

METADATA

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Abstract

Business Intelligence, i.e. the application of advanced techniques for business data analysis and decision support, is a cutting-edge technology that is rapidly gaining interest in the business world. In the past, Business Intelligence was identified with traditional Decision Support Systems. Later, Data Warehouses and OLAP techniques enriched the range of techniques used. Today, with the establishment of the Data Mining industry, unprecedented opportunities are available for knowledge discovery, decision-making improvement, and business management enhancement. The proposed textbook is aimed at future business executives. Its purpose is to familiarize the reader with the capabilities and applied methodologies of modern Business Intelligence. The subject matter of the textbook is also quite broad. First, the basic concepts of Business Intelligence are discussed. Next,

traditional Decision Support Systems are presented. One chapter deals with the problems of Business Intelligence project management. Various types of models for conducting analyses are the subject of an additional chapter. This is followed by a section on Data Warehouses and OLAP techniques. Particular emphasis is placed on Data Mining methodologies. Special chapters cover data preprocessing, association rules, classification, and cluster analysis. Reference is made to specific practical issues of data mining, such as the selection of important features, class imbalance, and the differentiation of classification error costs. The content of the textbook is enriched with examples of the application of the relevant methodologies to business data analysis problems. In addition, the last chapter of the book introduces the reader to the WEKA data mining software.









