

Power BI

Power BI is a Business Intelligence and Data Visualization platform that lets you convert data from different data sources into interactive dashboards and BI reports. It offers several connectors and medical services.

For various platforms, different Power BI versions, such as desktop, service-based (SaaS) and mobile Power Bi applications, are used.



Power BI tools

Power BI Desktop

The primary authoring and publishing tool for Power BI is the Power BI desktop. It is used by developers and power users to build entirely new models and reports from scratch.

Power BI Service

Online service applications (SaaS) hosting Powe Bl database templates, reports, dashboards.

Administration, networking, collaboration is going on in the cloud.

Power BI Data Gateway

Power BI Data Gateway serves as a bridge between Power Bl Provider and on-site data sources such as DirectQuery, Import, Live Query. It has been installed by the Bl Admin.

Power BI Report Server

It can host paginated reports, KPIs, smartphone reports, & Desktop Power Bl reports. It is updated every 4 months and the IT team installs / manages it. Users may change other Power Bl reports that the development team has developed.

Use of Power BI

Here, the most important reasons to use the Power BI tool are:

- SaaS Solutions' pre-built dashboards and reports
- Power BI facilitates dashboard alerts in real-time.
- Offers stable and efficient cloud or on-site access to your data sources
- Fast deployment, hybrid configuration and a stable environment are given by Power BI.
- Enables exploration of data using natural language queries
- Offers function that is regularly modified with the community for dashboard visualization.

Power BI Mobile Apps

Mobile Power BI applications are available for iOS, Android and Windows. Microsoft Intune can be used to handle it. Power BI Service Report Server reports and dashboards can be accessed using this method.

The Power BI data sources

- Excel (.xlsx, xlxm)
- Comma Separated Value (.csv)
- Power BI Desktop (.pbi)
- Databases in the Cloud
- Databases on-premises

Power BI's Architecture

Data Integration

A company has to deal with information from multiple sources, which may be in different file formats. Data can be derived from another source, which could be from various databases or servers. In a typical staging area, this information is merged into one uniform format.

Data Processing

At this point, as the data requires processing, the integrated data is still not prepared for visualizations. The information is pre-processed. Redundant values, for example, missing values would be omitted from the data collection.

When the data is washed, the business rule should be applicable to the data. You can backload these data to Data Warehouse.

Data Presentation

Using the different visualizations that Power Bi has to give, once the data is loaded and processed, it can be visualized even better.

Using dashboard and report allows us to more intuitively represent data. Based on the insights, this visual report allows business end users to take business decisions.