



## Data Analytics for Managerial Decision Making

Strengthening Management Decision Making through Enhanced Information Quality

### ► Upcoming Sessions

03-07 Jun 2024	Dubai - UAE	\$5,950
12-16 Aug 2024	London - UK	\$5,950
23-27 Sep 2024	Dubai - UAE	\$5,950
04-08 Nov 2024	Dubai - UAE	\$5,950
03-07 Feb 2025	Dubai - UAE	\$5,950

### ► Training Details

#### Training Course Overview

Effective and decisive decision making is a key ingredient in any successful manager. A significant contributing factor is using evidence-based information for decision making. This can be achieved through professionals equipping themselves with data analytic- and quantitative reasoning- skills. This Anderson training course focuses strongly on imparting a management perspective on the value of data analytics in decision making. In addition, it will provide insight into how data analytics can be used to support strategic initiatives, to guide policy formulation and to support operational decision making. The training course will emphasise applications of data analytics in management practice and focus on the valid interpretation of data analytics findings.

#### Training Course Objectives

**By attending this Anderson training course, delegates will be able to:**

- Understand the power of data analytics as a decision support tool in management
- Critically assess the validity of statistically-generated business information
- Understand the purpose of the different data analytic tools and which one/s to use in given management scenarios
- Know how to meaningfully and validly interpret statistical evidence in a management context
- Be in a position to communicate intelligently with data analytic professionals

#### Designed For

This Anderson training course is suitable for a wide range of middle and senior managers who have the responsibility of divisional and organisational success through their decision making. It is also suitable for consultants and professionals who support them. In particular:

- HR managers
- Marketing managers

- ▶ Operations and logistics managers
- ▶ Financial managers
- ▶ Policy support personnel
- ▶ Engineers / Technical Specialists

## ▶ Training Details

### Day One: Setting the Statistical Scene in Management

- ▶ Introduction; The quantitative landscape in management
- ▶ Thinking statistically about applications in management (identifying KPIs)
- ▶ The integrative elements of data analytics
- ▶ Data: The raw material of data analytics (types, quality and data preparation)
- ▶ Exploratory data analysis using excel (pivot tables)
- ▶ Using summary tables and visual displays to profile sample data

### Day Two: Evidence-based Observational Decision Making

- ▶ Numeric descriptors to profile numeric sample data
- ▶ Central and non-central location measures
- ▶ Quantifying dispersion in sample data
- ▶ Examine the distribution of numeric measures (skewness and bimodal)
- ▶ Exploring relationships between numeric descriptors
- ▶ Breakdown analysis of numeric measures

### Day Three: Statistical Decision Making - Drawing Inferences from Sample Data

- ▶ The foundations of statistical inference
- ▶ Quantifying uncertainty in data - the normal probability distribution
- ▶ The importance of sampling in inferential analysis
- ▶ Sampling methods (random-based sampling techniques)
- ▶ Understanding the sampling distribution concept
- ▶ Confidence interval estimation

### Day Four: Statistical Decision Making - Drawing Inferences from Hypotheses Testing

- ▶ The rationale of hypotheses testing
- ▶ The hypothesis testing process and types of errors
- ▶ Single population tests (tests for a single mean)
- ▶ Two independent population tests of means
- ▶ Matched pairs test scenarios
- ▶ Comparing means across multiple populations

### Day Five: Predictive Decision Making - Statistical Modeling and Data Mining

- ▶ Exploiting statistical relationships to build prediction-based models
- ▶ Model building using regression analysis
- ▶ Model building process - the rationale and evaluation of regression models
- ▶ Data mining overview - its evolution
- ▶ Descriptive data mining - applications in management
- ▶ Predictive (goal-directed) data mining - management applications

## ▶ The Certificate

Anderson Certificate of Completion will be provided to delegates who attend and complete the course.

## ▶ INFO & IN-HOUSE SOLUTION

For more information about this course, call or email us at:

Call us: +971 4 365 8363

Email: [info@anderson.ae](mailto:info@anderson.ae)

Request for a Tailor-made training and educational experience for your organization now:

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