Data Warehousing and Web Engineering

Table of Contents

Foreword .............................................................................................................................. vii
    Shirley Becker
    Florida Institute of Technology, USA

Preface .................................................................................................................................. ix

Chapter 1. An Introduction to Information Technology and Business Intelligence ................................................................................................................................. 1
    Stephan Kudyba, Economic Consultant, USA
    Richard Hoptroff, Consultant, The Netherlands

Chapter 2. Some Issues in Design of Data Warehousing Systems........................................................................................................................ 22
    Ladjel Bellatreche and Kamalakar Karlapalem
    University of Science Technology, Hong Kong
    Mukesh Mohania, Western Michigan University, USA

Chapter 3. Benchmarking Data Mining Algorithms ......................................................... 77
    Balaji Rajagopalan, Oakland University, USA
    Ravi Krovi, University of Akron, USA

Chapter 4. Justifying Data Warehousing Investments .................................................... 100
    Ram L. Kumar, University of North Carolina-Charlotte, USA

Chapter 5. Data Mining: A New Arsenal for Strategic Decision-making ......................... 103
    Sufi M. Nazem and Bongsik Shin
    University of Nebraska-Omaha, USA

Chapter 6. What’s in a Name? Exploring the Metaphysical Implications of Data Warehousing in Concept and Practice ............................................. 113
    Elizabeth J. Davidson, University of Hawaii-Manoa, USA

Chapter 7. Incremental Data Allocation and Reallocation in Distributed Database Systems ..................................................................................................................... 137
    Amita Goyal Chin, Virginia Commonwealth University, USA
Chapter 8. Using Business Rules Within a Design Process of Active Databases
Youssef Amghar, Madjid Meziane and Andre Flory
National Institute of Applied Sciences, France

Chapter 9. A Methodology for Datawarehouse Design: Conceptual Modeling
Jose Maria Cavero and Esperanza Marcos,
Universidad Rey Juan Carlos, Spain
Mario Piattini, Universidad de Castilla-La Mancha, Spain
Adolfo Sanchez, Cronos Iberica, Spain

Chapter 10. Assessing and Improving the Quality of Knowledge Discovery Data
Herna L. Viktor and Niek F. du Plooy
University of Pretoria, South Africa

Chapter 11. Complementing the Data Warehouse with Information Filtered from the Web
Witold Abramowicz, Pawel Jan Kaczynski and Krzysztof Wecel
The Poznan University of Economics, Poland

Chapter 12. Justification of Data Warehousing Projects
Reinhard Jung and Robert Winter
University of St. Gallen, Switzerland

Chapter 13. A Survey of Spatial Data Mining Methods Databases and Statistics Point of Views
Karine Zeitouni, University of Versailles

Chapter 14. Efficient Query Processing with Structural Join Indexing in an Object Relational Data Warehousing Environment
Vivekanand Gopalkrishnan and Qing Li, City University of Hong Kong, China
Kamalakar Karlapalem, University of Science and Technology, Hong Kong, China

Chapter 15. An Electronic Commerce Framework for Small and Medium Enterprises
Anne Banks Pidduck, University of Waterloo-Ontario, Canada
Quang Ngoc Tran, TurboLinux
Chapter 16. The VLEG Based Production and Maintenance Process for Web-based Learning Applications ........................................................266
   Jorg Schellhase and Udo Winand
   Universitat Gh Kassel, Fachbereich Wirtschaftswissenschaften

Chapter 17. Specification of Components Based on the WebComposition Component Model ...........................................................................275
   Martin Gaedke, University of Karlsruhe, Germany
   Klaus Turowski, University of Federal Armed Forces, Germany

Chapter 18. The Development of Ordered SQL Packages to Support Data Warehousing .................................................................285
   Wilfred Ng, Hong Kong University of Science and Technology, China
   Mark Levene, University of London, United Kingdom

About the Editor ......................................................................................312

Index ..........................................................................................................313