

## Using Data Analysis... For Business Decisions



The understanding of any enterprise and the basis for many decisions revolves around the basic understanding of the data involved. The acquisition, analysis, aggregation and presentation of data is crucial to the effective and efficient running of the enterprise.

Whether the purpose is operational performance, enterprise performance, financial analysis, competitive analysis, strategic direction setting or data for outside decision making of partners and customers the delivery of that data links the success of the business with the management. Such use of data is viewed as improving business operation and increasing the value of the enterprise.

*Quality Data  
Acquisition  
Data Management  
Analysis*

This seminar is intended for people who want to put the ideas and concepts of data analysis and presentation into effective use in their enterprise. Concepts of corporate measures such as critical success factors, key performance indicators, pulse points and function/process performance are also covered.

Further, the methods needed to make these ideas definitive are discussed in detail. Concepts such as measures development, statistical interpretations, strategic data analysis, business intelligence and scenarios are discussed as relevant to the type and extent of information required for decision making.

**Who should attend:** *Business process teams, Business planners, Process Analysts, Managers, Professionals, IT Specialists, Business Analysts and IT Architects.*

Quantity and choice of modules is adjusted to fit the educational needs and time frames

## Enterprise Data Analysis

## Available Modules

### Module 1: Intro to Data Analysis in the Enterprise

- Course Objectives and Structure
- About Data Analysis
- Business Measures for Performance
- The Strategic, Operational, Financial and External Views
- The Data Analysis Challenge and Solutions
- Basic Data Analysis Concepts

*Demonstration – Simple Data Delivery Tools*

### Module 2: An Overview of Business Statistics

- Using Data Effectively
- Applying Statistical Concepts
- Business Statistics and Statistical Concepts
- Pattern Analysis of Data

*Exercise – Identifying Business Measures of Value*

### Module 3: Acquisition and Organization of Data

- Sources of Data
- Internal vs. External Data
- Capturing Data
- Extracting Data of Interest
- Data on the web today

*Exercise – Analyzing Annual Reports from the web*

### Module 4: Methods of Data Presentation

- Simple Presentation of Numerical Data
- Alternatives in Presentation of Statistical Data
- Multivariate Views
- Data Access and Manipulation
- A Data Analysis Strategy
- Data Analysis Techniques
- Estimating, Confidence Intervals, Variance

*Exercise –Presenting Data to Management*

### Module 5: Enterprise Direction and Data Analysis

- Models for Measurement
- Aggregating Data
- Analytical Workflows
- Stakeholder Data Interests,
- Analysts, Shareholders, Regulators
- Data Analysis for Strategic Decisions
- Growth, Harvesting, Investing, Divesting, Privatizing

*Exercise – Analytic Workflows plus Comparative Balanced Scorecard Analysis*

### Module 6: Strategic Data Analysis for Business and Competitive Structure

- Merger and Acquisition Analysis
- Competitive Scenarios & Selecting Scenarios of Importance
- Competitive Analysis for Acquisition
- Comparative Operational Analytics
- Econometric Considerations
- Benchmarking and Best Practices

*Demonstration – A Balanced Scorecard Tool w/Strategy Maps*

### Module 7: Enterprise Performance Management – Measuring Business Activities

- Measuring Business Processes
  - Critical Success Factors
  - Decision Analysis and Scenarios
  - Measures for Quality
  - Key Performance Indicators
  - Process Performance, Pulse Points
  - Cycle, Transport, Wait Times and Others
- Exercise – Setting Measures for a Process*

### Module 8: Data Mining

- Finding patterns in data
- Interpreting the results
- Using neural nets for patterns and forecasting
- Presenting alternatives
- Issues in data access quality

*Demonstration – Neural Nets*

### Module 9: Enterprise Financial Analysis

- Classic Methods
- The shareholder view – Short term results
- The investor view – Long term return
- Ratios and Trends
- Financial Patterns
- Calculating value

*Exercise – Financial Ratio Analysis*

### Module 10: Decision Making Under Uncertainty

- Uncertainty ideas Random Variables
- Discrete Events Forecasting
- Decision Trees Optimization

*Exercise – Optimizing Product Mix*

### Module 11: Marketing Data Analysis

- Consumer buying and affinity analysis
- Competitive comparative analysis
- Projections and Forecasts
- Profit impact of market share
- Econometrics ideas

*Demonstration –Affinity Analysis*

### Module 12: Operational Data

- Process Analysis
- Statistics and Performance
- Benchmarking Revisited
- Control Charts and How to Use Them
- The Value of Historical Data
- Inventory analysis

*Exercise – An Inventory Management Problem*

### Module 13: Advanced Topics in Data Analysis

- Operations research
- Neural networks
- Statistics of small samples
- Compliance issues
- Cyber forensics and data

*Exercise – A Cyber Forensics Plan*

### Module 14: The Data Analysis Project

- Data Analysis Tools
  - Data Analysis and Business Intelligence
  - Tool Types
  - Simple Tool Evaluation Checklists
- Demonstration – A Process Simulation Tool*

### Module 15: Review and Wrap

- Issues and Trends in Data Analysis
  - Technology Issues – Easy Access to Data
  - Data Mining and the Power User
  - E – Business...More Data Issues?
  - The Growth of Business Intelligence
  - Data Analysis – Some Final Thoughts
- Exercise – Final Q&A*

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