Table of Contents

Keynotes

Exemplar	1
Dependable Systems – Wishful Thinking or Realistic Expectation? (Abstract)	13
Invited Talks	
Interoperability Governance for e-Government	14
Foundational Data Modeling and Schema Transformations for XML	
Data Engineering	25
Integration of Semantic XForms and Personal Web Services as a Tool to Bridge the Gap between Personal Desktops and Global Business	37
Processes	31
A Slicing Technique for Business Processes	45
Public Adoption of Digital Multimedia – Why Is It Lagging behind Expectations? (Extended Abstract)	52
Model-Driven Security Engineering of Service Oriented Systems Ruth Breu, Michael Hafner, Frank Innerhofer-Oberperfler, and Florian Wozak	59
Towards Truly Flexible and Adaptive Process-Aware Information	
Systems	72
From Human Knowledge to Process Models	84

Temporal Consistency of View Based Interorganizational Workflows Johann Eder and Amirreza Tahamtan	96
Engineering Design Performance (Extended Abstract)	108
Integration – Reflections on a Pivotal Concept for Designing and Evaluating Information Systems	111
Aspect Based Conceptual Modelling of Web Applications	123
The Influence of Mobile Computing to Information Systems Technology (Abstract)	135
Engineers Discovering the "Real World" – From Model-Driven to Ontology-Based Software Engineering	136
Holistic Engineering of Ultra-Highspeed Mobile Information and Communication Systems	148
A Framework for Building Mapping Operators Resolving Structural Heterogeneities	158
Metamodeling: Some Application Areas in Information Systems Dimitris Karagiannis, Hans-Georg Fill, Peter Höfferer, and Martin Nemetz	175
Collaborative Model Driven Software Development for SOA-Based Systems	189
A Meta-model-Driven Tool Integration Development Process Felix Klar, Sebastian Rose, and Andy Schürr	201
Information and Communication Systems for Mobile Emergency Response Janine Lachner and Hermann Hellwagner	213
Tacit Knowledge Management: Do We Need a Re-orientation of Traditional KM Approaches?	225

Table of Contents	XIII
Collaborative Software Development: A Case Study of Model Interdependencies	232
Conceptual Modelling in an Evolving World	246
An Ontological-Based Approach to Analyze Software Production Methods	258
Towards a Theory of Services	271
Evolving and Implanting Web-Based E-Government-Systems in Universities	282
Facets of Media Types	296
e-Skills and Standards – Prerequisites to Fully Exploit the Potential of ICT in Europe	306
ASM Foundations of Database Management	318
Software Quality – Experiences in System Development and Operation	332
Adaptive Macro-designing Technology for Complex Process Control Systems	340
Mokum for Correctness by Design in Relation to MDA	352
Conceptual Model – Meeting of Cultures	365
Operational Business-IT Alignment in Value Webs	371
Towards Virtual Sales Assistants: State-of-the-Art and Research Challenges (Abstract)	379

ISTA Papers

An Investigation into Improving the Load Balance for Term-Based Partitioning	380
A UML-Rewriting Driven Architectural Proposal for Developing Adaptive Concurrent IS Nasreddine Aoumeur and Gunter Saake	393
A Framework for Designing and Recognizing Sketch-Based Libraries for Pervasive Systems	405
A Conceptual Framework for Handling Complex Administrative Processes in E-Government	417
Fuzzy Time Intervals for Simulating Actions	429
Conceptual Design of a Method to Support IS Security Investment Decisions	445
A Query Language for Rational Tree Structures	457
A Learning Object Composition Model	469
Gathering Preference Data from Restricted Natural Language Johann Mitlöhner	475
Patterns for Screenography	484
A Model of Self-organized Criticality in Emergent Web Systems	496
Towards Prototyping-Based Technology for Adaptive Software Development	508
Management of Multi-services Structures Through an Access Control Framework	519
-wege - verso, Dirico Paric, and Chauta Hawaici	

Table of Contents	XV
Contract-Based Exception Handling Process Patterns Jelena Zdravkovic and Vandana Kabilan	531
Mobile Applications for the Academic Environment	544
eCOMO Papers	
Modeling Trust Relationships in Collaborative Engineering Projects Carlo Argiolas, Nicoletta Dessì, and Mariagrazia Fugini	555
Loosening the Hierarchy of Cross-Company Electronic Collaboration \dots Christoph Schroth	567
(Meta-)Models, Tools and Infrastructures for Business Application Integration	579
The Impact of Structuredness on Error Probability of Process Models	585
Author Index	591