

SAS - Analytics: Putting It All to Work

Code:	BAPUT
Length:	1 days
URL:	View Online

Many companies are flooded with huge amounts of data available in corporate databases and/or data warehouses. A key challenge is how to optimally manage this data overload and use analytics to better understand, manage, and strategically exploit the complex dynamics of customer behavior. This class starts by giving an overview of the steps involved when working out an analytics project in a practical business setting. After discussing the key data preprocessing activities, this course elaborates on how you can efficiently use and deploy both predictive and descriptive state-of-the-art analytics to optimize and streamline your strategic business processes such as marketing campaigns and/or risk management. Examples of business applications that are covered include credit scoring and risk modeling, customer retention and response modeling, market basket analysis and cross-selling, customer lifetime value modeling, and Web intelligence and social network analytics. You receive extensive practical advice and guidelines on how to put all the analytical tools and concepts to work in a real-life setting. The class focuses on analytical concepts, techniques, and methodologies and their applications. Software demonstrations illustrate and clarify the concepts, but no hands-on use of software is included. The class includes self-study sections with additional real-life case studies.

Skills Gained

- develop high-performing analytical business models using state-of-the-art analytics and data mining
- get more in-depth knowledge about your customer equity using analytics
- optimally prepare and enrich your data as a key ingredient to powerful analytics
- predict customer behavior using regression and decision tree approaches
- describe customer behavior using association rules, sequence analysis, and clustering
- use social network data and analytics to better understand and manage collective customer dynamics
- put analytics to work in a practical business setting.

Who Can Benefit

- Business analysts, senior data analysts, quantitative analysts, data miners, senior CRM analysts, marketing analysts, risk analysts, analytical model developers, online marketers, and marketing modelers in the following industries: banking and finance, insurance, Telco, on-line retailers, advertising, Pharma

Prerequisites

- Before attending this course, you should have a basic background in statistics.

Course Details

Introduction

- examples of business analytics
- the analytics process model
- predictive versus descriptive analytics
- analytics model requirements
- post processing

Data Collection, Sampling, and Preprocessing

- types of data sources
- sampling
- missing values
- outlier detection and treatment
- categorization
- weights of evidence coding
- information value

Predictive Analytics

- target definition
- regression
- logistic regression
- decision trees
- regression trees
- evaluating classification models
- ROC analysis
- lift curve
- regression diagnostics
- case study: churn prediction in a telco context

Descriptive Analytics

- association rules (support, confidence, a priori, interestingness, and so on)
- cross selling and market basket analysis
- recommender systems
- sequence analysis
- segmentation
- hierarchical versus non-hierarchical (for example, k-means) clustering

Social Network Analytics

- social network applications
- social network metrics

- social network-based inference
- Markov property
- relational logistic regression

Putting Analytics to Work

- analytics model requirements
 - model interpretation
 - monitoring analytical models
 - backtesting
 - benchmarking
 - data quality
 - corporate governance and management oversight
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