# POWER B

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## WHAT IS IT

- **Power BI** is a collection of software services, apps, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights.
- Data may be an Excel spreadsheet, or a collection of cloud-based and on-premises hybrid data warehouses.
- Power BI lets you easily connect to your data sources, visualize and discover what's important, and share that with anyone or everyone you want.

#### **ELEMENTS OF POWER BI**

- A Windows desktop application called Power BI Desktop.
- An online SaaS (Software as a Service) service called the Power BI service.
- Power BI mobile apps for Windows, iOS, and Android devices.
- + Power Bl Report Builder & Power Bl Report Server



#### THE WORKFLOW OF POWER BI

One common workflow that shows how the three main Power BI elements complement each other:

- Bring data into Power BI Desktop, and create a report.
- Publish to the Power BI service, where you create new visualizations or build dashboards.
- Share your dashboards with others, especially people who are on the go.
- View and interact with shared dashboards and reports in Power BI Mobile apps.

(data analysts or BI professionals often are responsible for the tasks performed in Power BI Desktop).

#### BUILDING BLOCKS OF POWER BI

- Visualizations: a visual representation of data.
- Datasets: a collection of data that Power Bl uses to create its visualizations.
- Reports: a collection of visualizations that appear together on one or more pages.
- Dashboards: a high-level view of some of key KPIs of one or more reports. A single-page collection of visuals built from a report.
- Tiles: a single visualization on a report or dashboard.

## POWER BI DESKTOP VS. SERVICE

**Power BI Desktop** 

Many data sources

Transforming

Shaping & modeling

Measures

Calculated columns

Python

Themes

**RLS** creation

Both

Reports

Visualizations

Security

Filters

Bookmarks

Q&A

R visuals

Power BI service

Some data sources

Dashboards

Apps & workspaces

Sharing

**Dataflow creation** 

Paginated reports

**RLS** management

**Gateway connections** 

#### **SOURCES**

- Power BI official documentation <u>https://docs.microsoft.com/en-us/power-bi/fundamentals/</u>
- Download Power BI Desktop
   <a href="https://powerbi.microsoft.com/en-us/desktop/">https://powerbi.microsoft.com/en-us/desktop/</a>
- Learning Path: Create and use analytics reports with Power BI
  <a href="https://docs.microsoft.com/en-us/learn/paths/create-use-analytics-reports-power-bi/">https://docs.microsoft.com/en-us/learn/paths/create-use-analytics-reports-power-bi/</a>
- Learning Path: Perform analytics in Power Bl <a href="https://docs.microsoft.com/en-us/learn/modules/perform-analytics-power-bi/">https://docs.microsoft.com/en-us/learn/modules/perform-analytics-power-bi/</a>
- Power BI Desktop and Python; Amazing capabilities <a href="https://medium.com/analytics-vidhya/power-bi-desktop-and-python-amazing-capabilities-9e66f645b4e#:~:text=Why%20Use%20Python%20in%20Power,based%20on%20the%20predicated%20result">https://medium.com/analytics-vidhya/power-bi-desktop-and-python-amazing-capabilities-9e66f645b4e#:~:text=Why%20Use%20Python%20in%20Power,based%20on%20the%20predicated%20result</a>
- Get samples for Power Bl <u>https://docs.microsoft.com/en-us/power-bi/create-reports/sample-datasets</u>
- What can developers do with the Power BI API?
  <a href="https://docs.microsoft.com/en-us/power-bi/developer/automation/overview-of-power-bi-rest-api">https://docs.microsoft.com/en-us/power-bi/developer/automation/overview-of-power-bi-rest-api</a>