

## Power BI Desktop & Online Advanced

This course is developed for the more experienced Power BI users who want to take their skills to the next level and want to know more about DAX.

- Transform and manipulate data with advanced tools such as parameters and functions in Power Query. View and adjust the M code in the editor
- Create relationships between different data sources; active relationships, inactive relationships and the filter direction in relationships
- Design a model, comparing calculated column or measures
- DAX formulas and calculated columns

### Course duration

The duration of the course is two days, 6 hours per day.

### Audience and Prerequisites

This course is intended for BI consultants, analysts, power users, end users, IT professionals and advanced Excel users who want to become familiar with the possibilities that Power BI Desktop & Dax offers on an advanced level. To participate this Power BI course, the student must at least master the topics of our Power BI Desktop & Online Basic course.

### Summary

#### Context

- Explanation of various types of context;
  - Row context
  - Filter context
  - Evaluation context
  - Context transition

- CALCULATE with in combination with AND / OR logic filter combinations
- CALCULATE with ALLSELECTED
- CALCULATE with ALLEXCEPT

#### Use CALCULATE with Passive (inactive) relationships

- Set up multiple relationships to 1 table
- Creating multiple relationships
- USERELATIONSHIP FUNCTION

#### Short repetition Power BI Desktop basis

- Importing data
- Repetition of the data model set up
- Create different date labels

#### Understanding relations (many to many)

- Relations 1: Basics
- Relations 2: Cross filter direction
- Relations 3: Many on many relationship solving with intermediate table

#### About Measures

- Set up a measures table
- How do you set up a measure table
- Separate base measures and more complex or specific measures
- When to use a measure and when to use a calculated column
- Implicit measures vs explicit measures?

#### Use of variables in Dax

- Use of variables to simplify extensive DAX formula's
- Naming conventions for variables
- Error checking using variables

#### Calculate function for Dax

- Extensive use of CALCULATE() in combination with adding, removing or redirecting filters

### *Disconnected tables*

- Use of disconnected tables: for percentage change through a Slicer
- Create disconnected tables: for currency Calculations and other puposes

### *Most used DAX functions*

- SUMX
- RANKX
- FILTER
- TOPN
- EARLIER
- RELATEDTABLE
- DATESMTD-QTD-YTD
- TOTALMTD-QTD-YTD
- SAMEPERIODLASTYEAR
- DATEADD
- PARALLELPERIOD
- VALUES
- CALCULATE
- And more ....!!

### *Dynamic titles*

- Creating dynamic title

### *Targets (day) versus Actuals (day)*

- Define Months
- Group
- Merge Targets and Actuals
- Extra specification Targets and Actuals

### *(Re)new(ed) Items*

- Activate preview settings
- Drill through to other pages
- Bookmarks [Bookmarks]
- Use of buttons
- Ask a question to your data (Q&A)
- Analysis of increases or decreases
- Use of themes
- Edit themes (JSON file)
- Setting up corporate identity
- Visual header tooltips
- Importing data from a PDF file

### *Templates*

- Templates general
- Create templates
- Use templates
- Save as Templates

### *Parameters*

- Creating dynamic Parameter
- Use dynamic Parameter
- Intermediate command: Delete parameter
- Use parameter in Template

### *Cumulative columns*

- Cumulative Columns via Calculate, Filter and MAX
- Counting and cumulative Columns via RANKX, FILTER and EARLIER

### *Extra visualization & additions new versions*

- Sparklines
- Table Sorter
- Gantt diagram
- Star rating

### *Histogram*

- Histogram: group [BIN] the data
- Histogram: use the Histogram visualization

### *Forecasting models*

- Fore Casting through Visualization
- Advanced: Forecasting through Time Intelligence

### *Use of Extra Tools*

- DAX Studio
- Vertipaq analyzer
- DAX Formatter
- Theme generator