

## Introduction to power BI - visualization basics

- Creating Visualization in Power BI
- Fields Configuration for Visuals
- Fields Formatting in the Modeling
- Formatting Visuals
- Analytical Lines for Visuals
- Page Formatting and Configurations
- Creating Visuals with Q&A

## Data Exploration

- Drill Down and Drill Up
- Filter Pane to Filter data
- Filter Pane Configuration
- Drill through Filter
- Slicers Options for End Users
- Syncing Slicers Across Multiple Pages
- Displaying Selected Values from Slicers

## Advanced visualization in power BI

- Report Page Tooltip
- Edit Interactions between Visuals
- Designing Report for Phone Views
- Grouping Data based on Text Fields
- Grouping Data based on DAX calculation
- Binning Data based on Datetime or Numeric Fields
- Bookmarks
- Selection Pane
- Controlling Visuals with Bookmarks & Selection Pane

## Column and bar charts - category analytics

- Stacked Bar Chart
- Stacked Column Chart
- Clustered Bar Chart
- Clustered Column Chart
- 100% Stacked Column Chart
- 1000% Stacked Bar Chart
- Line and Area charts - Trend analytics
- Line Chart
- Area Chart
- Stacked Area Chart

## Combo charts - different scales in visual

- Line & Stacked Column Chart
- Line & Clustered Column Chart

## Group Charts

- Pie Chart
- Donut Chart
- Treemap Chart

## Cards

- Single Card
- Multi-Row Card

## KPI visuals

- Gauge Chart
- KPI Chart

## Grid Visuals

- Table
- Matrix
- Conditional Formatting Grid Visuals and Charts

## Map Visuals

- Map Visual with Bing Map
- Map Visual with Latitude and Longitude
- Filled Map
- Shape Map
- ArcGIS Map

## Other Charts

- Ribbon Chart - Ranking
- Waterfall Chart
- Scatter Chart
- Custom Charts
- Custom Slicers
- Custom Visuals
- Recent Updates in Power BI
- Creating Real Time Dashboard

## **PowerBI - Data Preparation**

- ETL - Introduction
- Getting Data - Various Sources
- Data Types - Numeric, Text, Datetime, Boolean and Binary
- Comparison Operators
- Logical Operators - Logical OR, Logical AND, and Logical NOT
- Power Query Introduction

## **Transformation Activities**

- Data Converting
- Data Filtering - Numeric, Text, Date & Time and Reduce Rows
- Data Deriving - General, From Text, From Number and From Date & Time
- Data Sorting - Reading Latest file
- Data Combining - based on Number, Text, Date
- Data Appending
- Combine Files
- Data Aggregation - with/without Data Combining
- Data Pivoting
- Data Unpivoting - Creating Dynamic axis report

## **Different types of connectivity**

- Import
- Direct Query
- Differences Between Import & Direct Query
- Connect Live

## M-Script

- Introduction to M; Power Query Formula Language
- Learning M-Syntax
- Predefined Functions
- Creating Custom Functions
- Calling M-function with Invoke Custom Function
- Advantages of M-Script

## Tuning & Others

- Performance Tuning
- Getting Data with Different Connectors
- Common Activities
- Use Cases

## Data Modeling

- Introduction to Data Modeling
- Fact Tables
- Dimension Tables
- Star Schema
- Snowflake Schema
- Integrated Schema
- Data Loading into Power Pivot
- Creating Relationships
- What is Relationship
- Direction of the Relationship
- Active or Inactive Relationship
- Formatting Data Fields

- Sorting a Column by Another Column
- Hiding/Unhiding Column(s)
- Hierarchies
- Auto Summarization
- Other Configuration Fields

### **DAX and Calculations**

- Four Types of Calculations in Power BI
- Introduction to DAX
- New Column
- New Measure
- New Column vs New Measure
- Quick Measure
- Operators in DAX
- Functions in DAX

### **Math Functions**

- ABS Function
- DIVIDE Operator
- DIVIDE function
- POWER Function
- INT Function
- ROUND Function
- ROUNDUP Function
- ROUNDDOWN Function
- SIGN Function
- SQRT Function
- SUM Function

- SUMX Function

### **variables and parameters**

- Variables for Better Performance and Readability
- Adjusting DAX Expression
- Simplifying DAX Expressions
- Creating Variables in DAX
- Purpose of RETURN in DAX
- Writing a Function inside Function
- Breaking Logic into Pieces with DAX
- What-if Parameter
- Parameter Table or Disconnected Table

### **Text Functions**

- BLANK Function
- CONCATENATE Function
- CONCATENATEX Function
- EXACT Function
- FIND Function
- FORMAT Function
- LEFT Function
- LEN Function
- LOWER Function
- MID Function
- REPLACE Function
- REPT Function
- RIGHT Function
- SEARCH Function
- SUBSTITUTE Function

- TRIM Function
- UNICHAR Function
- UPPER Function
- VALUE Function

### **Date & Time Functions**

- CALENDAR/CALENDAR AUTO Functions
- DATE Function
- DATEVALUE Function
- DAY Function
- EOMONTH Function
- HOUR Function
- MINUTE Function
- MONTH Function
- NOW Function
- SECOND Function
- TIME Function
- TODAY Function
- WEEKDAY Function
- WEEKNUM Function
- YEAR Function

### **Aggregate functions**

- AVERAGE Function
- AVERAGEA Function
- AVERAGEX Function
- COUNT Function
- COUNTA Function



- COUNTAX Function
- COUNTBLANK Function
- COUNTROWS Function
- COUNTX Function
- MAX Function
- MAXA Function
- MAXX Function
- MIN Function
- MINA Function
- MINX Function

### **Information function**

- ISBLANKFunction
- ISERRORFunction
- ISEVENFunction
- ISNUMBERFunction
- ISODDFunction
- ISTEXTFunction
- USERNAME/USERPRINCIPALNAME

### **Filter Function**

- ALLFunction
- CALCULATEFunction
- FILTERFunction
- RELATEDFunction
- RELATED TABLEFunction
- CALCULATEFunction
- DISTINCTFunction

## Relationship Function

- RELATED function
- RELATEDTABLE function
- Using CrossFilter to change the Direction of Relationship
- UserRelationship to use an inactive Relationship

## Logical Function

- AND/OR Function
- FALSE/TRUE Function
- IFFunction
- IFERRORFunction
- NOT Function
- SWITCH

## Time Intelligence

- Introduction to Time Intelligence
- Default vs Custom Date Table
- Calendar/CalenderAuto Functions
- Year to Date Calculation
- Financial Year to Date
- Quarter to Date
- Month to Date
- Comparing This Year vs Last Year, Growth & Variance
- Calculating Last Month's value
- DateAdd function
- Rolling 12 Months Calculation
- Calculating the Average in the Rolling 12 Months Period

## **MS Power BI service Part 1**

- Introduction
- Creating Account in Power BI Service
- My Workspace
- Dashboards
- Reports
- Datasets
- Workbooks
- Creating Report in Power BI Service
- Creating Report with Existed Report
- Creating Dashboard
- Creating and Managing Alerts
- Sharing Report
- Sharing Dashboard
- App Workspaces
- Data Gateway
- Adding Data Sources to Data Gateways
- Data Refreshes - On-Demand and Scheduling

## **MS Power BI service Part 2**

- Creating Quick Insights
- Content Pack
- Publishing Report from Power BI Desktop
- Publishing Report from Excel
- Row Level Security
- Power BI Reporting Server
- Introduction
- Installing Power BI Report Server

- Configuring Power BI Report Server
- Installing Power BI Desktop for Report Server
- Deploying Power BI Report to Power BI Report Server
- Scheduling Power BI Reports - On-Demand and Scheduling

Total Duration: 45 Hrs

Batches Available: Weekdays & Weekends.

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