Business Intelligence:
Concepts, Methodologies, Tools, and Applications

Information Resources Management Association
USA

Volume II
Volume II

Section 3
Tools and Technologies

This section presents an extensive coverage of various tools and technologies available in the field of business intelligence that practitioners and academicians alike can utilize to develop different techniques. These chapters enlighten readers about fundamental research on the many tools facilitating the burgeoning field of business intelligence. It is through these rigorously researched chapters that the reader is provided with countless examples of the up-and-coming tools and technologies emerging from the field of business intelligence. With 15 chapters, this section offers a broad treatment of some of the many tools and technologies within the business intelligence field.

Chapter 30
Integrating Business Intelligence Services in the Cloud: A Conceptual Model...............................572
Volker Herwig, University for Applied Sciences at Erfurt, Germany
Kristof Friess, University for Applied Sciences at Erfurt, Germany

Chapter 31
Swee-Mei Chin, Multimedia University, Malaysia
Su-Cheng Haw, Multimedia University, Malaysia
Fang-Fang Chua, Multimedia University, Malaysia

Chapter 32
Information Retrieval Technologies and the “Realities” of Music Information Seeking ..................612
Charilaos Lavranos, Ionian University, Greece
Petros Kostagiolas, Ionian University, Greece
Joseph Papadatos, Ionian University, Greece

Chapter 33
A Formative Evaluation of Rendezvous: A Platform for Knowledge Sharing and Entertainment.....632
Alton Y.K. Chua, Nanyang Technological University, Singapore
Chapter 34
A Fireworks Algorithm for Modern Web Information Retrieval with Visual Results Mining
Hadj Ahmed Bouarara, Tahar Moulay University of Saida Algeria, Algeria
Reda Mohamed Hamou, Tahar Moulay University of Saida Algeria, Algeria
Abdelmalek Amine, Tahar Moulay University of Saida Algeria, Algeria
Amine Rahmani, Tahar Moulay University of Saida Algeria, Algeria

Chapter 35
Computer-Aided Deductive Critical Discourse Analysis of a Case Study from Mauritius with ATLAS-ti 6.2
Komalsingh Rambaree, University of Gävle, Sweden

Chapter 36
Visualization of High-Level Associations from Twitter Data
Luca Cagliero, Politecnico di Torino, Italy
Naeem A. Mahoto, Politecnico di Torino, Italy

Chapter 37
Information Retrieval (IR) and Extracting Associative Rules
Asmae Dami, Sultan Moulay Slimane University, Morocco
Mohamed Fakir, Sultan Moulay Slimane University, Morocco
Belaid Bouikhalene, Sultan Moulay Slimane University, Morocco

Chapter 38
Validating a Model Predicting Retrieval Ordering Performance with Statistically Dependent Binary Features
Robert M. Losee, University of North Carolina, USA

Chapter 39
A Tool for GIS Based Risk Analysis for Transportation of Dangerous Goods on Road (the RAGISADR): A Case Study for Fuel Products
Serhan Karabulut, Turkish Land Forces, Turkey
Ebru V. Ocalir-Akunl, Gazi University, Turkey

Chapter 40
The Use of Arabic WordNet in Arabic Information Retrieval
Ahmed Abbache, University of Oran 1, Algeria
Fatima Barigou, University of Oran 1, Algeria
Fatma Zohra Belkredim, University Hassiba Ben bouali of Chlef, Algeria
Ghalem Belalem, University of Oran 1, Algeria

Chapter 41
Authenticity in Online Knowledge Sharing: Experiences from Networks of Competence Meetings
Inge Hermanrud, Hedmark University College, Norway
Chapter 42
ConChi: Pattern Change Mining from Mobile Context-Aware Data
Luca Cagliero, Politecnico di Torino, Italy

Chapter 43
Social Networks Discovery Based on Information Retrieval Technologies and Bees Swarm Optimization: Application to DBLP
Yassine Drias, USTHB, LRIA, Algeria
Habiba Drias, USTHB, LRIA, Algeria

Chapter 44
Effectiveness of Visualization for Information Retrieval through Ontologies with Entity Evolution: The Impact of Ontology Modeling
Akrivi Katifori, National and Kapodistrian University of Athens, Greece
Costas Vassilakis, University of Peloponnese, Greece
George Lepouras, University of Peloponnese, Greece
Elena Torou, National and Kapodistrian University of Athens, Greece

Section 4
Utilization and Application
This section discusses a variety of applications and opportunities available that can be considered by practitioners in developing viable and effective business intelligence programs and processes. This section includes 18 chapters that review topics from case studies to best practices and ongoing research. Further chapters discuss business intelligence in a variety of settings. Contributions included in this section provide excellent coverage of today's IT community and how research into business intelligence is impacting the social fabric of our present-day global village.

Chapter 45
A Case Study of a Knowledge-Sharing Web-Based Platform for Energy Education
Mei-Chen Chang, National Science and Technology Museum, Taiwan
Yao-Ming Chu, National Kaohsiung Normal University, Taiwan

Chapter 46
The Importance of Visualization and Interaction in the Anomaly Detection Process
Maria Riveiro, Informatics Research Centre, University of Skövde, Skövde, Sweden

Chapter 47
Detection of Non-Technical Losses: The Project MIDAS
Juan I. Guerrero, Universidad de Sevilla, Spain
Íñigo Monedero, Universidad de Sevilla, Spain
Félix Biscarri, Universidad de Sevilla, Spain
Jesús Biscarri, Universidad de Sevilla, Spain
Rocío Millán, Universidad de Sevilla, Spain
Carlos León, Universidad de Sevilla, Spain
Chapter 48
A Comparative Study on Medical Diagnosis Using Predictive Data Mining: A Case Study .......... 923
Seyed Jalaleddin Mousavirad, University of Kashan, Iran
Hossein Ebrahimpour-Komleh, University of Kashan, Iran

Chapter 49
Knowledge Sharing for Improving Effectiveness of University-Industry Collaborations .......... 955
Leila Nemati-Anaraki, Islamic Azad University, Iran
Azadeh Heidari, Islamic Azad University, Iran

Chapter 50
From Project's Information Management to Project-Based Organizational Learning: The Role of Knowledge Sharing ........................................................................................................... 973
Maria Almeida, University of Porto, Portugal
António Lucas Soares, University of Porto, Portugal

Chapter 51
A Study on a Combined Model in Business Intelligence for Improving Electronic Insurance .... 994
Mahdi Bazargani, Islamic Azad University, Iran
Elnaz Namazi, Islamic Azad University, Iran

Chapter 52
Enablers and Barriers of Knowledge Sharing for Offshore Outsource ISD Project: A Case Study .......................................................... 999
Hans Solli-Sæther, BI Norwegian Business School, Norway
Jan Terje Karlsen, BI Norwegian Business School, Norway

Chapter 53
Assessing the Usefulness of Testing for Validating and Correcting Security Risk Models Based on Two Industrial Case Studies .................................................................................. 1016
Gencer Erdogan, SINTEF ICT, Norway & University of Oslo, Norway
Fredrik Seehusen, SINTEF ICT, Norway
Ketil Stølen, SINTEF ICT, Norway & University of Oslo, Norway
Jon Hofstad, EVRY, Norway
Jan Øyvind Aagedal, Accurate Equity, Norway

Chapter 54
Recognising Influences on Attitudes to Knowledge Sharing in a Research Establishment: An Interpretivist Investigation ........................................................................................................... 1038
Penny Hart, University of Portsmouth, UK

Chapter 55
A Proposal to Study of Cross Language Information Retrieval (CLIR) System Users' Information Seeking Behavior .......................................................... 1059
YooJin Ha, Clarion University, USA
Chapter 56
Predictive Analytics of Social Networks: A Survey of Tasks and Techniques
Ming Yang, Kansas State University, USA
William H. Hsu, Kansas State University, USA
Surya Teja Kallumadi, Kansas State University, USA

Chapter 57
On The Reuse of Past Searches in Information Retrieval: Study of Two Probabilistic Algorithms
Claudio Gutiérrez-Soto, Université de Toulouse, France & Universidad del Bío, Chile
Gilles Hubert, Université de Toulouse, France