**Debabrata Palit**
in /debabrata-palit03

# Introduction to Power BI

TRANSFORM YOUR DATA INTO DECISIONS!

# Introduction

In today's data-driven world, simply collecting data isn't enough — we need to make sense of it, visualize trends, and uncover insights that drive decisions. That's where Power BI steps in.

**Power BI** is a business analytics tool developed by Microsoft that allows users to connect to various data sources, transform raw data, and create **interactive dashboards** and **reports**. Its intuitive interface and powerful features make data analysis accessible to everyone — from beginners to data professionals.

**Debabrata Palit**
in /debabrata-palit03

# Why is Power BI Used?

Power BI is widely used for:
- 📊 Visualizing data through charts, graphs, and dashboards.
- 📥 Importing data from multiple sources (Excel, SQL, APIs, etc.).
- 📈 Monitoring KPIs and performance metrics in real-time.
- 🤝 Collaborating on reports and dashboards with teams.
- 🔁 Automating data refreshes to keep insights up-to-date.

Whether you're in marketing, finance, operations, or HR, Power BI helps you make data-backed decisions faster and more efficiently.

**Debabrata Palit**
in /debabrata-palit03

# Key Components of Power BI

**1. Power BI Desktop**: A free Windows application for data transformation and report creation. Ideal for building models, visuals, and complex DAX calculations.

**2. Power BI Service**: An online SaaS (Software as a Service) Cloud platform. Used to publish, share, and collaborate on reports and dashboards.

**3. Power BI Mobile App**: Available for iOS and Android. Allows users to access dashboards and reports on the go.

**4. Power BI Gateway**: Bridges the gap between on-premises data (like SQL Server) and Power BI Service. Enables secure data refresh and live queries.

**Debabrata Palit**

/debabrata-palit03

# Real-World Use Cases

Here are a few practical applications of Power BI across industries:

**Retail**: Analyzing sales trends and customer behavior across locations.

**Healthcare**: Monitoring patient flow, occupancy rates, and diagnostics.

**Finance**: Tracking expenses, profits, budgets, and forecasts.

**Human Resources**: Measuring employee performance, attrition, and hiring metrics.

**Supply Chain**: Optimizing inventory levels and logistics operations.

In short, if you have data — Power BI can help you understand it.

**Debabrata Palit**
/debabrata-palit03

# Installation & Set Up

Getting started is simple:

## 1. Download Power BI Desktop
Visit the official Power BI page or install it directly from the Microsoft Store.

## 2. Install the application
Follow the installation wizard — it takes just a few minutes.
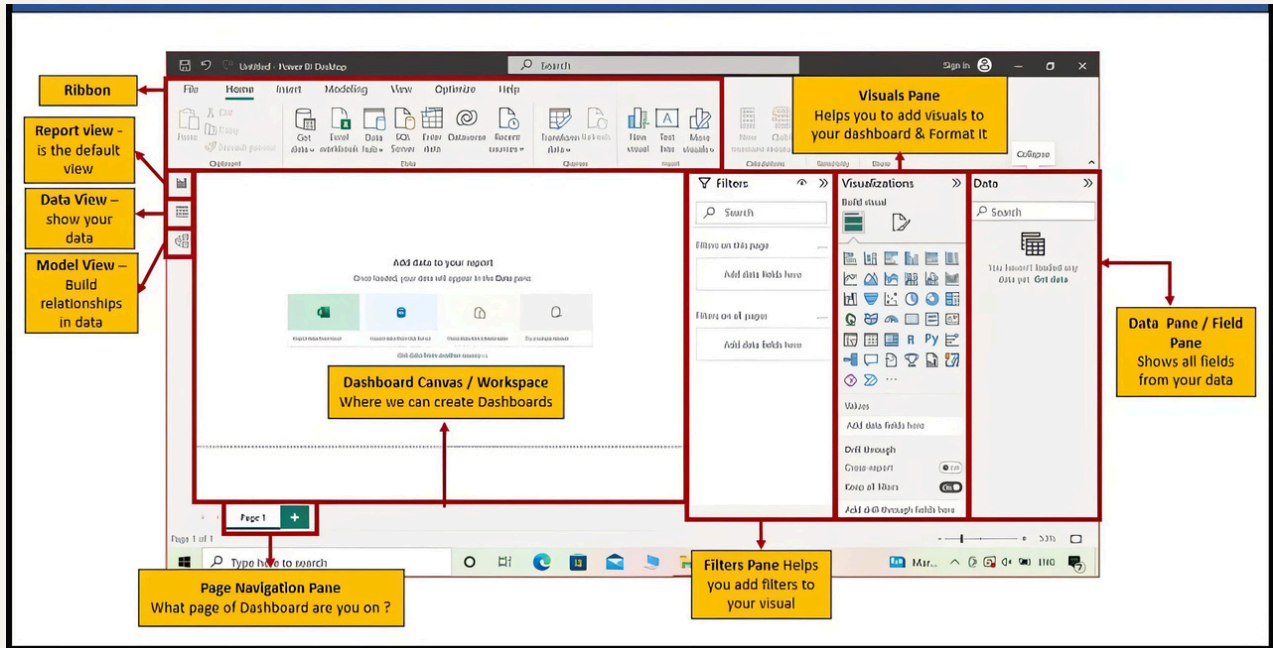
## 3. Launch & Explore
Open Power BI Desktop and start by importing data from Excel, CSV, SQL Server, or other sources.

## 4. Build your first report
Drag and drop fields, apply filters, and use visuals to start building interactive reports

**Debabrata Palit**
in /debabrata-palit03

# Power BI Interface



**Report View** – Drag, drop, and design your visuals

**Data View** – See your tables, columns, and clean your data

**Model View** – Define relationships between tables

**Fields Pane** – Access your data sources & measures

**Visualizations Pane** – Choose from charts, maps, cards, KPIs & more

**Filters Pane** – Add visual, page, or report-level filters

**Ribbon Toolbar** – Quick access to formatting, data, insert options

**Pages Tabs** – Manage multi-page reports with ease

**Debabrata Palit**
/debabrata-palit03

# Power BI vs. Excel

| Feature | Power BI | Excel |
|---|---|---|
| UI Type | Dashboard + Reports | Spreadsheet |
| Data Size | Millions of rows (optimized) | ~1 million rows |
| Data Modeling | Advanced (DAX, Relationships) | Limited (Pivot Tables, VLOOKUP) |
| Visualization | Interactive Dashboards | Static Charts |
| Collaboration | Cloud + Workspace sharing | File-based |

## WHEN TO USE EXCEL?

When you need:
- Simple calculations
- Custom templates
- Manual data entry
- Familiarity with formulas
- One-off reporting

## WHEN TO USE POWER BI?

When you need:
- Dashboards with drill-downs
- Scalable data analysis
- Scheduled refreshes
- Cloud collaboration
- Multiple data source integration

# THANK YOU!!!

## STAY CONNECTED

SHARE
YOUR
THOUGHTS

SAVE
FOR
LATER

LIKE
THIS
POST