

Lesson 1.

1. **Power BI** is a **business analytics tool** developed by Microsoft that allows users to **visualize data, share insights**, and create **interactive dashboards and reports**. It helps organizations make **data-driven decisions** by connecting to various data sources, transforming raw data into meaningful insights, and presenting it in an intuitive, interactive format.

Three Main Components of Power BI:

- Importing and transforming data
 - Building data models
 - Creating reports and dashboards
2. Two business use cases for Power BI dashboards are financial reporting and sales performance tracking.
 3. To download and install Power BI Desktop, navigate to the [Microsoft Power BI website](#) and choose either to download it from the Microsoft Store or directly from the website. If using the Microsoft Store, select "Get" and follow the prompts. If downloading directly, select the 32-bit or 64-bit version, run the installer, and follow the on-screen instructions.
 4. Power BI Desktop and Power BI Service are distinct but complementary components of the Power BI ecosystem. Power BI Desktop is a free, locally installed application primarily used for creating and modeling reports, while Power BI Service is a cloud-based platform for sharing, collaborating on, and consuming those reports.
 5. A Power BI project typically uses the .pbix file extension. This extension represents a Power BI Desktop report file, which includes the report visuals, data model, and queries.
 6. Power Query in Power BI is a powerful data connection and transformation engine. It allows users to import data from various sources, clean and shape it, and prepare it for analysis and reporting.
 7. Businesses prefer Power BI over Excel for reporting due to its superior capabilities in handling large datasets, interactive visualizations, data integration, and enhanced security features.
 8. No Sharing or Collaboration via Power BI Service

With the free version, you can:

Create reports and dashboards in Power BI Desktop

View your own reports locally on your machine

But you cannot publish, share, or collaborate with others via the Power BI cloud service (PowerBI.com) unless you have a Power BI Pro or Premium Per User (PPU) license.

9. In Power BI Service, a "published report" is a report that has been uploaded from Power BI Desktop to the Power BI cloud service. This allows users to access and interact with the report online, share it with others, and benefit from features like scheduled data refreshes and collaboration.

10. Power BI Mobile enhances accessibility by leveraging mobile device features and providing optimized report views for users with disabilities. Features include location-based filtering, QR code scanning, table view for screen readers, and optimized layouts for easier navigation.
11. Power BI and Tableau are both popular data visualization and business intelligence tools, but they have different strengths and weaknesses. Power BI is generally favored for its tighter integration with Microsoft products and its more affordable pricing, while Tableau is often preferred for its advanced visualization capabilities and ability to handle large datasets.
12. Power BI integrates with Azure services to provide a comprehensive data analytics and business intelligence solution. It allows users to connect to various Azure data sources, perform data transformations, and build interactive reports and dashboards, all within the Power BI ecosystem. This integration streamlines data processing, analytics, and reporting, offering real-time insights into business operations.
13. In Power BI, a gateway acts as a bridge between your on-premises data sources and the Power BI service in the cloud, enabling secure data transfer and refreshing of reports and dashboards. You need a gateway when your data resides on your local network, such as in a SQL Server database or an Excel file on a shared drive, and you want to use that data in your Power BI reports.
14. To convince a company to adopt Power BI, focus on demonstrating its potential to improve decision-making, reduce costs, and increase efficiency, all of which contribute to a strong return on investment (ROI). Highlight how Power BI empowers users with self-service analytics, leading to faster insights and better business outcomes.
15. Power BI offers several security features to protect sensitive data, including encryption, role-based access control, and data loss prevention policies. It also allows for sensitivity labeling, multi-factor authentication, and continuous monitoring of activities.