

**What is Power BI, and what are its three main components?**

Power BI is Microsoft's business analytics tool for creating interactive reports and dashboards.

Three main components:

Power BI Desktop (desktop app to build reports)

Power BI Service (online platform to share reports)

Power BI Mobile (mobile app to view reports)

**Name two business use cases for Power BI dashboards.**

Sales performance tracking

Financial reporting and budgeting analysis

**How do you download and install Power BI Desktop?**

Go to the official Power BI website, download the installer, and follow setup instructions.

Alternatively, install via Microsoft Store.

**What is the difference between Power BI Desktop and Power BI Service?**

Power BI Desktop → Used to design and build reports locally

Power BI Service → Cloud-based, used for sharing, collaboration, and online access to reports

**What file extension does a Power BI project use?**

.pbix

**Explain the role of Power Query in Power BI.**

Power Query is the ETL (Extract, Transform, Load) engine in Power BI, used to import, clean, and transform data before building reports.

**Why would a business prefer Power BI over Excel for reporting?**

Handles larger datasets more efficiently

Offers interactive visuals and dashboards

Enables easier sharing and collaboration

Automated data refresh and scheduling

**Describe one limitation of the free version of Power BI.**

You can't share reports with others via the online Power BI Service without a Pro license.

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

A report built in Power BI Desktop and uploaded to the Power BI cloud for online viewing, sharing, and collaboration.

### **How does Power BI Mobile enhance accessibility?**

Lets users view and interact with dashboards and reports on smartphones and tablets, providing insights anywhere, anytime.

### **Compare Power BI with Tableau—pros and cons.**

Power BI	Tableau
Lower cost, good for MS users	More expensive, broader data connections
Simpler for beginners	More advanced visuals and customization
Strong Excel integration	Excellent for big data handling
Tighter integration with Azure	Strong multi-platform support

### **Explain how Power BI integrates with Azure services.**

Connects to Azure SQL Database, Data Lake, Synapse

Can consume Azure Machine Learning models

Integrates with Azure Active Directory for security

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

Gateways connect Power BI Service to on-premises data sources, enabling scheduled refreshes or live queries without moving data to the cloud.

### **How would you convince a company to adopt Power BI? (ROI argument)**

Power BI saves time, reduces manual errors, enables faster insights, and improves decision-making, ultimately leading to higher efficiency and cost savings.

**What security features does Power BI offer for sensitive data?**

Row-level security (RLS)

Data encryption

Integration with Azure Active Directory

Sensitivity labeling and compliance features