11th International Conference on Strategic Management and Its Support by Information Systems 2015

Uherske Hradiste, Czech Republic
21-22 May 2015

Editors:

Radek Němec
František Zapletal

ISBN: 978-1-5108-0385-5

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© (2015) by VŠB - Technical University of Ostrava
All rights reserved.

Printed by Curran Associates, Inc. (2015)

For permission requests, please contact VŠB - Technical University of Ostrava
at the address below.

VŠB - Technical University of Ostrava
Sokolská třída 33, 701 21 Ostrava
Czech Republic

Phone: +420 59 732 2312
Fax: +420 59 732 2300

Konference_smsis@vsb.cz

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

SECTION A

Strategic management

Use of AHP Method for the Synthesis of External Strategic Analysis Results 14

Terezie Bartusková

Use of Saaty´s Matrix by Performance Employee Measuring at the University Department 25

Blanka Bazsová

Information Chaos, Risk Management and Cyber Security 36

Jan Čapek

Information Support for Sales Management in the Company OKD a.s. 46

Roman Danel, Roman Kozel, Jakub Chlopecký, Šárka Vilamová, Marian Piecha

Startup Ecosystem in the Czech Republic 55

Vladimír Krajčík

Managing customer relations: the use of CRM system by services company 66

Marcin Lis, Katarzyna Szczepańska-Woszczyna

Strategic information system as a tool for restructuring of companies facing global crisis situation 76

Dušan Mežnar

Competency model of crisis manager 83

Marie Mikušová, Andrea Čopíková

Attitude of Slovenian Secondary School Students to Environmental Problems 92

Marjan Senegačnik, Alenka Baggia, Anja Žnidaršič, Anja Komatar, Drago Vuk

Challenges in Online Marketing Management: A Study of Czech Companies in the Environment of Internet-based Services 100
Zdeněk Smutný

Utilization of DEMATEL Method in Corporate Social Responsibility 108
Štěpánka Staňková

Are Decision Trees Suitable Tool for Strategic Decision-making? 118
Lenka Švecová, Radovan Kačín

Use of Classification Methods in Exploring How Customers Shop for Meat Products 125
Pavel Turčínek, Arnošt Motyčka

SECTION B

Project management, program management and portfolio management

Combination of Traditional and Agile Methodologies for Efficient Management of ICT Projects 134
Andrej Miklošík

A computational intelligence approach to predicting new product success 142
Marcin Relich

Modification of the Use of Balanced Scorecard in SMEs 151
Petr Rozehnal

Matrix Organization for Project Management 160
Petr Řeháček

SECTION C

Quantitative methods in management

Prioritizing strategies and ranking executive methods by QFD and fuzzy QSPM-Gap analysis 167
Sasan Barak, Mehdi Toloo

Effects of (dis)continuity of the optimal value function in LP: Two applications 176
Michal Černý

(G)ARCH-RBF Modelling of Conditional Volatility in Finance 183
Lukáš Falát, Dušan Marček

Multiple Selections of Alternatives under Constraints based on DEA Results: Case Study of Slovak Higher Education Institutions 192
Andrea Furková, Květoslava Surmanová

Timetable Optimalization for Charter Air Transport Company 200
Vojtěch Graf, Dušan Teichmann

The impact of inclusion of non-traditional activities on efficiencies in European banking industry using the CCR-I model 208
Jana Hančlová, Lucie Chytilová

Managing fuzziness of real world in business informatics 221
Miroslav Hudec

Dynamic Interactions between Stock Returns and Exchange Rate Returns in the Czech Republic 229
Michaela Chocholatá

Radial approach to emergency system designing under uncertainty 237
Jaroslav Janáček

Efficiency Evaluation of Student Mobility in the Framework of ERASMUS at EkF VŠB-TUO Based on DEA Approach 245
Mária Jašková, Jitka Baňařová, Lucie Chytilová

Features weights optimization using metaheuristics 258
Nikola Kaspříková

Fuzzy control and monetary policy rule 266
Jan Kodera, Quang Van Tran

The use of linear programming in solving service tasks of mixed transport networks 274
Petr Kozel, Šárka Michalcová

Production efficiency of ICT sectors in the EU: A stochastic frontier analysis approach 280
Jan Manďák

Production in Industry and Prices of Emission Allowances' Predictability 288
Silvia Pastoreková, František Zapletal

Asymmetric Volatility in Asian Stock Market: Impact of Global Financial Crisis 296
Petr Seďa, Juan Antonio Jimber del Rio

Do gender and personality traits influence awareness of deal sites? 304
František Sudzina

Optimization of Railway Traffic Performance in Cross-border Sections 309
Dušan Teichmann, Michal Dorda

Fuzzy Optimization of Industrial Companies' Profit under Environmental Factors 318
František Zapletal

Monetary policy during the business cycle 329
Jana Závacká

The Influence of Number of Assets on Risk Measure 339
Kateřina Zelinková

SECTION D

Design and implementation of information systems

Exploring factors that influence information security awareness implementation and maintenance 348
Ladislav Beránek

Applying Kano model into goal/requirements elicitation for crossplatform mobile content technology 356
Jakub Duda, Maciej Rostański, Wojciech Borczyk, Krzysztof Grochla

Object Role Modeling Perspective Applied to Business Process Modeling 366
František Huňka

Process Management and IT Process Support at the University of Maribor 372
Tomaž Kern, Maja Zajec, Benjamin Urh, Matjaž Roblek

Proposal of Trend Database supporting corporate foresight process 383
Ludmila Kováříková, Stanislava Grosová

A survey and assessment of maturity models for big data adoption 391
Maria Mach-Król

SYNC-PROC Composition Operator of P/T Petri Process Nets 400
Ivo Martiník

Measuring Agile Software Development 411
Jan Ministr, Tomáš Pitner, Juraj Šoltés

ICT Professionals in the Czech Economy, Structural Changes in Human Resources 419
Lea Nedomová, Petr Doucek, Miloš Maryška

Comparison of multidimensional database schema querying results using ordered and unordered dimensional attributes data 431
Radek Němec

Application of selected classification and clustering methods on the database query categorization 439
Radek Němec, František Zapletal

Possibilities of using CASE tools for designing Microsoft Excel tables 447
Vítězslav Novák

“Big data” from the perspective of data sources 454
Antonín Pavlíček, Richard Novák

Security Aspects of PaaS Cloud Model 463
Tomáš Pitner, Jan Ministr

Internet of Things: Big Challenge for Enterprises 470
Martin Pochyla

Personal Relationships Identification in Unstructured Data 478
Jaroslav Ráček, Josef Daňa, Matúš Fristik

Innovation of complex information systems – 2nd generation ERP at universities 484
Milena Tvrdíková