

# Power BI - Data analysis and visualization

#### Goals of the training

The course aims to familiarize participants with the functions of analysis and data visualization using Power BI. After completing the training, the participant will be able to implement his own Business Intelligence solution, starting from getting data from external sources, through creating a simple data model, defining your own measures and formulas using DAX, to preparing an interactive report consisting of visualizations available in Power BI. During the training, the participant gets to know Power BI Desktop application and Power BI as a cloud service, an interesting element of which is the ability to export to Excel and PowerPoint. For the participant, this means the possibility of implementing the idea of Self-Service BI - creating own analytical solutions without much involvement of IT departments. This increases the efficiency of the analyst's work while reducing the costs of the entire process.

#### **Skills**

Thanks to the training, the participant will be able to:

- Load data into Power BI program
- Create a data model
- Create a dynamic analytical dashboard
- Share dashboards with other people
- Present the data from the analytical dashboard in PowerPoint program

#### Profile of participants

The course is intended for people who perform data analysis and create reports using data from different systems, who want to visualize their data.

#### **Prerequisites**

The training participants are required to have an intermediate level of knowledge of the Windows environment and the use of a spreadsheet. Knowledge of PowerPivot, DAX, and Power Query will be useful, but not required.

### **Detailed training program**

- 1. Introduction to Business Intelligence
- 2. Tools overview
  - 2.1. Power Bi Desktop: loading and transforming data, working with a data model, working with visualizations, publishing reports
  - 2.2. Power BI Online: sharing reports Datasets, Reports and Dashboard



- 3. Loading data
  - 3.1. Introduction to the query editor
  - 3.2. Getting and transforming data
  - 3.3. Combining tables
- 4. Creating of standard visualizations
  - 4.1. Creation
  - 4.2. Modification
  - 4.3. Drill down of data
  - 4.4. Adding and removing chart elements
- 5. Custom visualizations
  - 5.1. Adding custom visualizations
  - 5.2. Text box
  - 5.3. Graphics
  - 5.4. Shapes
- 6. Filters managing
  - 6.1. Slicer filters
  - 6.2. Chart filters
  - 6.3. Page filters
  - 6.4. Report filters
- 7. Data model
  - 7.1. Introduction to the data model
  - 7.2. Creating relationships
  - 7.3. Adding calculations: calculated columns, measures (DAX)
  - 7.4. Grouping data, creating hierarchies

## **Training delivery method**

The training is carried out in the form of alternating lectures and practical exercises. The training combines substantive knowledge with practical examples of its use in the work environment.

#### **Duration**

2 days, 8 teaching hours each

## **Development path**

- Power BI Data analysis and visualization
- Power BI, Power Pivot, Power Query Analysis of data from spreadsheets and unstructured files
- Power BI i DAX Analysis based on dates
- Power BI i DAX Advanced analysis based on dates
- DAX Creating advanced formulas for Power BI, SQL Server Analysis Services and PowerPivot in Excel.



## **Training information:**

Training level:	X basic	☐ intermediate		$\square$ advanced	
Form of training:	<b>X</b> stationary	X remote			
Group size - stationary training:		min:	3	max: 12	
Group size - remote training:		min:		3	max: 12
Technical requireme	ents:				
O trenerze:					