: Time-Drifts in Event Streams Using Series of Evolving Rolling Averages of Completion Times ....................... 289
   Florian Richter and Thomas Seidl
Intra and Inter-case Features in Predictive Process Monitoring:
A Tale of Two Dimensions ........................................... 306
Arik Senderovich, Chiara Di Francescomarino, Chiara Ghidini,
Kerwin Jorbina, and Fabrizio Maria Maggi

Discovering Infrequent Behavioral Patterns in Process Models ............ 324
David Chapela-Campa, Manuel Mucientes, and Manuel Lama

Author Index ................................................................. 341
Business Process Management
Carmona, J.; Engels, G.; Kumar, A. (Eds.)
2017, XXI, 341 p. 115 illus., Softcover
ISBN: 978-3-319-64999-3