

# Power BI

## Power BI Introduction and Installation

- Understanding Power BI Background
- Installation of Power BI and checklist for perfect installation
- Formatting and Setting prerequisites
- Understanding the difference between Power BI desktop & Power Query

## The Power BI user interface, including types of data sources and visualizations

- Getting familiar with the interface BI Query & Desktop
- Understanding types of visualization
- Loading data from multiple sources
- Data type and the type of default chart on drag drop
- Geo location map integration

**Lab:** Load the data from excel file and validating the data types and using default charts

## Sample dashboard with Animation Visual

- Financial sample data in Power BI
- Preparing sample dashboard as get started
- Map visual types and usages in different variation
- Understanding scatter Plot chart with Play axis and the parameters.

**Lab:** Variations of Scatter Chart and Map Chart with conditional formatting and using play axis

## Power BI Artificial Intelligence Visual

- Understanding the use of AI in Power BI
- AI analysis in Power BI using chart
- Q&A chat bot and the use in real life
- Hierarchy tree

**Lab:** Create visuals with the help of AI like Q&A Smart Narrative

## Power BI Visualization

- Understanding Column Chart
- Understanding Line Chart
- Implementation of Conditional formatting
- Implementation of Formatting techniques.

**Lab:** Bar & Column chart differences and Coloring and formatting

## Power Query Editor

- Loading data from folder
- Understanding Power Query in detail
- Promote header, Split to limiter, Add columns, append, merge queries, etc.

**Lab:** Formatting the data and removing unwanted fields

## Modelling with Power BI

- Loading multiple data from different format
- Understanding modelling (How to create relationship)
- Connection type, Data cardinality, Filter direction
- Making dashboard using new loaded data

**Lab:** Creating relationships with different Cardinality with examples

## Power Query Editor Filter Data

- Power Query Custom Column & Conditional Column
- Manage Parameter
- Introduction to Filter and types of filter
- Trend analysis, Future forecast

**Lab:** Power Query Custom Column (M-Code) and Manage Parameter

## Customize the data in Power BI

- Understanding tooltip with information
- Use and understanding of Drill Down
- Visual interaction and customisation of visual interaction

**Lab:** Usage of drill down & tool tip

## Customize the data in Power BI

- Drill through function and usage
- Button triggers
- Bookmark and different use and implementation
- Navigation buttons

**Lab:** How to create Bookmarks and Navigation buttons

## Dax Expressions

- Introduction to DAX
- Table Dax, Calculated column, DAX measure and difference
- Eg:- Calendar, Calendar auto, Summarize, Group by, etc.
- Calculated Column
- Related, Lookup value, switch, Datedif, Rankx, Date functions
- Dax Measure and Quick Measure
- Remove filters, Keep filters, All, Allselected, Time Intelligence Functions, Rolling average, YoY, Running total

**Lab:** Revision of the Table dax formulas  
Revision of the Calculated Columns formulas  
Revision of the Calculated Dax formulas

## Custom Visual

- Custom visual and understanding the use of custom
- Loading custom visual, Pinning visual
- Loading to template for future use
- Publishing Power Bi

**Lab:** Creating Visualization and Publishing Power BI Service

## Power BI Service

- Introduction to app.powerbi.com
- Schedule refresh
- Data flow and use power bi from online
- Download data as live in Powerpoint and more.

**Lab:** Complete Power BI Online Services