

## Microsoft Power BI Desktop & Online advanced

Learn how to create and visualize interactive reports with data modelling tools from Power BI!

- Connect data from the Cloud or on premise
- Create interactive reports with beautiful visual effects
- Create relationships between different data sources and discover patterns that you would otherwise never discover.
- Create dashboards
- Create apps
- Share data with anyone via desktop, web or mobile

### Course duration

The duration of this course is two days, six hours a day.

### Audience

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.

### Prerequisites

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

### Short repetition of Power BI desktop basics

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

### 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?

### Calculate function for Dax

- Extensive use of CALCULATE() in combination with adding, removing or redirecting filters
- 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 one table
- Creating multiple relationships
- USERELATIONSHIP FUNCTION

## Understanding relations (many to many)

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

## Use of variables in Dax

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

## Disconnected tables

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

## 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