



# **Training: Business Analytics with MS Excel**

## Microsoft Excel Fundamentals

Launching Excel

Microsoft Excel Startup Screen

Introduction to the Excel Interface

Customizing the Excel Quick Access Toolbar

More on the Excel Interface

Understanding the Structure of an Excel Workbook

Saving an Excel Document

Opening an Existing Excel Document

Common Excel Shortcut Keys

## **Entering and Editing Text and Formulas**

Entering Text to Create Spreadsheet Titles

Working with Numeric Data in Excel

**Entering Date Values in Excel** 

Working with Cell References

Creating Basic Formulas in Excel

Relative Versus Absolute Cell References in Formulas

Understanding the Order of Operation (DOWNLOAD EXERCISE FILE)

## Working with Basic Excel Functions

The structure of an Excel Function

Working with the SUM() Function

Working with the MIN() and MAX() Functions

Working with the AVERAGE() Function

Working with the COUNT() Function

Adjacent Cells Error in Excel Calculations

Using the AutoSum Command

Excel's AutoSum Shortcut Key

Using the AutoFill Command to Copy Formulas

## Modifying an Excel Worksheet

Moving and Copying Data in an Excel Worksheet

Inserting and Deleting Rows and Columns

Changing the Width and Height of Cells

Hiding and Unhiding Excel Rows and Columns

Renaming an Excel Worksheet

Deleting an Excel Worksheet

## Formatting Data in an Excel Worksheet

Working with Font Formatting Commands

Changing the Background Color of a Cell

Adding Borders to Cells

Formatting Data as Currency Values

**Formatting Percentages** 

Using Excel's Format Painter

Creating Styles to Format Data

Merging and Centering Cells

**Using Conditional Formatting** 

# Inserting Images and Shapes into an Excel Worksheet

Inserting Images

**Inserting Excel Shapes** 

Formatting Excel Shapes

Working with Excel SmartArt

#### Creating Basic Charts in Excel

Creating an Excel Column Chart

Working with the Excel Chart Ribbon

Adding and Modifying Data on an Excel Chart

Formatting an Excel Chart

Moving a Chart to another Worksheet

Working with Excel Pie Charts

## Printing an Excel Worksheet

Changing the Margins, Scaling and Orientation

Working with Page Layout View

Adding Header and Footer Content

Printing a Specific Range of Cells

## Working with Excel Templates

Intro to Excel Templates

Opening an Existing Template

Creating a Custom Template

## Working with an Excel List

Understanding Excel List Structure

Sorting a List Using Single Level Sort

Sorting a List Using Multi-Level Sorts

Using Custom Sorts in an Excel List

Filter an Excel List Using the AutoFilter Tool

Creating Subtotals in a List

Format a List as a Table

Using Conditional Formatting to Find Duplicates

**Removing Duplicates** 

## **Excel List Functions**

Introduction to Excels Function: DSUM()

Excel DSUM Function Single Criteria Continued

Excel DSUM Function with OR Criteria
Excel DSUM Function with AND Criteria

Excel Function: DAVERAGE()
Excel Function: DCOUNT()
Excel Function: SUBTOTAL()

#### **Excel Data Validation**

Understanding the Need for Excel Data Validation

Creating an Excel Data Validation List

**Excel Decimal Data Validation** 

Adding a Custom Excel Data Validation Error

Dynamic Formulas by Using Excel Data Validation Techniques

### Importing and Exporting Data

Importing Data Into Microsoft Excel

Importing Data from Text Files

Importing Data from Microsoft Access

NEW VERSION -- Import Data From Text Files into Excel

NEW VERSION -- Import Data From a Database into Excel

Microsoft Excel Legacy Import Options for New Excel Versions

Exporting Data to a Text File

# Excel PivotTables

Understanding Excel PivotTables

Creating an Excel PivotTable

Modifying Excel PivotTable Calculations

Grouping PivotTable Data

Formatting PivotTable Data

Drilling Down into PivotTable Data

**Creating PivotCharts** 

Filtering PivotTable Data

Filtering with the Slicer Tool

## Working with Excel's PowerPivot Tools

Why PowerPivot?

Activating the Excel PowerPivot AddIn

Creating Data Models with PowerPivot

Creating PivotTables based on Data Models

PowerPivot Calculated Fields

PowerPivot KPIs

## Working with Large Sets of Excel Data

Using the Freeze Panes Tool

Grouping Data (Columns and/or Rows)

Print Options for Large Sets of Data Linking Worksheets (3D Formulas) Consolidating Data from Multiple Worksheets

## Working with Excel's Conditional Functions

Working with Excel Name Ranges

Advantages and Disadvantages of Excel Name Ranges

Editing an Excel Name Range

Using Excel's IF() Function

Excel's IF() Function with a Name Range

**Nesting Functions with Excel** 

Nesting Excels AND() Function within the IF() Function

Using Excel's COUNTIF() Function

Using Excel's SUMIF() Function

Using Excel's IFERROR() Function

### Working with Excel's Lookup Functions

Microsoft Excel VLOOKUP() Function

Microsoft Excel HLOOKUP() Function

Microsoft Excel INDEX() Function

Microsoft Excel MATCH() Function

Microsoft Excel INDEX() and MATCH() Function Combined

Microsoft Excel INDEX() and MATCH() Function Combined Continued

Creating a Dynamic HLOOKUP() with the MATCH() Function

#### Working with Excel's Text Based Functions

Using Excel's LEFT(), RIGHT() and MID() Functions

Using Excel's LEN() Function

Using Excel's SEARCH() Function

Using Excel's CONCATENATE() Function

### Auditing an Excel Worksheet

Tracing Precendents in Excel Formulas

Tracing Dependents in Excel Formulas

Working with the Watch Window

**Showing Formulas** 

## Protecting Excel Worksheets and Workbooks

Protecting Specific Cells in a Worksheet

Protecting the Structure of a Workbook

Adding a Workbook Password

## Mastering Excel's "What If?" Tools

Working with Excel's Goal Seek Tool

Working with Excel's Solver Tool

Building Effective Data Tables in Excel

Creating Scenarios in Excel