Microsoft Power BI

**Introduction:**

Microsoft Power BI is a complete reporting solution that offers **data preparation**, **data visualization**, **distribution**, and **management** through development tools & an online platform.  
Power BI can scale from simple reports using a single data source to reports requiring complex **data modeling** & consistent theming.

**Primary Components of Power BI:**

There are **three primary components** of Power BI:

1. **Power BI Desktop** – (Desktop application)
2. **Power BI Service** – (Online platform)
3. **Power BI Mobile** – (Cross-platform mobile app)

**Power BI Desktop:**

It is a **development tool** available to **data analysts** and other report creators.  
*(Create reports)*

**Power BI Service:**

It allows you to **organize, manage, and distribute your reports** & other Power BI items.  
*(Share with team)*

**Power BI Mobile:**

It allows consumers to **view reports in a mobile-optimized format**.  
You can create these optimized report views in Power BI Desktop. *(View on mobile)*

**The Flow of Power BI:**

1. **Get started:**  
   Sign up and set up a workspace. Download Power BI Desktop or use the Power BI Service in your browser.
2. **Connect & prepare data:**  
   Connect to sources like Excel, SQL, or cloud services. Then clean and shape your data.
3. **Model and combine data:**  
   Create relationships, add calculations, and combine sources for a complete view.
4. **Build reports and dashboards:**  
   Use drag-and-drop tools to create interactive visuals.
5. **Explore and analyze:**  
   Filter, sort, and drill down to find insights using built-in analytics.
6. **Share and collaborate:**  
   Publish to Power BI Service, share with your team, and collaborate in real time.
7. **Administer and secure:**  
   Manage access, set up security roles, and monitor usage.