

#### **Power BI Unboxed**

#### Section 1: Learn

#### What is Power BI?

**Power BI** is a **business intelligence (BI) tool** developed by Microsoft that helps in **data visualization, reporting, and analytics**. It allows users to **connect, transform, and visualize data** from multiple sources.

### Why Use Power BI?

- Easy to use Drag-and-drop interface for creating reports.
- Real-time insights Helps businesses make data-driven decisions.
- Multiple data sources Connects to Excel, databases, cloud services, and more.
- Al-powered analytics Uses Al for better insights.

#### How Does Power BI Work?

### Power BI follows a 3-step process:

- 1. **Data Import** Connect to Excel, databases, or online sources.
  - 2. Data Transformation Clean and prepare data using Power Query.
  - 3. **Visualization & Reporting** Create dashboards and reports using charts, graphs, and tables.

#### Fun Fact: How Power BI Got Its Name!

Power BI was originally a part of Excel (PowerPivot, PowerQuery) but evolved into a standalone tool to provide more advanced analytics and visualization!



#### Section 2: Practice

## 1. Connecting to Data in Power BI

- Open Power BI Desktop.
- Click Get Data → Select Excel / SQL / Web.
- Click **Load** to import data.

### 2. Creating a Simple Visualization

- 1. Drag "Sales Amount" to the Values field.
  - 2. Drag "Region" to the Axis field.
  - 3. Select **Bar Chart** from the visualization panel.

### 3. Applying Filters

- Use the **Filters pane** to filter data by date, region, or category.
- Apply slicers for interactive filtering.

# 4. Publishing a Report

- Click Publish → Select Power BI Service.
- Share reports with your team.

# Try This Yourself:

- 1. Create a **line chart** to show monthly sales trends.
  - 2. Add a **slicer** to filter sales by product category.

#### Section 3: Know More

# Frequently Asked Questions

Q1: What are the components of Power BI?



- **Power BI Desktop** For report creation.
- Power BI Service Cloud-based sharing.
- Power BI Mobile View reports on mobile devices.

### Q2: Can Power BI work without coding?

Yes! Most tasks can be done using **drag-and-drop**. However, **DAX** and **M Query** can be used for advanced calculations.

# Q3: What file formats does Power BI support?

- Excel (.xlsx, .csv)
- SQL databases
- Cloud sources (Azure, Google Sheets)
- APIs

### Q4: How is Power BI different from Excel?

Power BI offers real-time data updates, better visualization, and cloud sharing, whereas Excel is mostly manual data processing.

# Q5: Can I use Power BI for free?

Yes! Power BI Desktop is **free**, but sharing reports requires a **Pro or Premium** license.

Power BI simplifies data analysis and makes decision-making faster and smarter. Keep practicing!