

training code: PBI\_02\_DAX / ENG DL 2d / EN

# Microsoft Power BI – Advanced Power BI solutions with DAX



The training Introduces attendees into advanced options of DAX language (Data Analyses Expressions), allowing to create effective and multidimensional analysis. During this training you will learn how to create clear and functional reports allowing detailed analyses of large quantities of data. The practical form of the training will allow you to use this in you day to day tasks. The training Introduces attendees into advanced options of DAX language (Data Analyses Expressions), allowing to create effective and multidimensional analysis. During this training you will learn how to create clear and functional reports allowing detailed analyses of large quantities of data. The practical form of the training will allow you to use this in you day to day tasks.



## Training recipients

Subjects of the training are aimed at people that already started working with Power BI Desktop and want to find out more about advanced DAX calculations. In the training you will also find many useful tips about data modelling. Aim of the training is also focused on creating clear and informative reports.



#### **Benefits**

- You will understand DAX language and use its capabilities
- You will learn how to use time intelligence functions, that allow to analyze data based on many different time intervals.
- You will see how to apply basic RLS security



- You will be able to prepare reports using parameters that allow you to change values on demand and get dynamic reports
- You will learn good practices of how to prepare your formulas



## Training program

- 1. Preparing data model structure and relationships
  - List tables
  - 2. Dates table (calendar) functions CALENDAR(), CALENDARAUTO(), FORMAT()
  - 3. Calculated columns
  - 4. Data types
  - 5. Conversions
  - 6. Active and non-active relationships
  - 7. Hierarchies
  - 8. Basic transformations with Power Query
- 2. Quick measures
  - 1. Using predefined calculations
  - 2. Implementing predefined calculations in custom measures
- 3. Most commonly used functions
  - 1. Aggregations: SUM(), SUMX(), AVERAGE(), MIN(), MAX(), RANKX()
  - 2. Counting: COUNT(), COUNTROWS(), DISTINCTCOUNT(), DISTINCTCOUNTNOBLANK()
  - 3. Lookup: REALATED(), LOOKUPVALUE()
  - 4. Error handling: DIVIDE(), BLANK(), SELECTEDVALUE()
- 4. Calculations context
  - 1. CALCULATE()
  - 2. FILTER()
  - 3. ALL(), ALLSELECTED(), ALLEXCEPT()
- 5. Dates intervals calculations
  - 1. SAMEPERIODLASTYEAR(), DATEADD(), PARALLELPERIOD()
  - 2. TOTALYTD(), TOTALQTD(), TOTALMTD()
  - DATESYTD(), DATESQTD(), DATESMTD()
  - 4. DATESBETWEEN(), DATESINPERIOD()
  - LASTNONBLANK(), LASTNONBLANKVALUE()
  - 6. USERELATIONSHIP()
- 6. Logical functions
  - 1. IF()
  - 2. SWITCH()
- 7. Good practices for creating measures
  - 1. Creating variables



- 2. Comments
- 3. Clear code structure
- 8. Using parameters with calculations
  - 1. Creating table with parameter values
  - 2. Using and referring to parameters in formulas
- 9. Filtering data based on sign in data
  - 1. USERPRINCIPALNAME()



Expected preparation of the participant

Basic knowledge of Power BI or training PBI\_01 or EX PBI



Duration

2 days / 14 hours

# Language

- English