

1. Record Nr.	UNINA9910298988003321
Autore	Vaisman Alejandro
Titolo	Data Warehouse Systems : Design and Implementation // by Alejandro Vaisman, Esteban Zimányi
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-54655-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XVI, 625 p. 133 illus.)
Collana	Data-Centric Systems and Applications, , 2197-974X
Disciplina	658.40380285574
Soggetti	Database management Information storage and retrieval systems Information technology - Management Database Management Information Storage and Retrieval Business IT Infrastructure Computer Application in Administrative Data Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I Fundamental Concepts -- 1 Introduction -- 2 Database Concepts -- 3 Data Warehouse Concepts -- 4 Conceptual Data Warehouse Design -- 5 Logical Data Warehouse Design -- 6 Querying Data Warehouses -- Part II Implementation and Deployment -- 7 Physical Data Warehouse Design -- 8 Extraction, Transformation and Loading -- 9 Data Analytics: Exploiting the Data Warehouse -- 10 A Method for Data Warehouse Design -- Part III Advanced Topics -- 11 Spatial Data Warehouses -- 12 Trajectory Data Warehouses -- 13 New Data Warehouse Technologies -- 14 Data Warehouses and the Semantic Web -- 15 Conclusion.
Sommario/riassunto	With this textbook, Vaisman and Zimányi deliver excellent coverage of data warehousing and business intelligence technologies ranging from the most basic principles to recent findings and applications. To this end, their work is structured into three parts. Part I describes "Fundamental Concepts" including multi-dimensional models; conceptual and logical data warehouse design; and MDX and

SQL/OLAP. Subsequently, Part II details “Implementation and Deployment,” which includes physical data warehouse design; data extraction, transformation, and loading (ETL); and data analytics. Lastly, Part III covers “Advanced Topics” such as spatial data warehouses; trajectory data warehouses; semantic technologies in data warehouses; and novel technologies like MapReduce, column-store databases, and in-memory databases. As a key characteristic of the book, most of the topics are presented and illustrated using application tools. Specifically, a case study based on the well-known Northwind database illustrates how the concepts presented in the book can be implemented using Microsoft Analysis Services and Pentaho Business Analytics. All chapters are summarized using review questions and exercises to support comprehensive student learning. Supplemental material to assist instructors using this book as a course text is available at <http://cs.ulb.ac.be/DWSDIbook/>, including electronic versions of the figures, solutions to all exercises, and a set of slides accompanying each chapter. Overall, students, practitioners and researchers alike will find this book the most comprehensive reference work on data warehouses, with key topics described in a clear and educational style.
