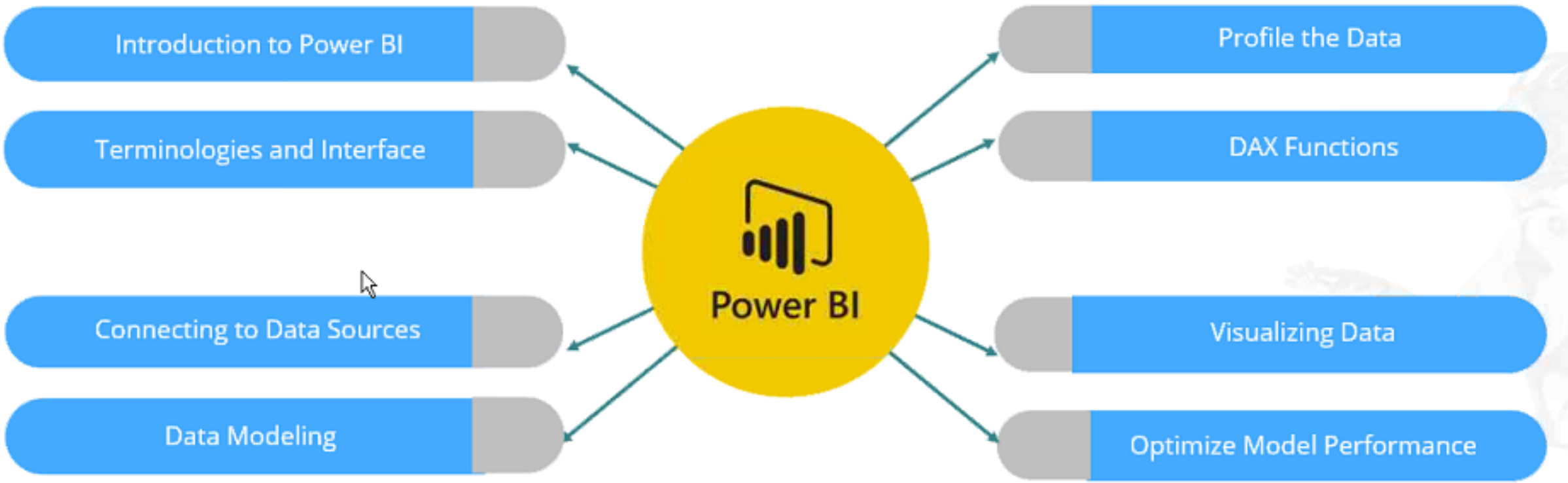
Course Outline



DATA AND
ARTIFICIAL INTELLIGENCE
Data Manipulation and Reporting
with Power BI

Introduction to Power BI

Learning Objectives

By the end of this lesson, you will be able to:

- Understand the concepts of business intelligence and Power BI
- Understand the architecture of Power BI
- Identify the different offerings by Power BI
- Know the benefits and applications of Power BI
- Install a Power BI desktop

What Is Business Intelligence?

- Capability to make intelligent business decisions
- Makes information discovery simple
- Helps you in analysis of the data
- Enables you to send the right information to the right people
- Provides data insights to everyone from any type / size / source of data

Why Power BI?

- You can create a report and perform data manipulation easily.
- Power BI provides a 360-degree view to visualize the data and publish the resulting content.
- It supports natural query language.
- It allows you to fetch data from 60 different data sources.
- You can connect your data live or save it on your local machine.
- The product updates happen frequently and regularly.
- Power BI offers a simple learning curve.
- Performance of Power BI is much better as compared to the other BI tools in market.

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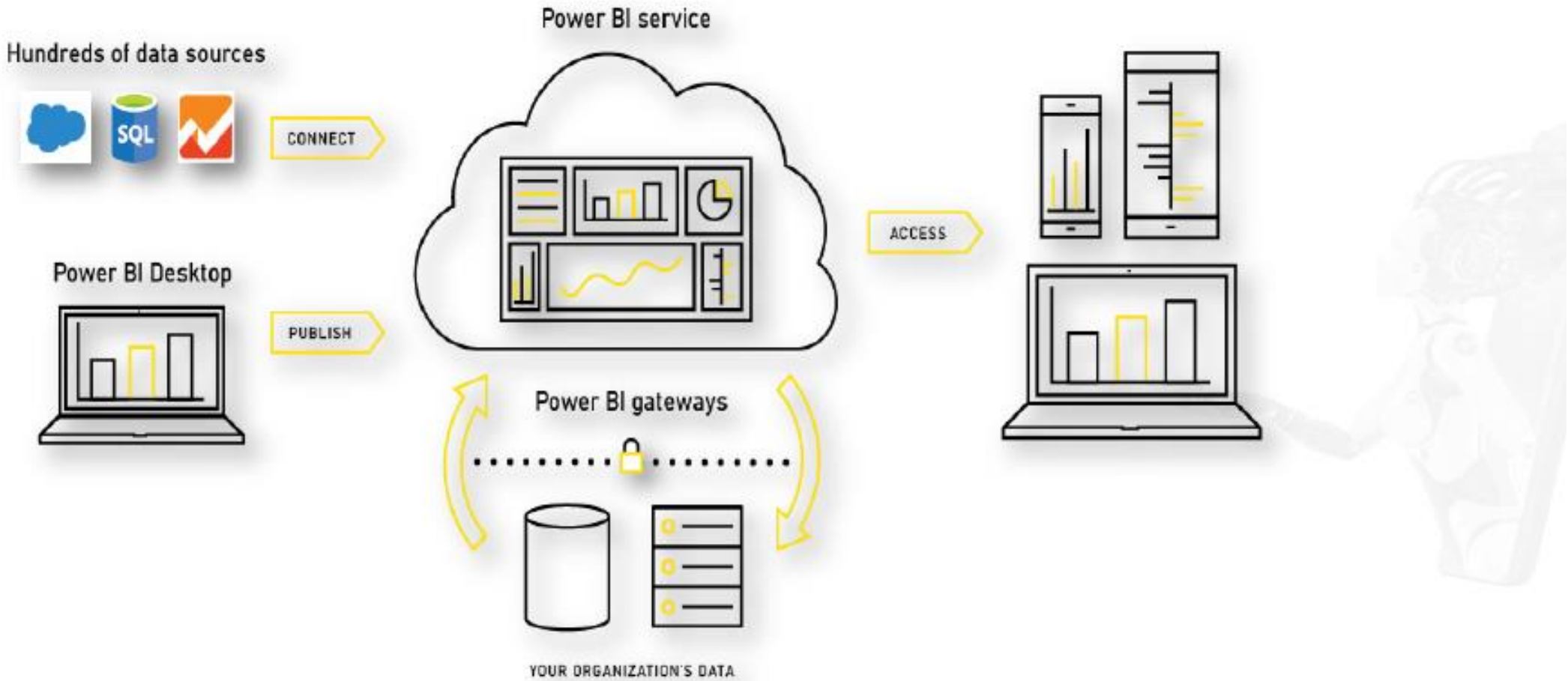
Power BI Architecture, Components, and Products

Power BI Offerings

You can choose from four different products that suit your need. They are:

- Power BI
- Power BI Desktop
- Power BI Mobile
- Power BI Embedded

Power BI Desktop Architecture



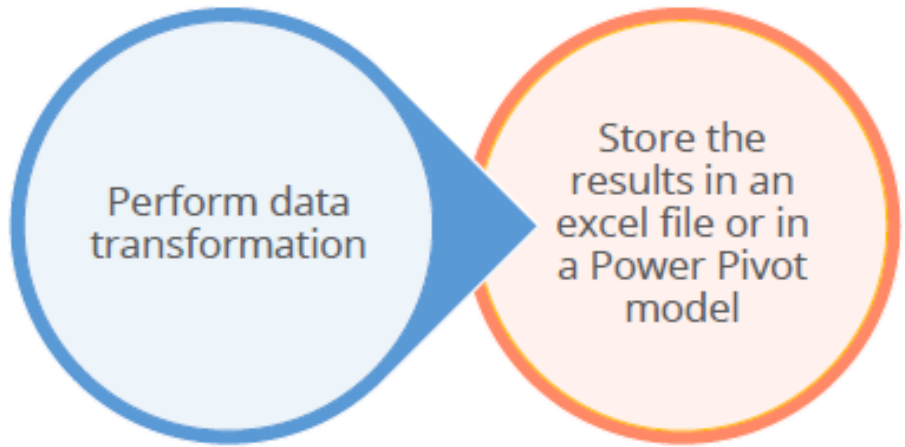
Power BI Desktop Components

Power BI Desktop uses three components to perform different operations. They are:

- Power Query
- Power Pivot
- Power View

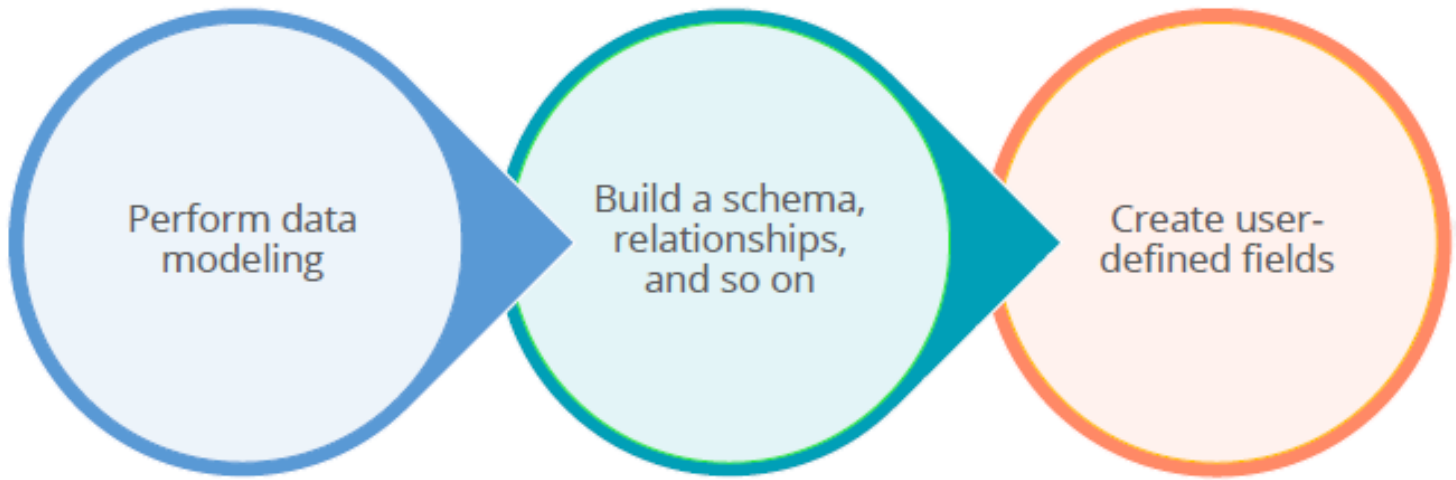
Power BI Desktop Components—Power Query

Power BI Desktop uses Power Query to:



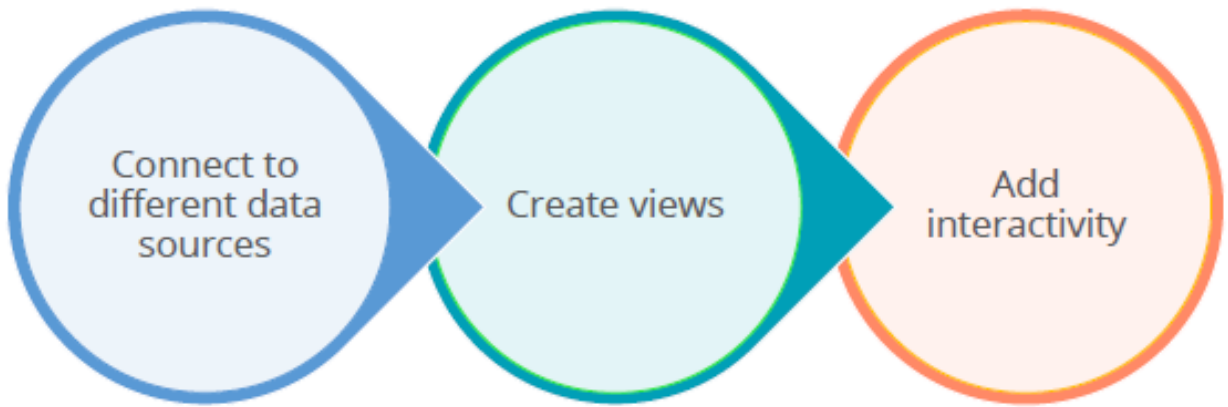
Power BI Desktop Components—Power Pivot

With Power Pivot you can:



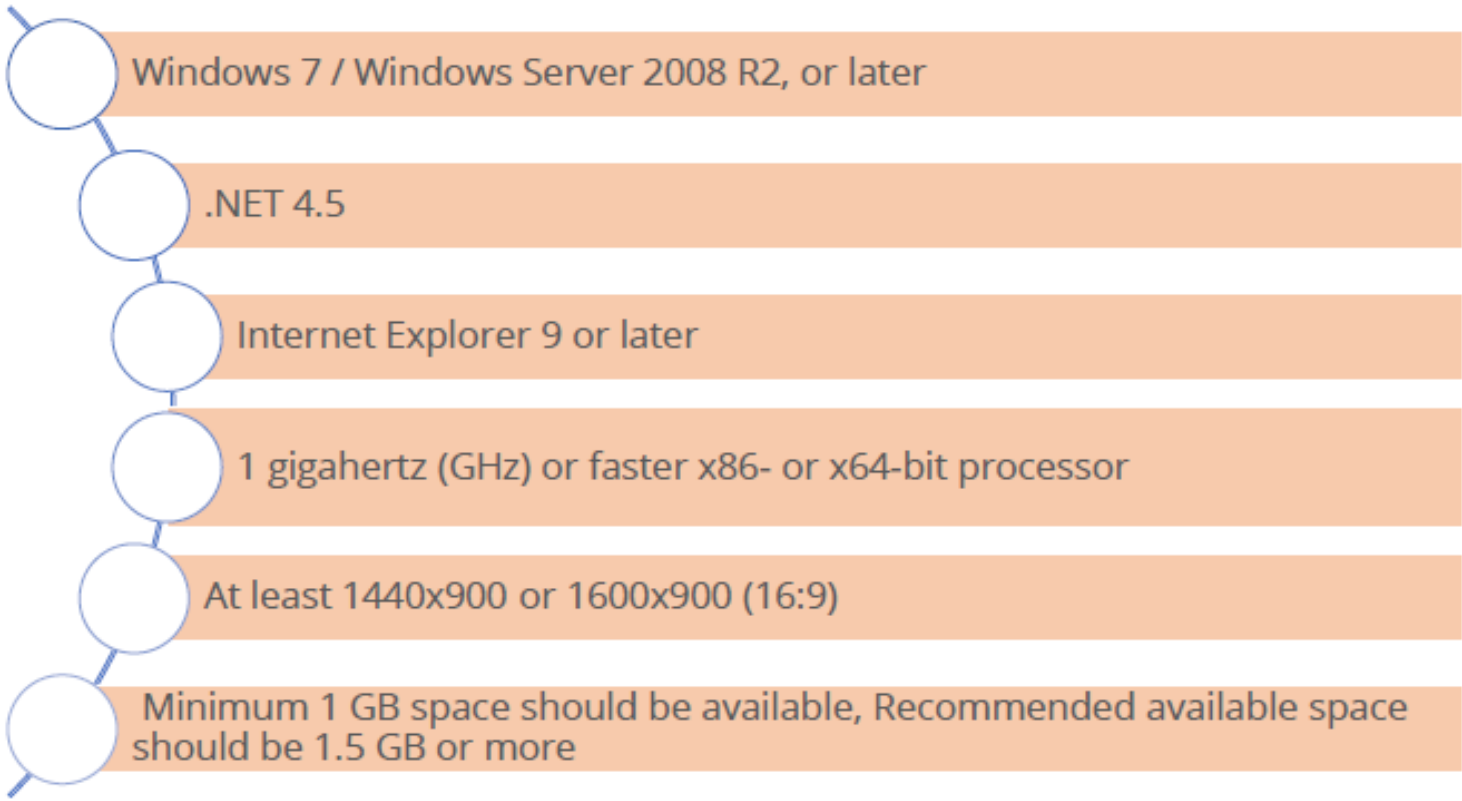
Power BI Desktop Components— Power View

Power View allows you to:



Minimum Hardware Requirements

Before you install Power BI Desktop, your system should meet the minimum hardware requirements. They are:



Steps to Install Power BI Desktop

Here are the steps to install Power BI Desktop on your system.

1. Open a browser and navigate to the Power BI page.
2. Click on the **Download Free** button and enter the required details.
3. Click the **Get Started** button.
4. Locate the installed file and run it.
5. Follow the on-screen instructions.

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Knowledge Check

Knowledge Check 1

Is it possible to publish a dashboard using Power BI Desktop?

a. Yes

b. No

The correct answer is b

The Power BI Desktop application only allows you to build and publish reports.

https://powerbi.microsoft.com/

USE BIG DATA IN POWER BI

Sales by Region

Quantity by month

Profit by country

Product Category