

Power BI Course Syllabus

By Satyabrata Barik (Azure Certified) trainer with 6+ Years
Experience

Introduction to Power BI

Query Editor

Power BI Desktop

Power BI Service

Sharing & Security Options

Advanced Features

Hands on Practice



Power Query

- Data Transformation, Benefits of Data Transformation
- Shape or Transform Data using Power Query
- Overview of Power Query / Query Editor, Query Editor User Interface.
- The Ribbon (Home, Transform, Add Column, View Tabs)
- The Queries Pane, The Data View / Results Pane, The Query Settings Pane, Formula Bar
- Data types, Changing the Data type of a Column Filter in Power Query
- Auto Filter / Basic Filtering, Filter a Column using Text Filters, Number Filters & Date Filters
- Remove Columns / Remove Other Columns, Name / Rename a Column, Reorder Columns or Sort
- Add Column / Custom Column Split
- Columns From Examples, Indexes
- Conditional Columns, Expressions



Power Query

- Header Row or Use First Row as Headers
- Keep Top Rows, Keep Bottom Rows Keep, Range of Rows
- Query Duplicate, Query Reference
- Keep Duplicates, Keep Errors
- Remove Top Rows, Remove Bottom Rows, Remove Alternative Rows
- Deriving Year, Quarter, Month, Day
- Remove Duplicates, Remove Blank Rows, Remove Errors
- Merge , Append, PIVOT, UNPIVOT, Transpose Columns
- Group Rows / Group By
- Creating Parameters in Power Query
- Linking Parameters to Queries



Power BI Desktop

Basic Report Design

- Power BI Desktop Installation
- Various options in the Top Ribbon
- Data Sources & Visual Types
- Canvas, Visualizations and Fields
- Get Data and Memory Tables
- Format Button and Data Labels
- Visual Interaction, Data Points
- Disabling Visual Interactions
- Edit Interactions - Format Options

- SPOTLIGHT &
- CSV and PDF Exports. Tooltips



Power BI Desktop

Data Modeling:

- Data Modeling Introduction
- Relationship, Need of Relationship
- Relationship Types / Cardinality in General
- One-to-One, One-to-Many (or Many-to-One), Many-to-Many
- Auto Detect the relationship, Create a new relationship, Edit existing relationships
- Make Relationship Active or Inactive
- Delete a relationship



Power BI Desktop

Filter, Slicer & Visual Sync

- Difference between slicer & filter
- Different types of Filters (Visual, Page & Report level filters)
- Basic Filter, Top N, Advance filtering options
- Slicer Visual : Real-time Usage
- Orientation, Selection Properties
- Single & Multi Select, CTRL Options
- Slicer : Number, Text and Date Data
- Slicer List and Slicer Drop downs
- Visual Sync Limitations with Slicer
- Edit Interaction
- Custom visual (chiclet slicer)

Efficient Ways to format the report

- Distribution Options
- Alignment options
- Arranging the order of visuals



Power BI Desktop

Hierarchies, Drill Down, Drill Through & Visual Tool Tip

- Creating Hierarchies in Power BI
- Drill Up Buttons and Operations
- Different ways of Drill down
- Formatting the Drill down view in Matrix
- Drill Through use case
- "Keep All Filters" Options in Drill Through
- Step by step implementation of Drill Through
- Normal Tool tip
- Tool Tip page creation
- Using visual tool



Power BI Desktop

Bookmarks & Button Actions

- Bookmarks: Real-time Usage
- Bookmarks for Visual Filters
- Bookmarks for Page Navigation
- Selection Pane with Bookmarks
- Buttons, Images with Actions
- Buttons, Actions and Text URLs

Visualization Properties

- Stacked Charts and Clustered Charts
- Line Charts, Area Charts, Bar Charts
- 100% Stacked Bar & Column Charts
- Map Visuals: Tree, Filled, Bubble
- Cards, Funnel, Table, Matrix
- Scatter Chart : Play Axis, Labels
- Series Clusters & Selections
- Waterfall Chart
- Conditional Formatting

DAX

DAX:

- What is DAX, Calculated Column, Measures
- DAX Table and Column Name Syntax
- Creating Calculated Columns, Creating Measures & Calculated Tables
- Columns Vs Measures
- DAX Syntax &
- DAX Operators
- Types of Operators: Arithmetic, Comparison, Text Concatenation and Logical Operators

DAX

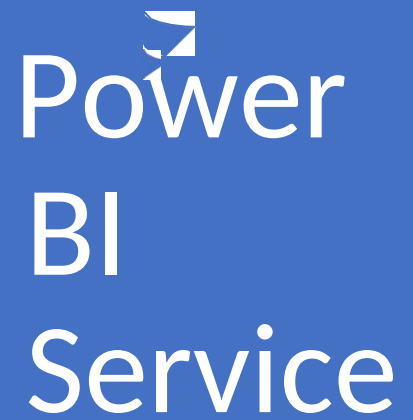
DAX Function *Types:*

- Date and Time Functions
- Text Functions
- Logical Functions
- Math & Statistical Functions
- Filter Functions
- Table Functions

DAX

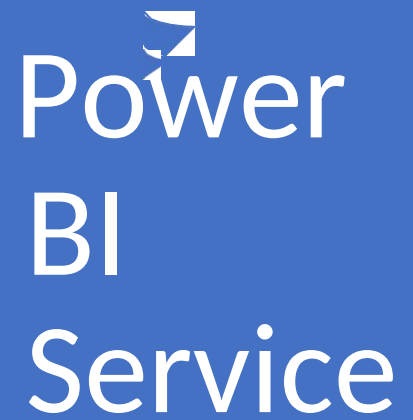
DAX *Functions:*

- SUM, SUMX, AVERAGE etc in DAX
- Remove Filters and CALCULATE
- COUNTROWS, RELATED, DIVIDE
- PARALLELPERIOD, DATEDADD
- CALCULATE & PREVIOUSMONTH
- USERELATIONSHIP, DAX Variables
- TOTALYTD ,
- CALCULATE Function Conditions
- Filter Context
- All, AllSelected, AllExcept
- IF & Switch Case
- Rankx
- Summarize, Union, Calculate Table



Dataset, Report and Dashboard

- Power BI Cloud Components, Use
- App Work spaces, Report Publish
- Reports & Related Data sets Cloud
- Creating New Reports in Cloud
- Report Publish and Report Uploads
- Dashboards Creation and Usage
- Adding Tiles to Dashboards
- Pining Visuals and Report Pages
- Visual Pin Actions in Dashboards
- LIVE Page Interaction in Dashboard



Dataset settings, Schedule Refresh, Gateway Settings

- Important Dataset settings
- Favorite, Insights, Embed Code
- Featured Dashboards and Refresh
- Gateways Configuration, PBI Service
- Gateway Types, Cloud Connections
- Gateway Clusters, Add Data Sources
- Data Refresh : Manual, Automatic
- DataFlow

Sharing & Security

Report Sharing and Export Options

- Giving access to Workspace
- Sharing the report directly
- Creating the app and giving access to app

- Analyze in
- Connecting to PPT
- Exporting in PDF & PPT
- Embedding the report in website/other applications
- Publishing to web for open access
- RLS Implementation
- Testing the RLS role

Advanced Features

- Paginated Reports
- Incremental Refresh setup
- External Tools and Report Optimization
- Best Practices
- Power
- Q&A Visual
- Power BI Latest Updates



Hands on Practice

Student can pick any one of the below template for hands on

- Finance Reporting
- HR Reporting
- Sales Report
- Operational
- Vertical Report

Thank
You

