



# Analyzing and Visualizing Data with Power BI

28 October – 01 November 2024

Barcelona / Spain

## Introduction

As technology progresses and becomes more interwoven with our businesses and lives, more data is collected about business and personal activities. This era of "big data" is a direct result of the popularity and growth of cloud computing, which provides an abundance of computational power and storage, allowing organizations of all sorts to capture and store data. Leveraging that data effectively can provide timely insights and competitive advantages.

Creating data-backed visualizations is key for data scientists, or any professional, to explore, analyze, and report insights and trends from data. Microsoft Power BI software is designed for this purpose. Power BI was built to connect to a wide range of data sources, and it enables users to quickly create visualizations of connected data to gain insights, show trends, and create reports. Power BI's data connection capabilities and visualization features go far beyond those that can be found in spreadsheets, enabling users to create compelling and interactive worksheets, dashboards, and stories that bring data to life and turn data into thoughtful action.

## Objectives

**By the end of this training participants will learn:**

- Analyze data with self-service BI
- Connect to data sources
- Perform data cleaning, profiling, and shaping
- Visualize data with Power BI
- Enhance data analysis by adding and customizing visual elements
- Model data with calculations
- Create interactive visualization

## Who Should Attend?

- Financial Analysts
- Planning Specialist
- Chief Executive Officers, Board Members, Regulators, Private Equity Managers, Strategic Planners, Trustees
- Risk Managers, Compliance Officers, Internal Auditors
- Management Consultants, Marketing Officers

## Course Outline

### Day One

#### Getting Started with Microsoft Data Analytics

- Getting started with Microsoft data analytic
- Data analytics and Microsoft
- Getting started with Power BI
- Get data in Power BI
- Get data from various data sources
- Optimize performance
- Resolve data error

### Day Two

#### Create visually appealing analytical models.

- Create reports
- Design a report
- Enhance the report
- Clean, transform, and load data in Power BI
- Data shaping
- Data profiling
- Enhance the data structure

### Day Three

#### Create Model Calculations using DAX in Power BI

- Design a data model in Power BI
- Introduction to data modeling
- Working with tables
- Dimensions and hierarchies
- Create model calculations using DAX in Power BI
- Introduction to DAX
- Real-time dashboards
- Advanced DAX

### Day Four

#### Optimize Model Performance

- Optimize model performance
- Optimize the data model for performance
- Optimize direct query models

- Create dashboards
- Perform advanced analytics
- Advanced analytics
- Data insights through AI visuals

## **Day Five**

### **Publish Dashboards Through Power BI.**

- Create and manage workspaces
- Creating workspaces
- Sharing and managing assets
- Manage datasets in Power BI
- Parameters
- Datasets

## Training Method

- Pre-assessment
- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- Power point presentation, LCD and flip chart
- Group activities and tests
- Each participant receives a 7" Tablet containing a copy of the presentation, slides and handouts
- Post-assessment

## Program Support

This program is supported by interactive discussions, role-play, case studies and highlight the techniques available to the participants.

## Schedule

### The course agenda will be as follows:

- |                     |                  |
|---------------------|------------------|
| • Technical Session | 08.30-10.00 am   |
| • Coffee Break      | 10.00-10.15 am   |
| • Technical Session | 10.15-12.15 noon |
| • Coffee Break      | 12.15-12.45 pm   |
| • Technical Session | 12.45-02.30 pm   |
| • Course Ends       | 02.30 pm         |

## Course Fees\*

- **6,500 USD**  
*\*VAT is Excluded If Applicable*