

Data Mining

The process of identifying anomalies, patterns, and correlations in large data sets in order to predict future outcomes. The general purpose of data mining is to extract information from a data set and transform it into a comprehensive structure that may be used further. It enables organizations to make informed decisions more quickly, resulting in higher revenues, reduced costs, and improved customer relationships.



Stages



Data Sources



Data Exploration



Data Modeling



Deploying Models

Techniques

- ◆ Anomaly Detection
- ◆ Association Learning
- ◆ Clustering Analysis
- ◆ Classification Analysis
- ◆ Neural Networks
- ◆ Rule Induction
- ◆ Decision Trees
- ◆ Choice Modeling
- ◆ Regression Analysis
- ◆ Sequential Patterns

Trends

- ◆ According to Gartner, 75% of enterprises will shift from piloting to operationalizing data mining, driving a 5X increase in analytics infrastructure by the end of 2024
- ◆ By 2023, more than 33% of large organizations will have analysts practicing data mining, including decision modeling
- ◆ The public cloud services will be essential for 90% of innovations in data mining by 2022
- ◆ According to McKinsey & Co., the data mining companies will generate more than \$500 million in sales by 2024