

# Table of Contents

## BUSINESS PROCESS MANAGEMENT

- Ralf Laue, Volker Gruhn  
*Complexity Metrics for Business Process Models*..... 1
- Jerzy Nawrocki, Tomasz Nędzza, Mirosław Ochodek, Łukasz Olek  
*Describing Business Processes with Use Cases*..... 13
- Roland Kaschek, Roman Pavlov, Vladimir A. Shekhovtsov, Sergiy Zlatkin  
*Towards Selecting Among Business Process Modeling Methodologies*..... 28
- Oliver Thomas, Otmar Adam, Peter Loos  
*Using Reference Models for Business Process Improvement: A Fuzzy Paradigm Approach*..... 47
- Ruopeng Lu, Shazia Sadiq, Guido Governatori  
*Utilizing Successful Work Practice for Business Process Evolution*..... 58
- Frank Puhlmann  
*Why Do We Actually Need the Pi-Calculus for Business Process Management?* ..... 77

## E-BUSINESS

- Willy Picard  
*Computer Support for Adaptive Human Collaboration with Negotiable Social Protocols*..... 90
- Bartosz Bębel, Zbyszko Królikowski, Robert Wrembel  
*Managing Multiple Real and Simulation Business Scenarios by Means of a Multiversion Data Warehouse*..... 102
- Jerzy Bartoszek, Grażyna Brzykcy  
*Situation Spaces in Context-aware Business Solutions*..... 114

## E-GOVERNMENT

- Wanchai Varavithya, Vatcharaporn Esichaikul  
*Dealing with Administrative Discretions in e-Government: A Citizen Consultation Model*..... 123
- Andrzej P. Urbański  
*Fairness Analysis of Traditional and Internet Supported Mass Enrolment to High Schools* ..... 132
- Nanna Suryana, Norayu Abdul Ghani  
*Role of a Clearing House Server Infrastructure for GIS Interoperability* ..... 141

- Dariusz Król, Jacek Oleksy, Małgorzata Podyma, Bogdan Trawiński  
*The Analysis of Reporting Tools for a Cadastre Information System* ..... 150

## **ERP**

- Stefan Koch  
*ERP Implementation Effort Estimation Using Data Envelopment Analysis* ..... 164
- Inka Vilpola, Mika Ojala, Ilkka Kouri  
*Risks and Risk Management in ERP Project - Cases in SME Context* ..... 179
- Eric Wang, James J. Jiang, Gary Klein, Ben Martz  
*Successful Adoption of ERP Technology as Influenced by Country of Origin* ..... 187

## **GENERAL BIS**

- Eliisa Jauhiainen, Anne Honkaranta  
*A Review on XML Document Schemas and Methods for Schema Design* ..... 201
- Małgorzata Miklas-Kalczyńska  
*Adoption of the Paperless Environment by Knowledge Workers* ..... 215
- Irja Kankaanpää, Jussi Koskinen, Tero Tilus, Henna Sivula, Heikki Lintinen, Jarmo J. Ahonen  
*Challenges in IS Evolution Benefit Assessment* ..... 224
- Viktorija Sulčič, Dušan Lesjak, Nada Trunk Širca  
*E-Classroom in Higher Education* ..... 230
- Paweł Cichoń, Zbigniew Huzar, Zygmunt Mazur, Adam Mrozowski  
*Managing Adaptive Information Projects in the Context of a Software Developer Organizational Structure* ..... 242
- Reyes Grangel, Ricardo Chalmeta, Cristina Campos  
*Definition of Target Knowledge in Virtual Enterprises* ..... 256
- Edward W.N. Bernroider, Johann Mitlöhner  
*Social Choice Aggregation Methods for Multiple Attribute Business Information System Selection* ..... 267
- Tom Wielicki, Gustavo Cavalcanti  
*Study of Digital Divide: Measuring ICT Utilization and Implementation Barriers Among SMEs of Central California* ..... 277
- Debbie Tesch, Gary Klein, Richard Dicenza, Ben Martz  
*The Moderating Effect of User Involvement on IS Success* ..... 295

## **INFORMATION RETRIEVAL AND FILTERING**

- Jakub Piskorski, Krzysztof Węcel, Agata Filipowska, Karol Wieloch  
*An Annotated Corpus for Development of Modern Cadastral Information Systems* ..... 304

▪ Jan De Beer, Nishant Kumar, Marie-Francine Moens, Jan Vanthienen <i>Assessing the State of the Art of Commercial Tools for Unstructured Information Exploitation</i> .....	315
▪ Dariusz Ceglarek, Wojciech Rutkowski <i>Automated Acquisition of Semantic Knowledge to Improve Efficiency of Information Retrieval Systems</i> .....	329
▪ Marek Kowalkiewicz <i>Expected Utility of Content Blocks in Web Content Extraction</i> .....	342
▪ Kazimierz Choroś, Justyna Kowalska, Izidor Statkiewicz <i>User Strategies in Query Formulations in the Internet Library Catalogue</i> .....	353
▪ Tarjei Laegreid, Paul Christian Sandal, Jon Espen Ingvaldsen, Jon Atle Gulla <i>Using Business Process Models to Retrieve Information from Governing Documents</i> .....	363

## ONTOLOGIES

▪ Krzysztof Węcel <i>A Framework for Document-driven Evolution of Ontology</i> .....	378
▪ Andrzej Bassara <i>Evolution of Ontology in Time</i> .....	392
▪ Eric Simon, Iulian Ciorascu, Kilian Stoffel <i>Concept and Implementation of an Ontological Document Management System</i> .....	403
▪ Małgorzata Mochol, Elena Paslaru Bontas Simperl <i>Cost Estimation for Ontology Development</i> .....	415
▪ Jolanta Cybulka, Adam Meissner, Tadeusz Pankowski <i>Schema- and Ontology-Based XML Data Exchange in Semantic E-Business Applications</i> .....	429
▪ Maria Antonina Mach, Paweł Jan Kalczyński <i>Technique for Reducing the Number of Rules in a Temporal Knowledge Base</i> .....	442
▪ Thierry Declerck, Hans-Ulrich Krieger <i>Translating XBRL Into Description Logic. An Approach Using Protege, Sesame &amp; OWL</i> .....	455

## SOFTWARE ENGINEERING

▪ Chunyan Ma, Arturo Conception <i>A Security Evaluation Model for Multi-Agents Distributed Systems</i> .....	468
▪ Sasa Baskarada, Jing Gao, Andy Koronios <i>Agile Maturity Model Approach to Assessing and Enhancing the Quality of Asset Information in Engineering Asset Management Information Systems</i> .....	486

- Oliver Thomas, Jan vom Brocke  
*Designing Infrastructures for Reusing Conceptual Models*..... 501
- Barbara Begier  
*Making Users the Subject of a Software Process to Build High Quality Software for Public Organizations*..... 515
- Kamil Kuliberda, Jacek Wiślicki, Radosław Adamus, Kazimierz Subieta  
*Object-Oriented Wrapper for Semistructured Data in a Data Grid Architecture*..... 528
- Tero Tilus, Jussi Koskinen, Jarmo J.Ahonen, Heikki Lintinen, Henna Sivula, Irja Kankaanpää  
*Software Evolution Strategy Evaluation: Industrial Case Study Applying Value-Based Decision Model*..... 543

**WEB SERVICES**

- Stijn Goedertier, Jan Vanthienen  
*Business Rules for Compliant Business Process Models* ..... 558
- Artur Kulpa, Jakub Swacha, Roman Budzowski  
*Script-based System for Monitoring Client-side Activity* ..... 573
- Arnd Schnieders, Frank Puhlmann  
*Variability Mechanisms in E-Business Process Families* ..... 583