

**CENTERIS 2017 – Conference on
ENTERprise Information Systems / ProjMAN
2017 – International Conference on Project
MANagement / HCIST 2017 – International
Conference on Health and Social Care
Information Systems and Technologies**

Procedia Computer Science Volume 121

Barcelona, Spain
8 – 10 November 2017

Part 1 of 2

Editors:

**Maria Manuela Cruz-Cunha
Joao Eduardo Quintela Varajao
Rui Rijo
Ricardo Martinho**

**Joe Peppard
Jose Ramon San Cristobal
Josep Monguet**

ISBN: 978-1-5108-5592-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© by Elsevier B.V.
All rights reserved.

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact Elsevier B.V.
at the address below.

Elsevier B.V.
Radarweg 29
Amsterdam 1043 NX
The Netherlands

Phone: +31 20 485 3911
Fax: +31 20 485 2457

<http://www.elsevierpublishingsolutions.com/contact.asp>

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com



Table of Contents

Preface

Maria Manuela Cruz-Cunha, João Eduardo Varajão, Rui Rijo, Ricardo Martinho, Joe Peppard, José Ramón San Cristóbal, and Josep Monguet.....	1
Pictogram-based mobile first medical aid communicator Krzysztof Wołk, Agnieszka Wołk, Krzysztof Marasek, and Wojciech Glinkowski.....	3
Machine enhanced translation of the Human Phenotype Ontology project Krzysztof Wołk, and Agnieszka Wołk.....	11
Vocal Acoustic Analysis – Classification of Dysphonic Voices with Artificial Neural Networks João Paulo Teixeira, Paula Odete Fernandes, and Nuno Alves.....	19
A Continuous Approach to Improve IT Management Shuichiro Yamamoto.....	27
To Be The Hub or Not: Explaining the Diffusion of Communication Apps Kemal Altinkemer, and Stefan Koch.....	36
Conflict Management Style of Team Leaders in Multi-Cultural Work Environment in the Construction Industry Amin Akhavan Tabassi, David James Bryde, Aldrin Abdullah, and Maria Argyropoulou.....	41
The development of a hard and soft IT governance assessment instrument Daniël Smits, and Jos van Hillegersberg.....	47
Enablers for Considering Sustainability in Projects; the Perspective of the Supplier Rutger Peenstra, and Gilbert Silvius.....	55
A Heuristic Algorithm for Project Scheduling with Fuzzy Parameters Mohammad Khalilzadeh, Hedieh Shakeri, Hadis Gholami, and Leila Amini.....	63
Projects Selection and Prioritization: A Portuguese Navy pilot model Ricardo Simplicio, Jorge Gomes, and Mário Romão.....	72
Modelling Strategic Alignment of Business and IT through Enterprise Architecture: Augmenting Archimate with BMM Prithvi Bhattacharya.....	80
Motivations and Barriers for End-User Adoption of Bitcoin as Digital Currency Wanda Presthus, and Nicholas Owen O'Malley.....	89
Extending CMMN with entity life cycles Giorgio Bruno.....	98
Gamification of Enterprise Systems: A Lifecycle Approach Ola El-Telbany, and Ahmed Elragal.....	106
Key Issues for the Successful Adoption of Cloud Computing Teófilo Branco, Filipe de Sá-Soares, and Alfonso Lopez Rivero.....	115

Coordination in multi-team programmes: An investigation of the group mode in large-scale agile software development	
Torgeir Dingsøy, Knut Rolland, Nils Brede Moe, and Eva Amdahl Seim.....	123
An Agile Business Process Improvement Methodology	
Paula Ventura Martins, and Marielba Zacarias.....	129
Taxonomy of the project portfolio risks - an empirical investigation	
Hofman Mariusz, and Grela Grzegorz.....	137
Bridging IT requirements to competitive advantage: The concept of IT value planning	
Christof Gellweiler.....	145
Modeling Neutrosophic Data by Self-Organizing Feature Map: MANETs Data Case Study	
Haitham ELwahsh, Mona Gamal, A.A. Salama, and I.M. El-Henawy.....	152
Empirical thresholding logistic regression model based on unbalanced cardiac patient data	
Iris Reychav, Lin Zhu, Roger McHaney, and Yaron Arbel.....	160
The Effect of Representational UI Design Quality of Mobile Shopping Applications on Users' Intention to Shop	
Wonjin Jung.....	166
An Agile Business Process and Practice Meta-model	
Marielba Zacarias, Paula Ventura Martins, and António Gonçalves.....	170
Customized X-Learning Environment: Social Networks & knowledge-sharing tools	
Fernando Moreira, Anabela Mesquita, and Paula Peres.....	178
Analysis of knowledge transfer practices: Insights from a medical device manufacturing organization	
Vivian Doherty, and Kathryn Cormican.....	186
Business Intelligence and Analytics in Small and Medium-sized Enterprises: A Systematic Literature Review	
Marilex Rea Llave.....	194
Mobile Health to Support Ageing in Place: A Synoptic Overview	
Alexandra Queirós, Margarida Cerqueira, Milton Santos, and Nelson Pacheco Rocha.....	206
Exploring a Complexity Framework for Digital Inclusion Interventions	
Arturo Serrano-Santoyo, and Veronica Rojas-Mendizabal.....	212
Implementation of a risk management simulation tool	
Zakari Tsiga, Michael Emes, and Alan Smith.....	218
Critical success factors for projects in the petroleum industry	
Zakari Tsiga, Michael Emes, and Alan Smith.....	224
Risks of Abandonment in Residential Projects Caused by Subcontractors	
Borvorn Israngkura Na Ayudhya, and Masahiko Kunishima.....	232
Multimodal approach for polysensory stimulation and diagnosis of subjects with severe communication disorders	
A Czyzewski, B Kostek, A Kurowski, P Szczuko, M Lech, P Ody, and A Kwiatkowska.....	238
The customer effect in agile system development projects. A process tracing case study	
Bjørnar Tessem.....	244
Clinical Intelligence: A study on Corneal Transplantation	
Brian Carneiro, Filipe Portela, António Abelha, and Manuel Filipe Santos.....	252
Identifying New Directions in Database Performance Tuning	
Derek Colley, and Clare Stanier.....	260
Categorizing the Business Risks of Social Media	
Susan P. Williams, and Verena Hausman.....	266

Planning project closure phase in combined cycle power plant projects Shakib Zohrehvandi, Mohammad Khalilzadeh, Maryam Hajizadeh, and Esmail Cheraghi.....	274
Improving organizational decision support: Detection of outliers and sales prediction for a pharmaceutical distribution company Augusto Ribeiro, Isabel Seruca, and Natércia Durão.....	282
A survival analysis of the Japanese information service industry Seigo Matsuno, Yasuo Uchida, Tsutomu Ito, and Takao Ito.....	291
Why virtual teams work – State of the art Birgit Großer, and Ulrike Baumöl.....	297
A System for the Monitoring and Predicting of Data in Precision Agriculture in a Rose Greenhouse Based on Wireless Sensor Networks Schubert Rodríguez, Tatiana Gualotuña, and Carlos Grilo.....	306
An interactive thought visualization tool for insomnia treatment Begum Erten Uyumaz, Rosa Hendrikx, Laury Quaedackers, Loe Feijs, Mili DoCampo Rama, Sebastiaan Overeem, and Jun Hu.....	314
Information technology in the process of managing polypharmacy in elderly patients Emilia Sarmento, Carmem Leal, and M ^a João Monteiro.....	322
Sustainable roads in Serengeti National Park: - gravel roads construction and maintenance Michael Tarimo, Paulos Wondimu, James Odeck, Jarda Lohne, and Ola Lædre.....	329
Drivers and consequences of identity abuse in the AEC-industry Yara Louisa Richani, Ole Jonny Klakegg, and Jardar Lohne.....	337
Exploring ad-hoc portfolio management: Does it work, and is it the flexibility that supports project portfolio management? Adrian Hepworth, Fotios Misopoulos, Vicky Manthou, Ronald Dyer, and Roula Michaelides.....	345
Handling project dependencies in portfolio management Gozde Bilgin, Gorkem Eken, Beste Ozyurt, Irem Dikmen, M. Talat Birgonul, and Beliz Ozorhon.....	356
Value Driver and Its Impact on Operational Profit in Construction Company E Vítková, J Chovancová, and D Veselý.....	364
The Online Organization Tiago Santos, Ana Telha, and Carlos Páscoa.....	370
Development and validation of a pharmacoeconomic tool for decision making in the implementation of pharmaceutical care for hypertensive patients in the Brazilian public health system (SUS) Maurílio de Souza Cazarim, Rodrigo Reis, Olívia Wu, Rui Pedro Charters Lopes Rijo, André Luiz Teixeira Vinci, Domingos Alves, and Leonardo Régis Leira Pereira.....	376
What's the “Thing” in Internet of Things in Grocery Shopping? A Customer Approach Asle Fagerstrøm, Niklas Eriksson, and Valdimar Sigurðsson.....	384
A problem-centered analysis of enterprise social software projects Alexander Forstner, and Dietmar Nedbal.....	389
Best Value Procurement - The Practical Approach In The Netherlands Arnoud Storteboom, Paulos Wondimu, Jardar Lohne, and Ola Lædre.....	398
Very high resolution aerial data to support multi-temporal precision agriculture information management Luís Pádua, Telmo Adão, Jonáš Hruška, Joaquim J. Sousa, Emanuel Peres, Raul Morais, and António Sousa.....	407
Anomaly Detection in Roads with a Data Mining Approach Nuno Silva, João Soares, Vaibhav Shah, Maribel Yasmina Santos, and Helena Rodrigues.....	415

Analysis of the Documentation of ERP Software Projects Lerina Aversano, Daniela Guardabascio, and Maria Tortorella.....	423
Potential Stakeholders and Perceived Benefits of a Digital Health Innovation Ecosystem for the Namibian Context Gloria Ejeihohen Iyawa, Marlien Herselman, and Adele Botha.....	431
Success Factors for Business Process Improvement Projects in Small and Medium Sized Enterprises – Empirical Evidence Patrick Lückmann, and Carsten Feldmann.....	439
Multiscale modeling of comorbidity relations in hypertensive outpatients Nikita Bukhanov, Marina Balakhontceva, Sergey Kovalchuk, Nadezhda Zvartau, and Aleksandra Konradi.....	446
A Method for Measuring the Success of Collaborative University-Industry R&D Funded Contracts Gabriela Fernandes, Eduardo B. Pinto, Madalena Araújo, Pedro Magalhães, and Ricardo J. Machado.....	451
Gender influence in project management: analysis of a case study based on master students P. Rodríguez, V.R. Montequín, H. Morán, and L. de Arriba.....	461
Improving Electronic Medical Records with Support of Human Computer Interaction in Medical Information Systems Ekaterina V. Bolgva, Nadezhda E. Zvartau, Sergey V. Kovalchuk, Marina A. Balakhontceva, and Oleg G. Metsker.....	469
Improvement of Processes in Managing the Organizational Climate and Work-Related Quality of Life in a Public-Sector Research Company Marcos Ferreira, Saulo Barbará de Oliveira, Andre Yves Cribb, and Marcelo Sales Ferreira.....	475
Business Intelligence Success applied to Healthcare Information Systems Rikke Gaardboe, Tom Nyvang, and Niels Sandalgaard.....	483
Does it Matter the Loss of Tacit Knowledge in IT Outsourcing? A study in a Swedish Governmental Agency Georg Hodosi, Daniel Johansson, and Lazar Rusu.....	491
Rethinking Project Management Education: A Humanistic Approach based on Design Thinking Natalie Ewin, Jo Luck, Ritesh Chugh, and Jacqueline Jarvis.....	503
Development and proposal of a reference tool for semi-structured interviews for the characterization of the management in mental health networks André Luiz Teixeira Vinci, Rui Pedro Charters Lopes Rijo, João Mazzoncini de Azevedo Marques, and Domingos Alves.....	511
The relationship between young consumers’ decision-making styles and propensity to shop clothing online with a smartphone Niklas Eriksson, Carl-Johan Rosenbröijer, and Asle Fagerstrøm.....	519
Challenges in Integrating Product-IT into Enterprise Architecture – a case study Kaidalova Julia, Sandkuhl Kurt, and Seigerroth Ulf.....	525
A Multi-model Approach in Developing an Intelligent Assistant for Diagnosis Recommendation in Clinical Health Systems Christian E. Pulmano, and Ma. Regina Justina E. Estuar.....	534
Towards an Unified Information Systems Reference Model for Higher Education Institutions Felix Sanchez-Puchol, Joan A. Pastor-Collado, and Baptista Borrell.....	542
Infodemiology for Syndromic Surveillance of Dengue and Typhoid Fever in the Philippines Kennedy Espina, and Ma. Regina Justina E. Estuar.....	554
The Privacy Paradox in the Data-Driven Marketplace: The Role of Knowledge Deficiency and Psychological Distance Ruwan Bandara, Mario Fernando, and Shahriar Akter.....	562

A Comparison of Cybersecurity Risk Analysis Tools Gabriela Roldán-Molina, Mario Almache-Cueva, Carlos Silva-Rabadão, Iryna Yevseyeva, and Vitor Bas- to-Fernandes.....	568
Iconography's development for a seniors' iTV informative platform Telmo Silva, Hilma Caravau, Liliana Reis, and Pedro Almeida.....	576
Automatic creation of informative TV videos to be delivered through iTV: a system architecture Telmo Silva, Martinho Mota, Carlos Hernández, and Jorge Ferraz de Abreu.....	584
PMO Conceptualization for Engineering and Construction Businesses Catarina Oliveira, Anabela Tereso, and Gabriela Fernandes.....	592
Embracing Paradox and Conflict: Towards a Conceptual Model to drive Project Portfolio Ambidexterity Clare O'Dwyer, Breda Sweeney, and Kathryn Cormican.....	600
A mathematical Model to select the Risk Response Strategies of the Construction Projects: Case Study of Saba Tower Esmail Cheraghi, Mohammad Khalilzadeh, Sirous Shojaei, and Shakib Zohrehvandi.....	609
Can a small city be considered a smart city? Isabel Maria Lopes, and Pedro Oliveira.....	617
Contribution of talent analytics in change management within project management organizations The case of the French aerospace sector Julie N'Cho.....	625
Simulation Of The Influence Of Different Ways Of Setting The Restraint On Value Of Construction Company J. Korytarova, B. Puchyr, K. Bozikova, and M. Spiroch.....	630
Enterprise Architecture management challenges in the Norwegian health sector Dag H. Olsen.....	637
A multi-objective fuzzy project selection problem considering social responsibility and risk Mohammad Khalilzadeh, and Kayvan Salehi.....	646
Governance lifecycles of inter-organizational collaboration: A case study of the Port of Rotterdam Dissa R. Chandra, and Jos van Hillegersberg.....	656
Measures to counteract work-related crime – airport developments in Norway Marianne Skovly, Alida R. Mørenskog, Atle Engebø, Ola Lædre, and Jardar Lohne.....	664
A study to understand the acceptance of DICOM Structured Reports on Breast Imaging Liliana Tribuna, Augusto Silva, Pedro Sá Couto, and Luis Bastião.....	672
Exploring mechanisms underlying lock-in in large infrastructure projects: A management perspective Ermal Hetemi, Joaquin Ordieres Mere, Cali Nuur, and Mats Engwall.....	681
Project Planning and Control in Social and Solidarity Economy Organizations: A Literature Review Thierry Marier-Bienvenue, Robert Pellerin, and Luc Cassivi.....	692
Automated lineament analysis to assess the geodynamic activity areas Zhantayev Zhumabek, Bibossinov Assylkhan, Fremd Alexandr, Talgarbayeva Dinara, and Kikkarina Altynay.....	699
Differences in ERP Value between Iberian Manufacturing and Services SMEs Pedro Ruivo, Jorge Robrigues, Björn Johansson, Tiago Oliveira, and Jorge Rebelo.....	707
Sourcing Trends Predictions – An Analysis of Regions and Strategies Björn Johansson, Oskar Hallén, Andreas Persson, and Rasmus Tarland.....	716

Evaluation of Open Source Medical Imaging Software: A Case Study on Health Technology Student Learning Experience Kari Björn.....	724
Investigating Schedule Deviation in Construction Projects through Root Cause Analysis Pei-Yuan Hsu, Marco Aurisicchio, and Panagiotis Angeloudis.....	732
A framework for Business Process Data Management based on Big Data Approach Asma Hassani, and Sonia Ayachi Gahnouchi.....	740
SISPRENACEL – mHealth tool to empower PRENACEL strategy Livia Oliveira-Ciabati, Domingos Alves, Francisco Barbosa-Junior, Elisabeth Meloni Vieira, and João Paulo Souza.....	748
The S-curve envelope as a tool for monitoring and control of projects J.R. San Cristóbal.....	756
Complexity in Project Management J.R. San Cristóbal.....	762
Towards KPI-Based Health Care Process Improvement Emna Ammar El Hadj Amor, and Sonia Ayachi Ghannouchi.....	767
Big Data, Analytic Culture and Analytic-Based Decision Making Evidence from Australia Usarat Thirathon, Bernhard Wieder, Zoltan Matolcsy, and Maria-Luise Ossimitz.....	775
The Impact of Integration Quality on Customer Equity in Data Driven Omnichannel Services Marketing Tasnim M Taufique Hossain, Shahriar Akter, Uraiporn Kattiyapornpong, and Samuel Fosso Wamba.....	784
Development and evaluation of an interoperable system based on the semantic web to enhance the management of patients' tuberculosis data Felipe Carvalho Pellison, Rui Pedro Charters Lopes Rijo, Vinícius Costa Lima, Ricardo Roberto de Lima, Ricardo Martinho, Ricardo João Cruz Correia, and Domingos Alves.....	791
Automated Medical Articles Analysis for Human Genetic Diagnostic Emilia Zawadzka, Krzysztof Wolk, and Krzysztof Marasek.....	797
From guidelines to decision-making: using mobile applications and semantic web in the practical case of guides to support patients Vinicius Costa Lima, Rui Pedro Chartes Lopes Rijo, Felipe Carvalho Pellison, Ricardo Roberto de Lima, Ricardo João Cruz Correia, Henrique Tresmonde Giuriati, and Domingos Alves.....	803
A Ground-Up Approach to mHealth in Nigeria: A Study of Primary Healthcare Workers' Attitude to mHealth Adoption Grace Kenny, Yvonne O'Connor, Emmanuel Eze, Edmund Ndibuagu, and Ciara Heavin.....	809
The current state of fake news: challenges and opportunities Álvaro Figueira, and Luciana Oliveira.....	817
Improving the benchmarking of social media content strategies using clustering and KPI Luciana Oliveira, and Álvaro Figueira.....	826
Data-driven modeling of clinical pathways using electronic health records Anastasia A. Funkner, Aleksey N. Yakovlev, and Sergey V. Kovalchuk.....	835
Quality Assessment of an Emergency Care Process Model based on Static and Dynamic Metrics Ghada Haouari, and Sonia Ayachi Ghannouchi.....	843
Towards Identifying of Effective Personalized Antihypertensive Treatment Rules from Electronic Health Records Data Using Classification Methods: Initial Model Anna Semakova, Nadezhda Zvartau, Klavdiya Bochenina, and Aleksandra Konradi.....	852

User resistance in ERP implementations: A literature review Moutaz Haddara, and Henrik Moen.....	859
IRESS: Identification of Requirements for Enterprise Social Software Johannes H. Glitsch, and Petra Schubert.....	866
Towards the development of a methodology for managing industrialization projects Deborah Perrotta, Madalena Araújo, Gabriela Fernandes, Anabela Tereso, and João Faria.....	874
Proposal of a gold standard database model of adverse drug reactions reports Lídia Maria Lourençon Rodrigues, Fabricio Alves Barbosa da Silva, Ricardo João Cruz Correia, Rui Pedro Charters Lopes Rijo, and Domingos Alves.....	883
Satisfaction evaluation of health professionals in the usability of software for monitoring the tuberculosis treatment Nathalia Yukie Crepaldi, Inácia Bezerra de Lima, Fernanda Bergamini Vicentine, Lídia Maria Lourençon Rodrigues, Verena Hokino Yamaguti, Tiago Lara Michelin Sanches, Antonio Ruffino-Netto, Domingos Alves, and Rui Pedro Charters Lopes Rijo.....	889
Data quality in tuberculosis: the case study of two ambulatories in the state of São Paulo, Brazil Verena Hokino Yamaguti, Fernanda Bergamini Vicentine, Inacia Bezerra de Lima, Laís Zago, Lídia Maria Lourençon Rodrigues, Domingos Alves, Nathalia Yukie Crepaldi, Rui Pedro Charters Lopes Rijo, and Antonio Ruffino-Netto.....	897
Social Network of Business Objects (SoNBO): An Innovative Concept for Information Integration in Enterprise Systems Bernd Gewehr, Berit Gebel-Sauer, and Petra Schubert.....	904
Development of the Intelligent Platform of Technical Systems Modernization at Different Stages of the Life Cycle A.V. Matokhina, A.V. Kizim, D.E. Skvaznikov, A.A. Aleshkevich, V.P. Malikov, and D.A. Kravchenko....	913
Design of a Knowledge-Based Agent as a Social Companion Leo Wanner, Elisabeth André, Josep Blat, Stamatia Dasiopoulou, Mireia Farrús, Thiago Fraga, Eleni Kamateri, Florian Lingenfelser, Gerard Llorach, Oriol Martínez, Georgios Meditskos, Simon Mille, Wolfgang Minker, Louisa Pragst, Dominik Schiller, Andries Stam, Ludo Stellingwerff, Federico Sukno, Bianca Vieru, and Stefanos Vrochidis.....	920
IT Governance Structures in Brazilian, Dutch and Portuguese Universities Isaias Scalabrin Bianchi, Rui Dinis Sousa, Rúben Pereira, and Edimara Luciano.....	927
Acceptance criteria in a Promotional Tourism Demarketing Plan Maria José Magalhães, Sérgio Tenreiro de Magalhães, Carlos Rodrigues, and Susana Marques.....	934
How to sort trustworthy health online information? Improvements of the automated detection of HONcode criteria Célia Boyer, Cédric Frossard, Arnaud Gaudinat, Allan Hanbury, and Gilles Falquetd.....	940
ERP II is Dead- Long Live CRM Moutaz Haddara, and Angelo Constantini.....	950
From water to energy: low cost water & energy consumptions readings António Cunha, Elisabete Silva, Francisco Pereira, Ana Briga-Sá, and Sandra Pereira.....	960
Exploring User Behaviours when Providing Electronic Consent on Health Social Networks: A ‘Just Tick Agree’ Approach W. Rowan, Y. O’Connor, L. Lynch, and C. Heavin.....	968
Organisational factors affecting cloud computing adoption in small and medium enterprises (SMEs) in service sector Haslinda Hassan.....	976

Forum participation plugin for Moodle: Development and Discussion Andrés Muñoz, Ramiro Delgado, Enrique Rubio, Carlos Grilo, and Vitor Basto-Fernandes.....	982
Standardization and Modularization of Prisons Andreas Økland, Agnar Johansen, Teresa Beste, and Endre Gjesteby.....	990
Knowledge sharing at the construction sector – facilitators and inhibitors Carmem Leal, Sandra Cunha, and Iolanda Couto.....	998
Extracting and Conserving Production Data as Test Cases in Executable Business Process Architectures Daniel Lübke.....	1006
Modelling IoT behaviour within BPMN Business Processes Francisco Martins, and Dulce Domingos.....	1014
Specification for the cooperative dimension of the Bid Process Information System Sahbi Zahaf, and Faiez Gargouri.....	1023
The Temporal Dimension of Business Processes - Dealing with Time Constraints José Luis Pereira, and João Varajão.....	1034
The Acceptance of Cloud Computing for IT Workers in Thailand Sureerut Inmor, and Rungsun Suwannahong.....	1039
IT/IS Outsourcing in Large Companies – Motivations and Risks João Varajão, Maria Manuela Cruz-Cunha, and Maria da Glória Fraga.....	1047
Why is Empowerment Important in Big Data Analytics? Saradhi Motammarri, Shahriar Akter, Venkata Yanamandram, and Samuel Fosso Wamba.....	1062
Learning by doing: Public and private search for quick delivery and sustainability in building projects Andreas Økland, Agnar Johansen, Eli Tufto, and Iver-Erik Kylling.....	1072
Pursuing Value Creation in Construction by Research -A Study of Applied Research Methodologies Amin Haddadi, Ali Hosseini, Agnar Johansen, and Nils Olsson.....	1080
Relational base contracts – Needs and trends in Northern Europe Ali Hosseini, Amin Haddadi, Bjørn Andersen, Nils Olsson, and Ola Lædre.....	1088
BPFlexTemplate: a software tool to derive flexible process model templates Latifa Ilahi, Ricardo Martinho, and Sonia Ayachi Ghannouchi.....	1096
Knowledge Discovery from Surgical Waiting lists Cristiana Neto, Hugo Peixoto, Vasco Abelha, António Abelha, and José Machado.....	1104
Virtual Enterprise integration management based on a Meta-enterprise – a PMBoK approach L. Ferreira, N. Lopes, P.S. Ávila, H. Castro, M.L.R. Varela, G.D. Putnik, R. Martinho, R. Rijo, I.M. Miranda, and M.M. Cruz-Cunha.....	1112
BPMN4KM: Design and Implementation of a BPMN Extension for Modeling the Knowledge Perspective of Sensitive Business Processes Mariam Ben Hassen, Molka Keskes, Mohamed Turki, and Faïez Gargouri.....	1119