

Data Analysis with Power BI

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Introduction to Power BI

- What is Power BI
- Why Power BI
- Different Power BI Products

Introduction to Power BI Desktop

Working with Data Sources

Functionality of Import /Direct Query and Live connection

Working with

- Excel
- CSV
- SQL Server
- SSAS
- Snowflake
- DataBricks
- Power BI Data Sets
- Power BI Data flows

Working With Visualizations

Purpose Of Each & Every Visualization

Configuration of Each Visualization

- Card & Multirow card
- Pie/Donut/100 % Stacked bar
- Filled Map/Map
- Clustered Bar/Stacked Bar
- Line & Area charts
- Bar & Line Charts
- Table & Matrix
- Gauge, KPI & Funnel
- Ribbon, Water Fall
- Conditional Formatting
- Dynamic Titles
- Dynamic Colors

Working With Power Query

- Parameters
- Merge table & Column
- Split
- Pivot
- Unpivot
- Group by
- Removing columns
- Filtering rows

- Duplicate, reference and delete
- Changing connection Strings
- Advanced editor
- And other transformations
- Filter a Column using Text Filters
- Filter a Column using Number Filters
- Filter a Column using Date Filters
- Filter Multiple Columns
- Keep Top Rows, Keep Bottom Rows
- Keep Duplicates, Keep Errors
- Replace Values
- Keep Rows, Remove Rows
- Keep Columns, Remove Columns

Working with User interface

- Working with Cross filtering & cross highlighting
- Edit Interactions
- Filters
- Visual/page /report
- Parameters : What if /Field /URL
- Drill down
- Drill through
- Sync Slicers
- Performance analyzer
- Themes
- Templates
- Bookmarks
- Selection Pane
- Inserting Image /Shape/text
- Grouping of Visuals
- Grouping of categories
- Manage Roles

Data Modelling

- Dimensions & Facts
- Star Schema
- Snowflake schema
- Working with M- M relationships
- Working with manage relationships
- Cross filter direction Single or Both

Working With Security

- Static RLS
- Dynamic RLS
- Object based Security

- Page based security
- Enabling or disabling Visuals based on user

Working With Power Bi Service

- Introduction to Power BI Service
- How to configure Power BI service
- Deploying Power BI Reports
- Subscriptions
- Alerts
- Creating a dashboard
- Analyse in Excel
- Sharing a report with Report & Dashboard
- Working with APP
- Giving An Access to Workspace
- Working with Gateways
- Installing & configuring Gateways
- Adding a data Source
- Configuring data source
- Refreshing adhoc & scheduled
- Configuring Mobile Apps
- Creating Data Flows

Working with DAX Functions

- Date and Time Functions
- Text Functions
- Logical Functions
- Statistical Functions
- Filter Functions
- Time Intelligence Functions
- Information Functions
- Relationship Functions
- Aggregation Functions
- Parent & Child Functions
- Table Manipulation Functions

Date and Time Functions

- CALENDAR
- CALENDARAUTO
- DATE
- DATEDIFF
- DATEVALUE
- DAY
- EDATE
- EOMONTH
- HOUR
- MINUTE

- MONTH
- NETWORKDAYS
- NOW
- QUARTER
- SECOND
- TIME
- TIMEVALUE
- TODAY
- UTCNOW
- UTCTODAY
- WEEKDAY
- WEEKNUM
- YEAR

Text Functions

- COMBINEVALUES
- CONCATENATE
- CONCATENATEX
- EXACT
- FIND
- FIXED
- FORMAT
- LEFT
- LEN
- LOWER
- MID
- REPLACE
- REPT
- RIGHT
- SEARCH
- SUBSTITUTE
- TRIM
- UNICHAR
- UNICODE
- UPPER
- VALUE

Logical Functions

- AND
- COALESCE
- FALSE
- IF
- IF.EAGER
- IFERROR
- NOT
- OR

- SWITCH
- TRUE

Statistical Functions

- COMBIN
- COMBINA
- RANK.EQ
- RANKX
- SAMPLE

Filter Functions

- ALL
- ALLCROSSFILTERED
- ALLEXCEPT
- ALLNOBLANKROW
- ALLSELECTED
- CALCULATE
- CALCULATETABLE
- EARLIER
- EARLIEST
- FILTER
- INDEX
- KEEPFILTERS
- LOOKUPVALUE
- OFFSET
- ORDERBY
- PARTITIONBY
- REMOVEFILTERS
- SELECTEDVALUE
- WINDOW

Time Intelligence Functions

- CLOSINGBALANCEMONTH
- CLOSINGBALANCEQUARTER
- CLOSINGBALANCEYEAR
- DATEADDDATESBETWEEN
- DATESINPERIOD
- DATESMTD
- DATESQTD
- DATESYTD
- ENDOFMONTH
- ENDOFQUARTER
- ENDOFYEAR
- FIRSTDATE
- FIRSTNONBLANK
- LASTDATE

- LASTNONBLANK
- NEXTDAY
- NEXTMONTH
- NEXTQUARTER
- NEXTYEAR
- OPENINGBALANCEMONTH
- OPENINGBALANCEQUARTER
- OPENINGBALANCEYEAR
- PARALLELPERIOD
- PREVIOUSDAY
- PREVIOUSMONTH
- PREVIOUSQUARTER
- PREVIOUSYEAR
- SAMEPERIODLASTYEAR
- STARTOFMONTH
- STARTOFQUARTER
- STARTOFYEAR
- TOTALMTD
- TOTALQTD
- TOTALYTD

Aggregation Functions

- AVERAGE
- AVERAGEA
- AVERAGEX
- COUNT
- COUNTA
- COUNTAX
- COUNTBLANK
- COUNTROWS
- COUNTX
- DISTINCTCOUNT
- DISTINCTCOUNTNOBLANK
- MAX
- MAXA
- MAXX
- MIN
- MINA
- MINX
- PRODUCT
- PRODUCTX
- SUM
- SUMX

Information Functions

- CONTAINS
- CONTAINSROW
- CONTAINSSTRING
- CONTAINSSTRINGEXACT
- CUSTOMDATA
- HASONEFILTER
- HASONEVALUE
- ISAFTER
- ISBLANK
- ISCROSSFILTERED
- ISEMPY
- ISERROR
- ISEVEN
- ISFILTERED
- ISINSCOPE
- ISLOGICAL
- ISNONTEXT
- ISNUMBER
- ISODD
- ISONORAFTER
- ISSELECTEDMEASURE
- ISSUBTOTAL
- ISTEXT
- NONVISUAL
- SELECTEDMEASURE
- SELECTEDMEASUREFORMATSTRING
- SELECTEDMEASURENAME
- USERCULTURE
- USERNAME
- USEROBJECTID
- USERPRINCIPALNAME

Relationship Functions

- CROSSFILTER
- RELATED
- RELATEDTABLE
- USERELATIONSHIP

Parent & Child Functions

- Path
- Path contains
- Path Item
- Path Item Reverse
- Path Length

Table Manipulation Functions

- ADDCOLUMNS
- ADDMISSINGITEMS
- CROSSJOIN
- CURRENTGROUP
- DATATABLE
- DETAILROWS
- DISTINCT column
- DISTINCT table
- EXCEPT
- FILTERS
- GROUPBY
- IGNORE
- INTERSECT
- NATURALINNERJOIN
- NATURALLEFTOUTERJOIN
- ROLLUP
- ROLLUPADDSUBTOTAL
- ROLLUPISSUBTOTAL
- ROLLUPGROUP
- ROW
- SELECTCOLUMNS
- SUBSTITUTEWITHINDEX
- SUMMARIZE
- SUMMARIZECOLUMNS
- Table Constructor
- TOPN
- TREATAS
- UNION
- VALUES