

1. Power BI is a business analytics tool developed by Microsoft that allows users to visualize data, share insights, and make data-driven decisions.

Its three main components are:

- \*Power BI Desktop

- \*Power BI Service (Cloud)

- \*Power BI Mobile

2. Sales Performance Analysis – Track regional sales, profit margins, and product trends.

Financial Reporting – Monitor budgets vs. actuals, cash flow, and KPIs in real time.

3. Visit the official Microsoft Power BI website or open the Microsoft Store on Windows.

Search for Power BI Desktop.

Click Download or Install.

Once installed, launch it from the Start menu and sign in with your Microsoft account.

4. Power BI Desktop is a Windows app used to create and design reports locally and save them as .pbix files.

Power BI Service is a cloud-based platform used to publish, share, and collaborate on those reports online.

5. Power BI project files are saved with the .pbix extension.

6. Power Query is the data transformation and preparation tool in Power BI.

It allows users to:

- \*Connect to multiple data sources.

- \*Clean, reshape, and combine data.

- \*Automate repetitive data preparation tasks.

- \*It uses a scripting language called M.

7. Interactive Dashboards: Visuals are dynamic and clickable.

Real-time Data Updates: Dashboards can refresh automatically.

Scalability: Handles large datasets better than Excel.

Collaboration: Easier sharing via the Power BI Service.

Integration: Connects directly to hundreds of data sources.

8. The free version does not allow sharing or collaboration in the Power BI Service — only the Pro or Premium versions allow publishing and sharing dashboards with others.

9. A published report is a Power BI Desktop report (PBIX) that has been uploaded to the Power BI Service, making it available online for viewing, interaction, and sharing within an organization.

10. Power BI Mobile allows users to:

- \*Access reports and dashboards anytime, anywhere.

- \*Get real-time alerts and updates.

- \*View interactive visuals optimized for smaller screens.

- \*It ensures decision-makers stay informed on the go.

11. Power BI is easier to use, especially for beginners and Excel users. It's more affordable and integrates well with Microsoft tools like Excel and Azure. It works best for small to medium datasets.

Tableau offers more advanced visualizations and handles large data better, but it's more expensive and harder to learn.

12. Power BI seamlessly integrates with Azure for:

- \*Data storage and processing: via Azure SQL Database, Azure Synapse Analytics, or Azure Data Lake.

- \*AI and machine learning: via Azure Machine Learning.

- \*Security and identity management: via Azure Active Directory (AAD).

13. A gateway connects on-premises data sources (like SQL Server, Oracle, etc.) to the Power BI Service.

It's needed when:

- \*Data is stored locally (not in the cloud).

- \*You want scheduled refreshes or live connections to your local databases.

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- \*Reduced reporting time: Automates manual Excel work, saving labor hours.

- \*Better decisions: Real-time insights improve strategic planning.

- \*Lower cost: Affordable compared to competitors like Tableau or Qlik.

- \*Scalable and secure: Easily grows with company needs.

- \*High ROI: Transforms raw data into actionable intelligence, increasing operational efficiency and profitability.

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- \*Row-Level Security (RLS): Restricts data visibility based on user roles.

- \*Data Encryption: In-transit and at-rest.

- \*Azure Active Directory: For secure authentication and access control.

- \*Data Loss Prevention (DLP): Prevents sensitive information sharing.

- \*Auditing and Monitoring: Tracks activity and report access.