

## 1. What is Power BI, and what are its three main components?

**Power BI** is a Microsoft business analytics tool that helps visualize data and share insights.  
**Three main components:**

- **Power BI Desktop** – for data modeling and report building
- **Power BI Service** – cloud platform for sharing and collaboration
- **Power BI Mobile** – mobile app for report access on the go

## 2. Two business use cases for Power BI dashboards:

- **Sales Analysis** – Track sales by region, product, or rep in real-time
- **Financial Reporting** – Monitor budget vs. actuals, expenses, and KPIs

## 3. How do you download and install Power BI Desktop?

- Go to the [official Microsoft Power BI page](#)
- Click **Download** → choose Power BI Desktop
- Install the .msi or get it from the Microsoft Store

## 4. Difference between Power BI Desktop and Power BI Service:

Feature	Power BI Desktop	Power BI Service
Platform	Windows (installed)	Cloud (browser-based)
Use	Build and design reports	Share, collaborate, schedule
Data refresh	Manual or scheduled via Gateway	Automated (with Pro)

## 5. Power BI project file extension:

.pbix

## 6. Role of Power Query in Power BI:

Power Query is the **ETL tool** (Extract, Transform, Load) inside Power BI. It helps **clean**, **reshape**, and **combine** data before loading it into the data model.

## 7. Why prefer Power BI over Excel for reporting?

- Better **visualization**
- Live **dashboards**
- **Automated refresh**
- Easier **sharing & collaboration**
- Handles **larger datasets**

## 8. One limitation of the free version of Power BI:

You **cannot share reports** with others in the Power BI Service (requires Power BI Pro).

## 9. What is a "published report" in Power BI Service?

It's a report **created in Desktop and uploaded** to the Power BI cloud service for viewing, collaboration, or dashboard integration.

## 10. How does Power BI Mobile enhance accessibility?

Users can **view interactive reports** and **receive alerts** on their smartphones/tablets anytime, anywhere.

## 11. Power BI vs Tableau – Pros and Cons:

Feature	Power BI	Tableau
<b>Pros</b>	Cheaper, integrates well with Microsoft	Powerful visuals, deep analytics
<b>Cons</b>	Limited customization	Expensive, steep learning curve

## 12. How Power BI integrates with Azure services:

- Connects to **Azure SQL Database, Azure Synapse, Azure Blob Storage**, etc.
- Uses **Azure Active Directory** for authentication
- Can embed in **Azure web apps** and **Logic Apps** for automation

## 13. What are "gateways" in Power BI, and when are they needed?

**Gateways** allow Power BI Service to **connect to on-premises data sources** securely. Needed when your data lives **outside the cloud** (e.g., SQL Server on your network).

## 14. How to convince a company to adopt Power BI (ROI argument):

- **Lower cost** than many BI tools
- **Faster decision-making** via live dashboards
- **Time savings** through automation
- **Improved collaboration** boosts productivity

ROI = Better decisions + Less manual reporting + More agility

## **15. Security features in Power BI for sensitive data:**

- **Row-level security (RLS)**
- **Data loss prevention (DLP) policies**
- **Encryption at rest and in transit**
- **Azure AD integration**
- **Auditing and usage metrics**