

Explain Common Components of Power BI



Ranjan Relan

DATA & TECH STRATEGY CONSULTANT

@rrelan2



What's covered in previous Module?

Data View

Collect data and
wrangle data

Model View

Build your data model

Report View

Build your visualizations



What's covered in previous Module?

Data View

Collect data and
wrangle data

Model View

Build your data
model

Report View

Build your visualizations



What we shall cover in this module?

Data View

Collect data and
wrangle data

Model View

Build your data model

Report View

Build your visualizations

Power BI Query Editor



Demo



Model View: Build the Data Model



Report View: Visualization, Pages and Reports



Visualization Controls

Bar Chart

Extremely popular, used to compare objects or things across categories

Line Chart

Leveraged to find trends over a period of time, find seasonal patterns, etc. Popularly used in time series data.

Pie Chart

Should be used when you want to compare one category against the complete dataset

Scatter Chart

Should be used when you want to track anomalies or patterns in data

Maps

For showcasing location, geographies to capture the geographical imagination of the users

Slicers

Visual Canvas Filters used in Power BI

Reports, Pages and Visualizations

Visualizations



```
graph TD; A[Visualizations] --> B["Page<br/>(Combination of Visualizations)"]; B --> C["Reports<br/>(Combination of Pages)"]
```

Page
(Combination of Visualizations)

Reports
(Combination of Pages)



Demo



Report View : Interface

- Visualization Controls
- Pages
- Reports



Demo



Report View: Build your first Bar Chart



Demo



Report View: Pie Chart



Demo



Report View: Text Table & Heat Maps



Demo



Report View: Filled Maps



Filters and its Types



Demo



Report View: Using Slices



Filters and its Types



Power BI has three types of filters



Filters and Its Types

Visual Filter

Apply to a single visualization

Page Filter

Applies to all the visualizations in a page

Report Filter

Applies to all the visualizations in a report

We shall also study slicers

Visual Formatting for Visualizations in Power BI



Two Levels of Visual Formatting

Visualization Level

Legends

Colors

Labels

Title

Background

Page Level

Information

Size

Alignment

Filter Pane

Wallpaper



Demo



Power BI Editor: Aggregate Functions



Custom Visuals Usage



Custom Visuals – Build vs Buy

Buy

Buy custom visuals from
Power BI AppStore (many of
them are free)

Build

Build your own Custom
Visuals

Describe and Implement Aggregate Functions



When to Use Aggregate Functions

Reduce the Dataset

Combine and reduce the size
of the dataset

Understand the Data

Output is generally one value
or row



Types of Aggregate Functions

SUM

Add all the values in a field

AVERAGE

Take an arithmetic mean of the values

MINIMUM

Show the smallest values

MAXIMUM

Show the largest values

COUNT
(not blank)

Counts the number of values in that field that aren't blank



Types of Aggregate Functions

COUNT
(not distinct)

Counts the number of different values in that field

**STANDARD
DEVIATION**

Deviation from the mean of values

VARIANCE

Variance from the mean of values

MEDIAN

Middle number in a sorted list

**Do Not
Summarize**

In case we don't want to summarize a numeric field



Demo



Implement Aggregate Functions



Compare and Contrast Power BI Common Components



Compare and Contrast Power BI Common Components

JOURNEY OF POWER BI DEVELOPER

Power BI Desktop

Create

Publish

Power BI Service

Share

Power BI Mobile

VISUALIZATION

DATASETS

REPORTS

TILES

DASHBOARDS

APPS

VISUALIZATION

DATASETS

REPORTS

TILES

DASHBOARDS

APPS

VISUALIZATION

DATASETS

REPORTS

TILES

DASHBOARDS

APPS

