Table of Contents

Design Science

Designing Information Systems for Sustainability – The Role of Universal Design and Open Innovation 1
Moyen Mohammad Mustaquim and Tobias Nyström

Designing Business Models in the Era of Internet of Things: Towards a Reference Framework 17
Stefanie Turber, Jan vom Brocke, Oliver Gassmann, and Elgar Fleisch

Co-creation Patterns between Designers and Users in the Design Process: A View of Reflexivity 32
Jaehyun Park and Hyun-A. Park

Design Principles for a Social Question and Answers Site: Enabling User-to-User Support in Organizations 54
Kevin Ortbach, Oliver Gaß, Sebastian Köffer, Silvia Schacht, Nicolai Walter, Alexander Maedche, and Bjoern Niehaves

Emerging Themes

Data Analytics and Human Trafficking 69
Kena Fedorschak, Srivatsav Kandala, Kevin C. Desouza, and Rashmi Krishnamurthy

The Design of a Multi-layer Scrutiny Protocol to Support Online Privacy and Accountability 85
Jonas Sjöström, Pär J. Ågerfalk, and Alan R. Hevner

Meta Issues

Conceptual Design Science Research? How and Why Untested Meta-Artifacts Have a Place in IS 99
Rob Gleasure

Knowledge Contributions in Design Science Research: A Meta-Analysis 115
Neelam Dwivedi, Sandeep Purao, and Detmar W. Straub

Action Design Research in Practice: The Case of Smart Cities 132
Giovanni Maccani, Brian Donnellan, and Markus Helfert

Advancing the Impact of Design Science: Moving from ...
2014

digitalisiert durch
IDS Basel/Bern, im Auftrag der
Schweizerischen Nationalbibliothek

Communicating Nascent Design Theories on Innovative Information Systems through Multi-grounded Design Principles 148
Peter Heinrich and Gerhard Schwabe

Methods

A Self-Service MSS Design from a New-Generation Manager Perspective 164
Jörg H. Mayer, André Röder, Jens Hartwig, and Reiner Quick

Towards a Design Science-Driven Product-Service System Engineering Methodology 180
Christina Niemöller, Deniz Özcan, Dirk Metzger, and Oliver Thomas

Supporting Business Processes

A Reference Model for the Information-Based Support of Enterprise Transformations 194
Nils Labusch, Stephan Aier, and Robert Winter

Mining Configurable Process Fragments for Business Process Design 209
Nour Assy, Walid Gaaloul, and Bruno Defude

Developing the Evaluation of a Pattern-Based Approach for Business Process Improvement 225
Philipp Griesberger

Building a Software Tool for Transparent and Efficient Process Assessments in IT Service Management 241
Anup Shrestha, Aileen Cater-Steel, Mark Toleman, and Wui-Gee Tan

Team Support

CM2: A Case-Based Conflict Management System 257
Guangxuan Zhang and Sandeep Purao

Call for Action: Designing for Harmony in Creative Teams 273
Mateusz Dolata and Gerhard Schwabe

An Empirical Account of Fitness-Utility: A Case of Radical Change towards Mobility in DSR Practice 289
Mudassir Imran Mustafa, Jonas Sjöström, and Jenny Eriksson Lundström

Work In Progress Papers

An Artifact for Improving Effective Medication Adherence 304
Neetu Singh and Upkar Varshney

Improving Case Management via Statistical Text Mining in a Foster Care Organization 312
Alfred Castillo, Arturo Castellanos, and Monica Chiarini Tremblay

Instantiation Validity in IS Design Research 321
Roman Lukyanenko, Joerg Evermann, and Jeffrey Parsons

What Kinds of Artifacts Are We Designing? An Analysis of Artifact Types and Artifact Relevance in IS Journal Publications 329
Andreas Drechsler and Philipp Dörr

Extending the Fitness-Utility Model for Management Artifacts in IS Design Science Research 337
Andreas Drechsler

Using Coloured Cognitive Mapping (CCM) for Design Science Research 345
John R. Venable

Towards a More Cognitively Effective Business Process Notation for Requirements Engineering 360
Carel Miske, Marcus A. Rothenberger, and Ken Peffers

Prototypes

Social Data Analytics Tool (SODATO) 368
Abid Hussain and Ravi Vatrapu

Travel Safety: A Social Media Enabled Mobile Travel Risk Application 373
Kay Noyen and Felix Wortmann

Emerging Patterns of Communication in a Pharmacist-Patient Health Information System 378
Dirk Volland, Klaus Korak, and Tobias Kowatsch

Impacts of In-Memory Technology on Data Warehouse Architectures A Prototype Implementation in the Field of Aircraft Maintenance and Service 383
Tobias Knabke, Sebastian Olbrich, and Sarah Fahim

Integration of Information Retrieval in Creativity Support: A Prototype to Support Divergent Thinking 388
Dominik Siemon and Susanne Robra-Bissantz

AmbiTune: Bringing Context-Awareness to Music Playlists While Driving 393
Patrick Helmholz, Sebastian Vetter, and Susanne Robra-Bissantz

Designing an Information System for Residential Heating and Ventilation to Improve Comfort and Save Energy 398
Thomas von Bomhard, Dominic Wörner, and Felix Wortmann

A Visualization Approach for Reducing the Perceived Complexity of COBIT 5 403
Yannick Bartens, Steven de Haes, Linda Eggert, Leonard Heilig, Kim Maes, Frederik Schulte, and Stefan Voß

Supporting Technical Customer Service Processes: A Design-Centered Approach 408
Gerald Däuble, Inga Schlömer, Boris Böttcher, and Markus Nüttgens

An Art-Based IS for Improving Room-Climate 413
Paul Rigger and Felix Wortmann

RUPERT: A Modelling Tool for Supporting Business Process Improvement Initiatives 418
Florian Johannsen and Hans-Georg Fill

Corporate Navigator App A New-Generation Management Support System 423
Jörg H. Mayer, Claudia Koschtial, Jens Hartwig, and André Röder

Mass Shooting Incident Response Optimization System: Development of Situational Aware Incident Response System 428
Joana Monteiro, Shuai Yuan, Abhiram Upadhya, Pavankumar Mulgund, Megha Malaviya, and Raj Sharman

Emotionally Responsive Virtual Counselor for Behavior-Change Health Interventions 433
Reza Amini, Christine Lisetti, and Ugan Yasavur

Green e-community: Sensemaking in Environmental Sustainability Transformations 438
Stefan Seidel, Leona Chandra, Nadine Reuter, Daniel Stieger, and Michael Gau

Task and Process Support in ERP Systems 443
Tamara Babaian, Wendy Lucas, and Jennifer Xu

Personalized Medication Adherence Motivating and Reminding System (PMAMRS) 448
Pavankumar Mulgund, Wencui Han, Raj Sharman, Abhiram Upadhya, Srikanth Reddy Bandi, Vishwanath Miriyapalli, Kunal Jiwane, Ranjit Singh, and Gurdev Singh

A Language-Independent Model Query Tool 453
Patrick Delfmann, Hanns-Alexander Dietrich, Jean-Marie Havel, and Matthias Steinhorst

Author Index 459