

# IT & Systems

### Course Name

Microsoft Power BI Introduction

### Course Description

This two-day course goes beyond just the basics and includes a comprehensive look at using Power BI Desktop, as well as Microsoft's Power BI Pro online service.

With Power BI, you get a report authoring tool that enables you to connect to and transform data from a wide variety of sources. With the use of DAX calculations and a comprehensive range of visualizations, you can then produce detailed reports.

The reward is to then be able to share those reports with your team inside or outside of your organisation, simply by publishing them to Power BI online service. This course allows you to gain a thorough understanding of the complete Power BI cycle by working with real-world examples and will equip you with the necessary skills to start applying your knowledge straight away.

1. Getting Started

The Power BI Process

Launch Power BI Desktop

The Four Views of Power BI

Create Report Visuals

2. Getting Data

Connect to Data Sources

Connect to an Excel File

Connect to a CSV File

Connect to a Database

Connect to a Web Source

Connect to a Folder of Files

Create a Data Table

3. Transform and Append Data

Clean Data in the Query Editor

Remove Rows by Filter

Replace Values, Query Data Types

Data Type Detection, Add a Custom Column

Append Data to a Query, Add an Index Column

Resolve Error Issues

Perform Basic Math Operations • The Power Query Editor

Fill Data Up and Down

Split Column by Delimiter

Add Conditional and Custom Columns

A Simple Column Merge

4. Pivot and Unpivot Data

Pivot Data in Power Query

Pivot and Append Data

Pivot but Don't Summarise

Unpivot Data

Append Mismatched Headers

5. Manage Table Relationships

Merge Queries

Table Join Kinds

The Merge Process

6. Group Data in Power Query

Group Rows in a Table

7. Build a Data Model

Relate Tables in a Data Model

Cardinality

Data modelling schema

Filter Flow

Table joins

Hide in Report View

8. Dax Calculated Columns

Create Calculated Columns  
 Calculated columns best practice  
 Dax Syntax  
 Common function categories 9. Introduction to DAX Measures  
 DAX Rules  
 Turn off Field Summarisation  
 The COUNTROWS Function  
 The DISINCTCOUNT Function  
 The CALCULATE Function  
 The SUMX Function  
 When to Use SUMX vs. SUM 10. Introduction to Time Intelligence  
 Standard Calendar vs. Custom Calendar  
 Calendar: A Special Lookup Table  
 Mark a Calendar as a Date Table  
 Time Intelligence Functions  
 The TOTALYTD Function 11. Create Report Visualizations  
 Create and Format Visuals  
 Create a Map Visual, Create a Chart Visual  
 Format Map and Chart Visuals  
 Create Table, Matrix and Card Visuals  
 KPI, Gauge, Waterfall visuals  
 Format Table visuals  
 Control a Visual's Number Format  
 Use Slicers to Filter Data  
 Sync Slicers Across Pages  
 Visuals from the Marketplace  
 Export Report Data to Excel 12. Hierarchy, Groups and Conditional Formats  
 Create a Hierarchy to "Drill" Data  
 Compare Data in Groups  
 Add Conditional Formatting 13. Publish and Share Your Report Online  
 Publish to the Online Power BI Service  
 Get Reports from Power BI Service  
 Get Quick Insights  
 What is Q&A?  
 Share your Report 14. Apply your learning  
 Post Training Exercise When requesting this course you MUST have Power BI downloaded and installed on your computer. If you do not have Power BI installed you will not be able to partake in the course.  
 To enable you to get the most from this learning experience you must have read the DAX information sent to you prior.

## **Audience**

A good understanding of Excel is required, specifically Pivot Tables, IF Statements, NESTED IF, VLOOKUPS, SUMIF, SUMIFS. Also, an understanding of Relational Database Technologies may be beneficial. The main pre-requisite is to have a good understanding of your business's need to collect, cleanse, analyse and deliver insights and visualisations of your business data.

**Duration:** 2 Days Day(s) **Class Size:** 8

**Competence Name Awarded**

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**Course Code**

**Prerequisite Name**

**Prerequisite Short Code**

**Skills Assessment Scheme Regime**

## Course Type



Face to Face

**Download Date: 21/5/2024**