

## Quick Introduction & Basic Rules to Discuss.

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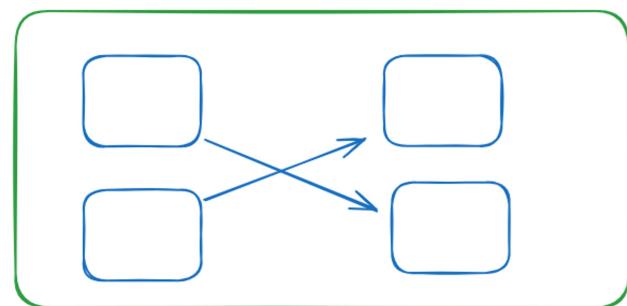
- = Analyst - Skillset + Soft Skills.
- Intent to the learning.
- Discipline - Lectures To be Muted.
  - You will have to first Raise Your Hand.
  - 5 to 10 Minutes at the end for open mic discussion.
  - Chat would be the only source of interaction.
  - 0 - Not Clear, Doubt.
  - 1 - Clear with the concept, Done.
  - Repeat - Where I have to repeat.

## Introduction To Power BI

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- What is Business Intelligence?
- BI Use Cases
- BI Tools
- What is Power BI?
- Power BI as part of the Data Analytics lifecycle.
- Applications of Power BI
- Power BI Desktop Installation/Setup
- Navigating Power BI Desktop
- Flow of data in Power BI
- Power BI Architecture
- Building Blocks of Power BI
- Project Ideas



Relationship Between Tables

# What is POWER BI

Microsoft Power BI is a self-service business intelligence platform, which includes both desktop and web-based applications for connecting, modeling, and visualizing data.



"Images Speaks Better than Words."

## FEATURE OF POWER BI?

### 1. Connect, transform and load millions of rows of data

- Access data from virtually anywhere (database tables, flat files, web, cloud services, folders, etc.), and create fully automated workflows to extract, transform and load data for analysis

### 2. Build relational models to blend data from multiple sources

- Create table relationships to analyze holistic performance across an entire relational data model

### 3. Define complex calculations using Data Analysis Expressions(DAX)

- Enhance datasets and enable advanced analytics with powerful and portable DAX expressions

### 4. Bring data to life with interactive reports and dashboards

- Build professional-quality reports and dashboards with best-in-class visualization tools

### 5. Develop a versatile, in-demand skill set

- Power BI is the industry leader in self-service BI, and the skills you build in this course will be highly transferrable

# Why We Use Power BI

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## 1. Data Visualization:

- Power BI helps transform raw data into interactive and visually appealing reports and dashboards.  
It makes complex data easy to understand.

## 2. Integration:

- Power BI integrates seamlessly with various data sources like Excel, SQL Server, cloud services, and more, allowing you to consolidate and analyze data from different platforms.

## 3. Business Intelligence:

- With Power BI, you can gain insights into your business performance, track key metrics, and make data-driven decisions..

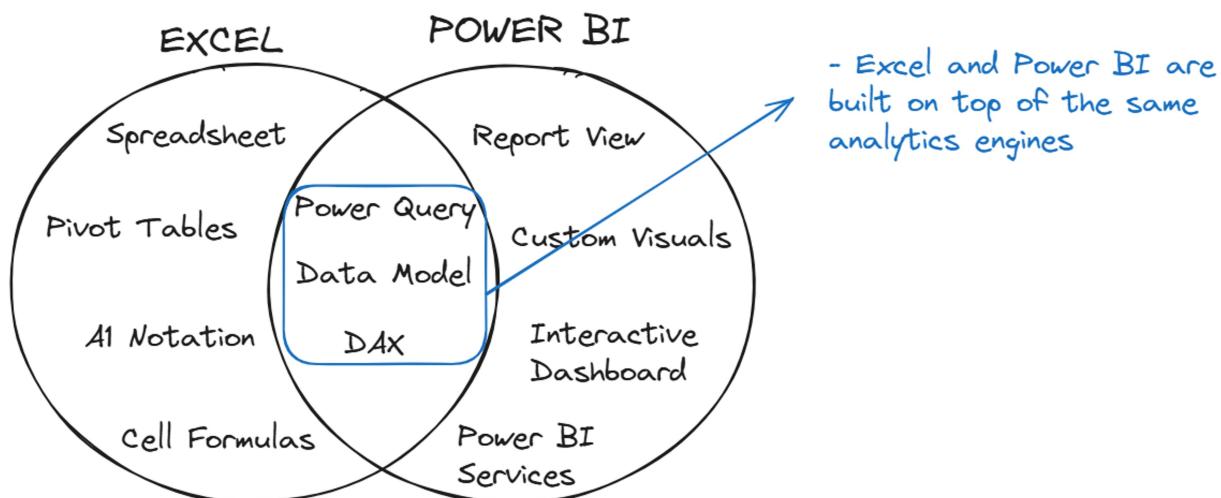
## 4. Real-time Data:

- You can connect to real-time data sources to ensure your reports and dashboards reflect the most up-to-date information.

## 5. User-Friendly Interface

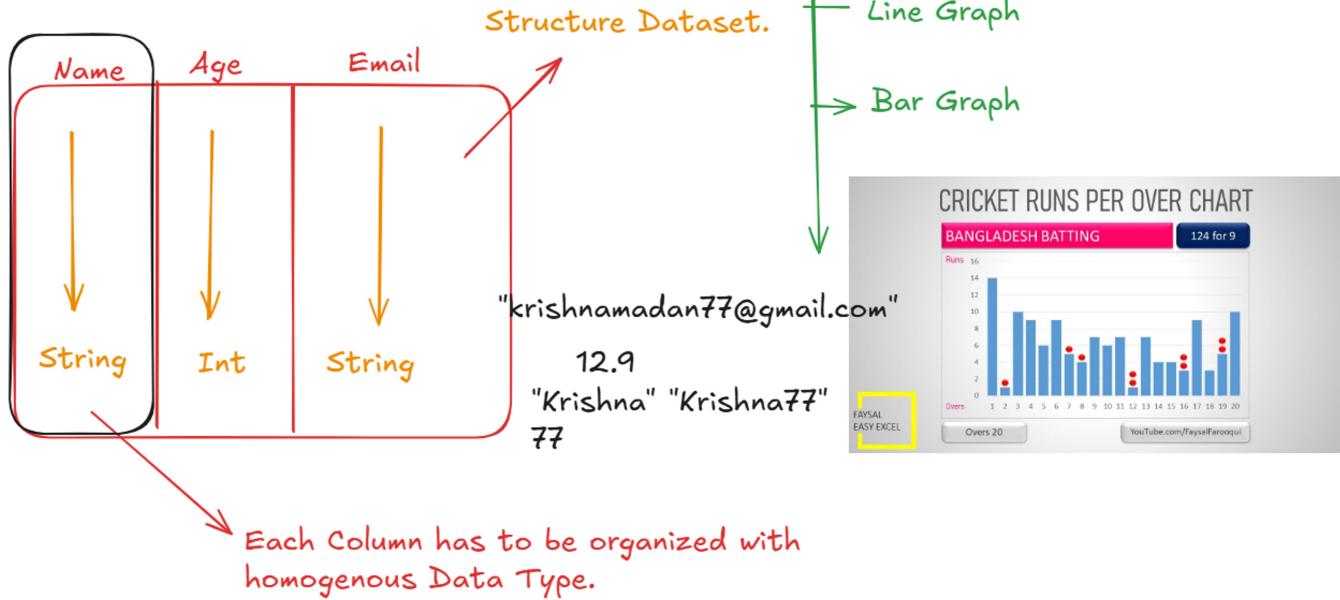
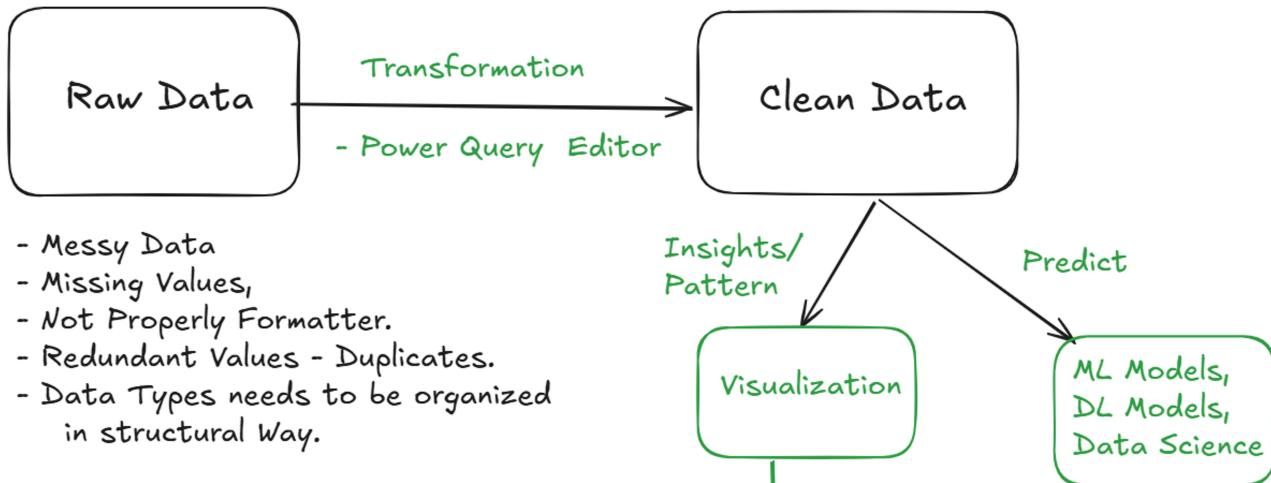
- The intuitive interface makes it accessible for users of all skill levels, from beginners to advanced analysts.

## EXCEL VS. POWER BI



- Power BI takes the same data transformation and modeling capabilities and adds powerful visualization and publishing tools
- Transitioning is easy; you can import an entire data model directly from Excel!

- Being an Analyst - What is your Role? -
  - To help company Grow.
  - Money Ball - Netflix. - Weekend.
  - IPL Auction - Analyst.
  - To Build your Analytical Mindset - Financial Terms.
    - KPIs, Metrices - Shark Tank.

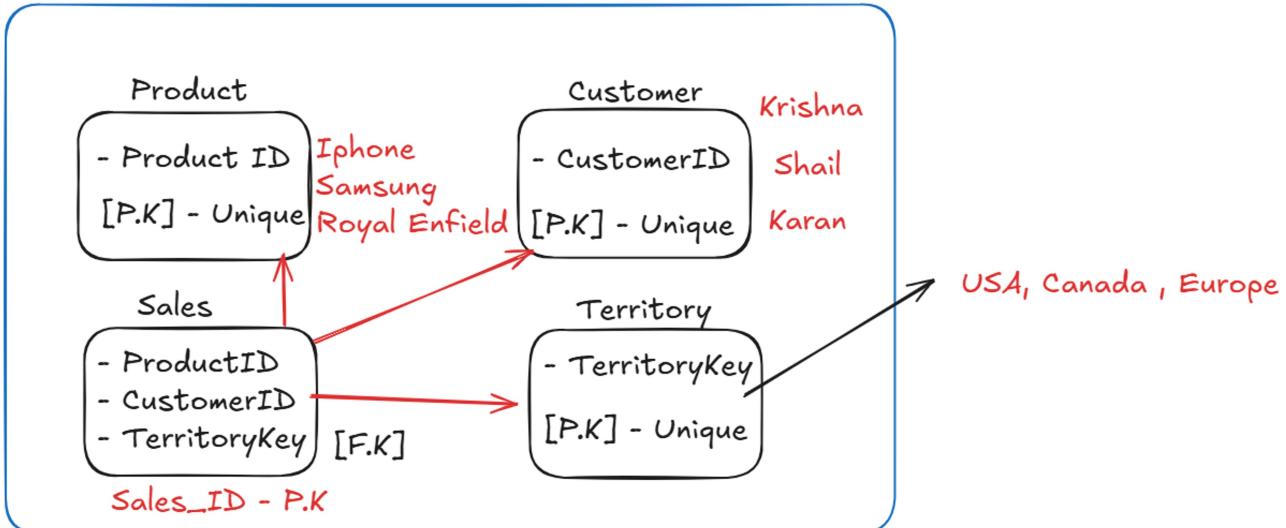


[1,2,3,4,5,6] - Integer [Same Data Type]  
[Homogenous].

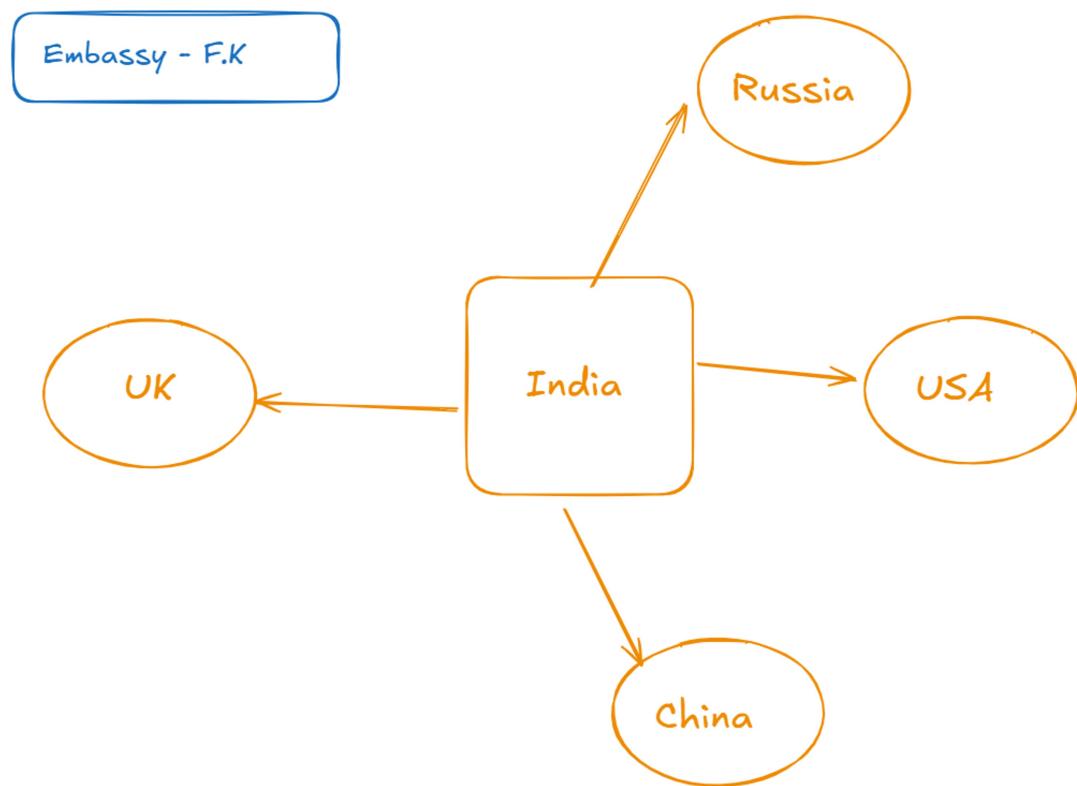
["abcd",'K',21.11,21,True] - Heterogenous [Different Data Type]



### Amazon Database [Schema]



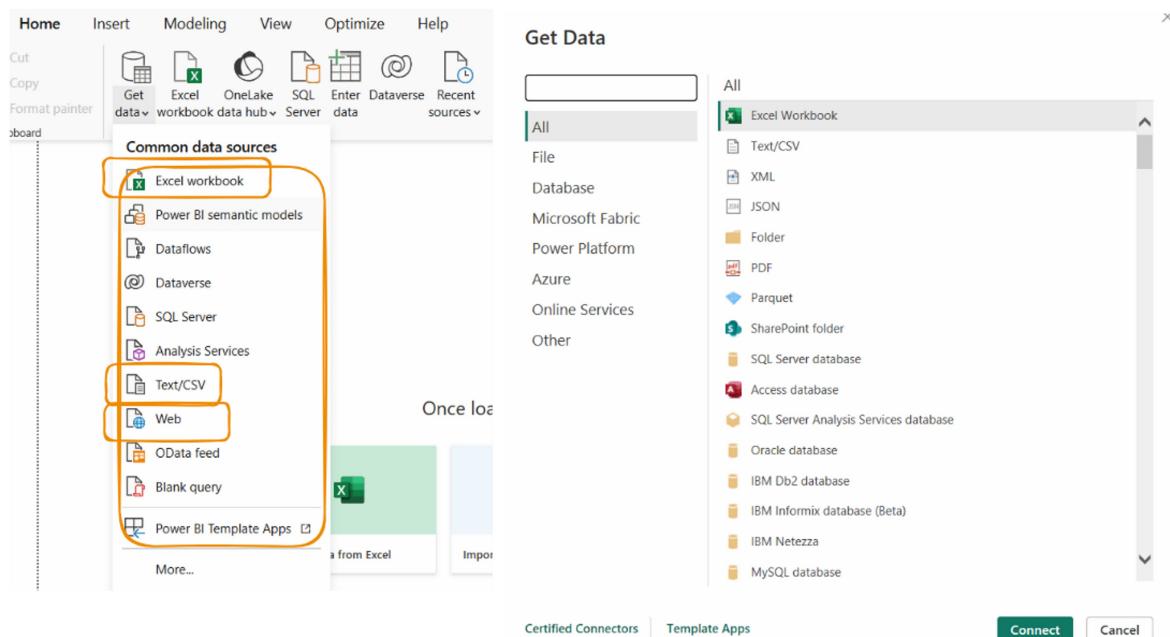
Krishna - Iphone - USA.  
 Karan - Samsung - Europe  
 Karan - Iphone - Canada  
 Karan - Royal Enfield - USA  
 Sahi - Iphone - USA  
 Sahi - Iphone - USA  
 Sahi - Iphone - USA



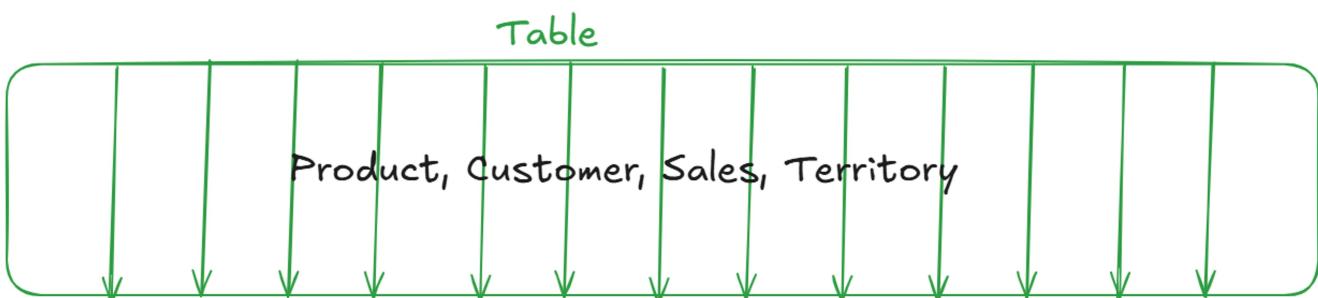
Business Intelligence Tool - Being used for Visualization.

Power BI - Microsoft  
Tableau - Salesforce  
Quick Sight - Amazon  
Google Data Studio - Google

It Shares the same analytical engine with Excel, 1GB Azure Database.

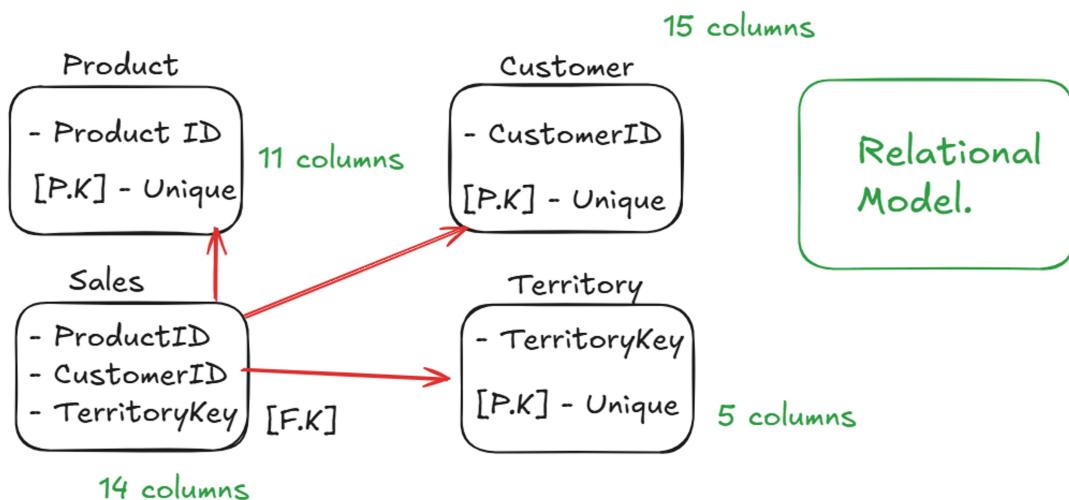


Why Storing data in Relational Model is far better than storing in traditional Format.  
[T.F: You are storing all your information in a single table.]



When you are running a query on a single table which stores all the info in it. It requires a lot of Computational power to run a query.

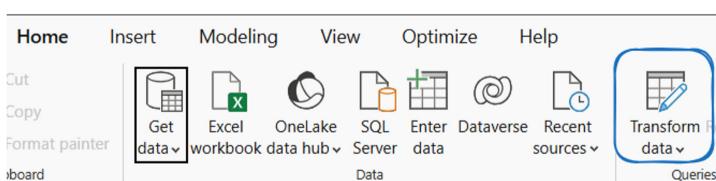
- On a longer run its not optimized, and costly as well.



Report - Many Dashboard together combines to form Report.



Raw Data -- Transform --> Clean Data



- Report View - [Dashboard]
  - Data View {DAX} Table View
  - Model View [ER Diagram]
- DAX [Data Analysis Expression]

DAX is not a programming language, Its a formula language which used function & formulae for calculation.

## Power BI Desktop - Version

[<https://www.microsoft.com/en-in/download/details.aspx?id=58494&msockid=03cbf6d6443066a11929e2e945116726>]

Choose the download you want

File Name	Size
PBIDesktopSetup.exe	493.3 MB
<input checked="" type="checkbox"/> PBIDesktopSetup_x64.exe	538.3 MB

**Download** Total size: 538.3 MB

Disclaimer - My version is oldest, So you might find some features or tools of Power BI in different location then what I'm seeing.

