

# Contents

## **Business Information Systems Interoperability**

Creation of Smart-Contracting Collaborations for Decentralized Autonomous Organizations. . . . .	3
<i>Alex Norta</i>	
Reliable Customers and Credible Fixed-Price Contracts for Software Development Projects: A Study of One Supplier’s Contracts . . . . .	18
<i>Cornelia Gaebert</i>	
Life Events: A Crucial Point of e-Government . . . . .	33
<i>Vaclav Repa</i>	
A Linked Data Model for Web API-s . . . . .	48
<i>Svetlana Omelkova and Peep Kungas</i>	

## **Business Information System Requirements and Architecture**

Requirement Elicitation Using Business Process Models . . . . .	67
<i>Sander Valvas and Fredrik Milani</i>	
Elements and Characteristics of Enterprise Architecture Capabilities . . . . .	82
<i>Matthias Wißotzki and Kurt Sandkuhl</i>	
Governing IT Services for Quantifying Business Impact . . . . .	97
<i>Oscar González Rojas</i>	
On Design Research – Some Questions and Answers . . . . .	113
<i>Pertti Järvinen</i>	

## **Business Process and Decision Management**

Selecting the “Right” Notation for Business Process Modeling: Experiences from an Industrial Case . . . . .	129
<i>Jörn Wiebring and Kurt Sandkuhl</i>	
Modeling and Animation of Crisis Management Process with Statecharts. . . . .	145
<i>Elena Kushnareva, Irina Rychkova, and Bénédicte Le Grand</i>	
Change Point Detection and Dealing with Gradual and Multi-order Dynamics in Process Mining . . . . .	161
<i>J. Martjushev, R.P. Jagadeesh Chandra Bose, and Wil M.P. van der Aalst</i>	

Quick Decide — A Tool to Aid the Analytic Hierarchy Process  
for Group Decisions . . . . . 179  
*Igor Kovbasiuk, Welf Löwe, Morgan Ericsson, and Anna Wingkvist*

**Business Information Systems Development**

The Most Prominent Software Development Concepts Cited  
in IT Professionals’ Blogs . . . . . 197  
*Deniss Ojastu, Tarmo Robal, and Ahto Kalja*

Towards a Consumer Preference-Based Taxonomy for Information  
Systems Development . . . . . 213  
*Eric-Oluf Svee and Jelena Zdravkovic*

Code Transformation Pattern Alignments and Induction for ERP Legacy  
Systems Migration . . . . . 228  
*Algirdas Laukaitis*

Passive Condition Pre-enforcement for Rights Exporting . . . . . 241  
*Wenhui Lu, Jyrki Nummenmaa, and Zheyang Zhang*

**Research in Progress**

A Business Process Based Method for Capability Modelling . . . . . 257  
*Hasan Koç and Kurt Sandkuhl*

Modeling for Viability . . . . . 265  
*Marite Kirikova*

Towards Graphical Query Notation for Semantic Databases . . . . . 273  
*Kārlis Čerāns, Jūlija Ovčinnikova, and Mārtiņš Zviedris*

Conceptualizing a Network Process Model Based Production Platform . . . . . 282  
*Thomas Knothe, Adrian Zoch, and Malte Meißner*

**Author Index** . . . . . 291



<http://www.springer.com/978-3-319-21914-1>

Perspectives in Business Informatics Research  
14th International Conference, BIR 2015, Tartu,  
Estonia, August 26-28, 2015, Proceedings  
Matulevičius, R.; Dumas, M. (Eds.)  
2015, XVI, 291 p. 88 illus., Softcover  
ISBN: 978-3-319-21914-1