

Microsoft Excel – Analysis and Dashboards

Course Overview - 1-day course

Our Excel Analysis and Dashboards course requires you to get your hands dirty. We work through multiple exercises so you can learn to master the tools of data modelling, analysis and building visuals for effective Dashboards. We complete the course by working through a Case Study pulling all the aspects we teach on the day together, so you have a fully worked example to take back to the office.

Business Case Study –You will start with raw sales data for a Comedy Roadshow. We model the data using PowerPivot, creating relationships and the necessary calculations to build our interactive Dashboard for assessing Sales performance and profitability across various cities



Detailed Content

Data Modelling

- Starting a dataset in Excel
- Multiple Tables
- Data Modelling

Get & Transform

- Using Get & Transform
- Why Use Get & Transform
- Understanding the Navigator Pane
- Creating a New Query from a File
- Creating a New Query from the Web
- Understanding the Query Editor
- Displaying the Query Editor
- Managing Data Columns
- Reducing Data Rows
- Adding A Data Column
- Transforming Data
- Editing Query Steps
- Merging Queries
- Working with Merged Queries
- Saving and Sharing Queries
- The Advanced Editor

Power Pivot

- Lists, Tables, and Relational Databases
- The Excel Data Model
- Power Pivot and The Data Model
- Understanding Relational Data
- Common Sense Data Modelling
- Enabling Power Pivot
- Connecting to a Data Source
- Working with The Data Model
- Working with Data Model Fields
- Changing A Power Pivot View
- Creating A Data Model PivotTable
- Using Related Power Pivot Fields
- Creating A Calculated Field
- Creating A Concatenated Field
- Formatting Data Model Fields
- Using Calculated Fields
- Creating A Timeline
- Adding Slicers

Great functions for Analysis

- Understanding Data Lookup Functions
- Data Area
- Calculation Area

- Using CHOOSE
- Using VLOOKUP
- Using VLOOKUP For Exact Matches
- Using HLOOKUP
- Using INDEX
- Using SUMIF
- Using SUMIFS
- Using SUMPRODUCT

Data Validation

- Validation Criteria
- Input Messages & Error Messages
- Drop-Down Lists Formulas
- Customised Validation Criteria
- Creating a Number Range Validation
- Testing a Validation
- Creating an Error Message
- Creating a Drop-Down List
- Using Formulas as Validation Criteria
- Circling Invalid Data
- Removing Invalid Circles

Microsoft Excel- Analysis and Dashboards

Controls

- Understanding Types of Controls
- Understanding How Controls Work
- Preparing a Worksheet for Control
- Adding a Combo Box Control
- Changing Control Properties
- Using the Cell Link to Display the Selection
- Adding a List Box Control
- Adding a Scroll Bar Control
- Adding a Spin Button Control
- Adding Option Button Control
- Adding a Group Box Control
- Adding a Check Box Control
- Protecting a Worksheet with Controls

Using Sparklines to show trends

- What is a Sparkline?
- Types of Sparklines
- Showing Sparklines only
- Specifying a Date Axis
- Hidden Data and Sparklines
- Sparklines and Targets

Using Conditional formatting

- Using Conditional Formatting with A Dashboard
- Top 10 & Custom Formatting
- Data Bars
- Show Data Bars Outside the Data Cell
- Colour Scales Icon Sets
- Creating Rules Based Icon Set
- Removing Unnecessary Icons
- Using Symbols in Reporting
- Using The Camera Tool

Pivot Tables

- Structure of Pivot Tables
- Using Compound Fields
- Counting in A Pivot Table
- Formatting PivotTable Values
- Working with Grand Total
- Working with PivotTable Subtotals
- Finding the Percentage of Total
- Finding the Difference From Grouping in PivotTable Reports
- Creating Running Totals
- Creating Calculated Fields
- Providing Custom Names
- Creating Calculated Items
- Pivot Table Options
- Sorting in a Pivot Table
- Top and Bottom Views Date
- Grouping Options
- Hiding or Showing Data Items
- Conditional Formatting and Sparklines in Pivot Tables
- Pivot Caches and File Size

Pivot Charts

- Inserting A Pivot Chart
- Defining the PivotChart Structure
- Changing the PivotChart Type
- Using the PivotChart Filter Field Buttons
- Moving Pivot Charts to Chart Sheets

Slicers in Reports

- What are Slicers?
- Creating Slicers
- Timeline Slicer
- Renaming Pivot Tables
- Using a Slicer on Multiple Pivot Tables

Trending Charts

- Why do we use Trending Charts?
- Appropriate Chart Types for Trending
- Vertical or Y-Axis Scales
- Chart Titles linking to a Cell
- Comparative Trending
- Labelling Using a Secondary Axis
- Formatting Key Data Points
- How to display Actuals and Forecasts
- Averages and Data Smoothing

Other Report Charts

- Top and Bottom Charts
- How to show Top or Bottom Values in Data Labels
- Waterfall Charts

Histograms

- Creating Histograms using Formulas
- Creating Histograms using Pivot Tables
- Creating Histograms using Excel's Statistical Charts

Charting performance against a target

- Performance against Targets
- Creating Thermometer Charts
- Bullet Graph
- Defining Dashboards

- Purpose of a Dashboard
- Working out what is needed
- What are the data sources
- Will the audience need further data to drill-down to?
- How often will/can the data refresh?
- Does it need to be maintained?
- How easy will it be to maintain?

Dashboard Design Principles

- Thirteen common mistakes in dashboard design

Making an Interface

- Using Macros with Dashboards
- Recording a Macro
- Navigation using Macros
- Macros to Change Chart types
- Macros and Pivot Form
- Controls with Dashboards

Pulling it all together

- Case Study –Build a Dashboard from raw data to finished product.