Business Intelligence

Course Description

Business Intelligence (BI) is used to obtain information from company data that is relevant for targeted corporate management and the optimization of business activities. This course introduces and discusses techniques, procedures, and models for data provision, information generation, and analysis, as well the distribution of the information obtained. You will then be able to explain the various subject areas of data warehousing and independently select methods and techniques to meet specific requirements.

Contents

1. Motivation and Conceptualization
   1. Motivation and Historical Development
   2. BI as a Framework
2. Data Provision
   1. Operative and Dispositive Systems
   2. The Data Warehouse Concept
   3. Architectural Variations
3. Data Warehouse
   1. ETL Process
   2. DWH and Data Mart
   3. ODS and Metadata
4. Modelling of Multidimensional Data Spaces
   1. Data Modeling
   2. OLAP Cubes
   3. Physical Storage
   4. Star and Snowflake Scheme
   5. Historicization
5. Analysis Systems
   1. Free Data Research and OLAP
   2. Reporting Systems
   3. Model-Based Analysis Systems
   4. Concept-Oriented Systems
6. Distribution and Access
   1. Information Distribution
   2. Information Access