

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

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

Microsoft Excel- Analysis and Dashboards

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.