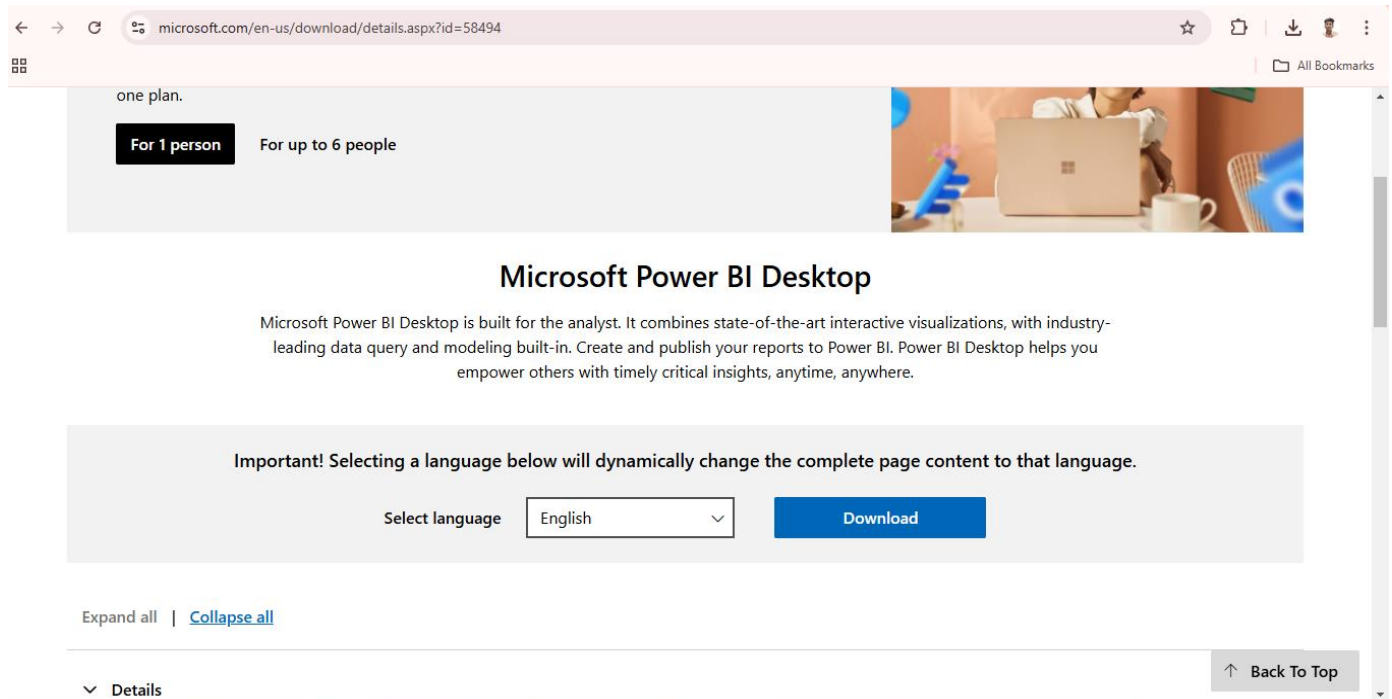
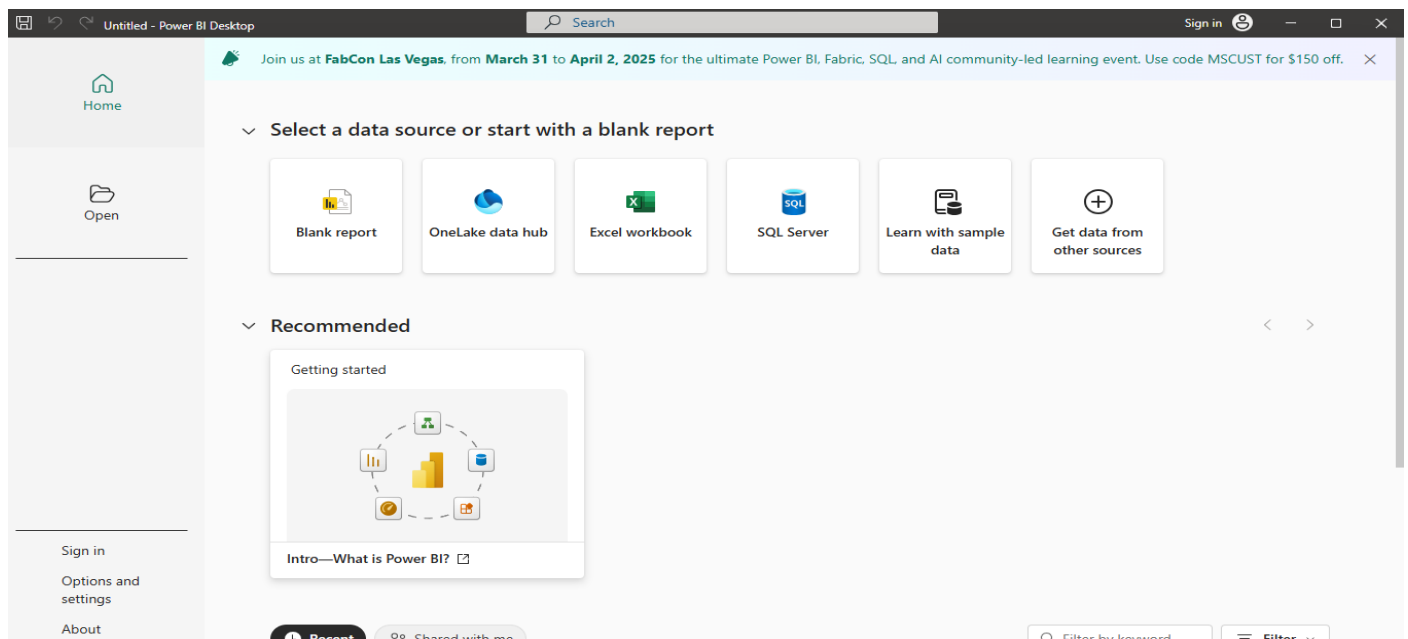


INTRODUCTION TO POWER BI

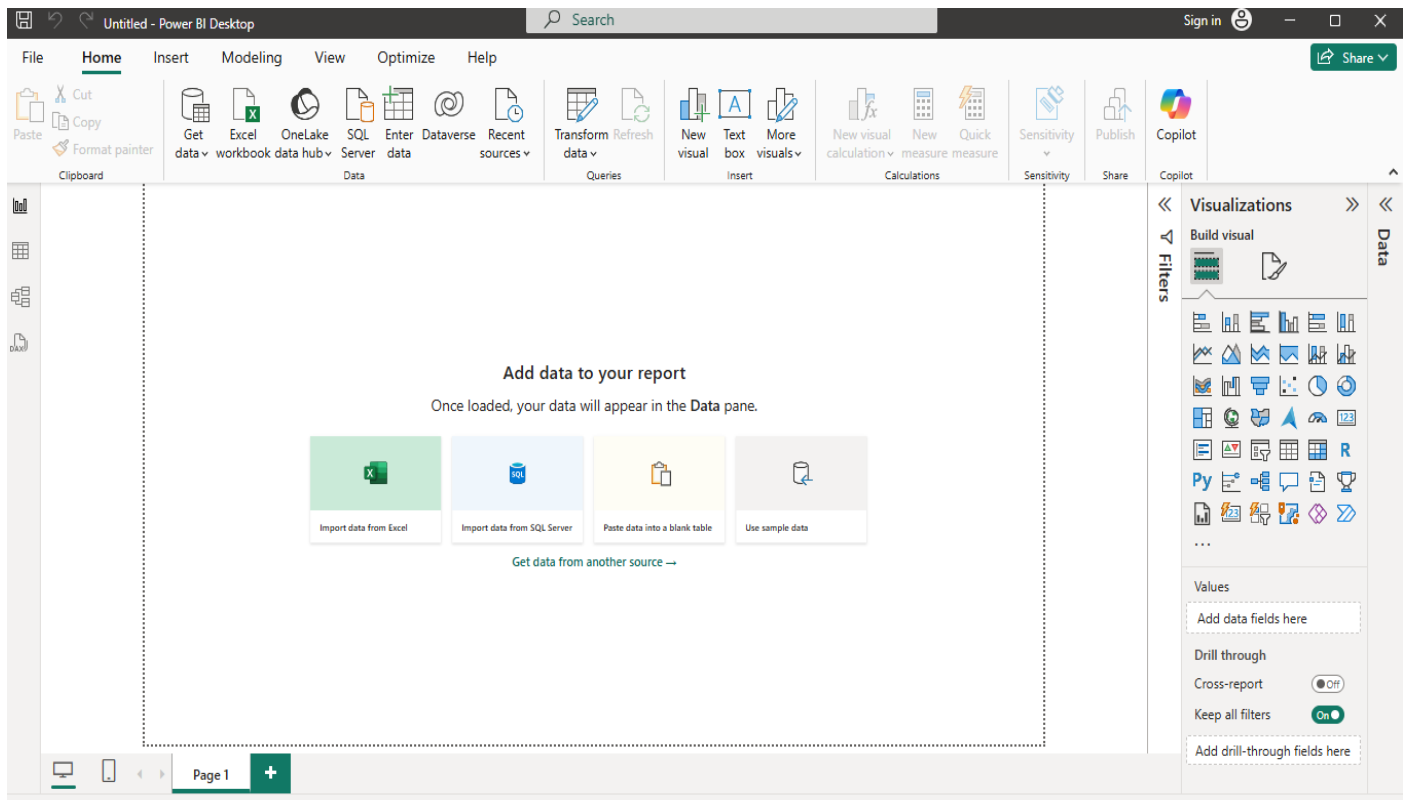
Step 1: Go to Microsoft Power BI Desktop website , Select the Language and Click on Download . After Downloading, install the Power BI Desktop.



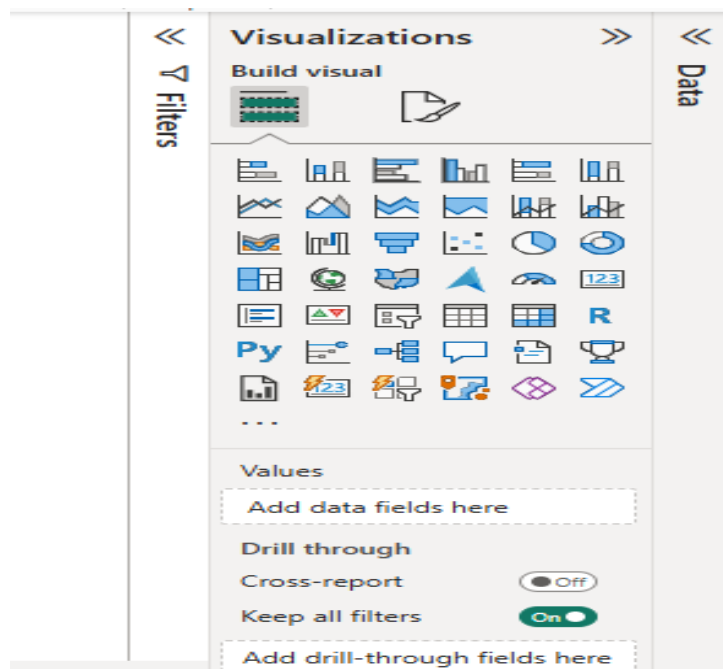
Step 2: After successful installation , Power BI interface will be displayed. Click on Blank report.



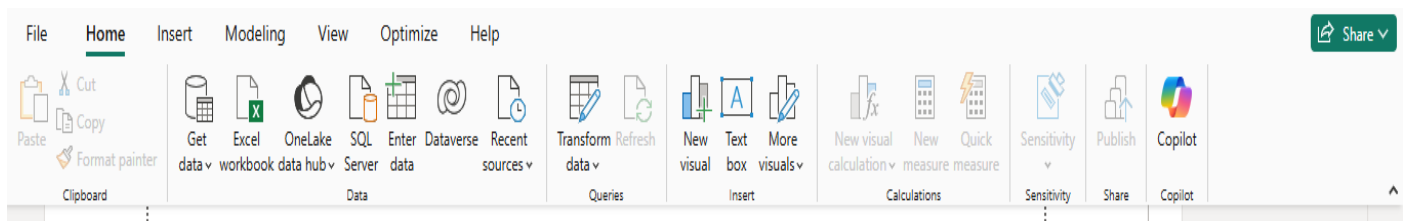
Step 3 : After clicking Blank report . You will get following interface where you should add the data from different sources such as from Excel , from SQL server , from sample data.



Here , Right side space is called Visualization where all visualization tools available and using them we can easily build visuals of our data .



On top , there are different tools where to perform data extraction , data cleaning , data modelling .



Step 4: Import the data from different sources .after importing data (.csv) , data will displayed like below.

e33952a7b79341025642.csv

File Origin

Delimiter

Data Type Detection

Comma

Based on first 200 rows

RowID	State_Name	District_Name	Crop_Year	Season	Crop	Area	Production	_1	_2
0	Bihar	NALANDA	2005	Rabi	Wheat	81934	160425		
1	Assam	KARBI ANGLONG	2019	Whole Year	Onion	257	514		
2	Gujarat	ANAND	2020	Summer	Maize	100	100	Total production	Avi
3	Karnataka	UTTAR KANNAD	2013	Rabi	Groundnut	2872	4572	45168275000	89
4	Uttar Pradesh	JAUNPUR	2016	Rabi	Onion	110	1290		
5	Assam	MARIGAON	2014	Rabi	Rapeseed & Mustard	6535	2719		
6	Odisha	SONEPUR	2006	Winter	Rapeseed & Mustard	91	6		
7	Rajasthan	DHOLPUR	2017	Whole Year	Garlic	1	1		
8	Karnataka	BELGAUM	2018	Whole Year	Coconut	336	3212		
9	Bihar	MUNGER	2020	Summer	Moong(Green Gram)	125	78		
10	Chhattisgarh	JANIGIR-CHAMPA	2013	Kharif	Other Kharif pulses	223	107		
11	Assam	KARBI ANGLONG	2019	Rabi	Rapeseed & Mustard	19337	8652		
12	Uttar Pradesh	SHRAVASTI	2005	Kharif	Groundnut	72	58		
13	Gujarat	PATAN	2019	Kharif	Moong(Green Gram)	9100	3300		
14	Tamil Nadu	KARUR	2008	Whole Year	Sweet potato	20	309		
15	Uttar Pradesh	KASGANJ	2019	Rabi	Tobacco	5247	28554		
16	Haryana	MAHENDRAGARH	2006	Rabi	Wheat	45074	186000		
17	Assam	DHEMAJI	2017	Whole Year	Turmeric	321	211		
18	Assam	BAKSA	2015	Kharif	Small millets	284	127		
19	Kerala	PATHANAMTHITTA	2008	Whole Year	Sugarcane	224	10950		

Extract Table Using Examples

Load

Transform Data

Cancel

On bottom right there are three options(Load , Transform data ,cancel) . If there you need to clean the data then click on “Transform Data” . Then you can easily clean the data by removing null values .

File Home Transform Add Column View Tools Help

Close & Apply

New Source

Recent Sources

Enter Data

Data source settings

Manage Parameters

Refresh Preview

Advanced Editor

Choose Columns

Remove Columns

Keep Rows

Remove Rows

Sort

Split Column

Group By

Data Type: Whole Number

Use First Row as Headers

Replace Values

Merge Queries

Append Queries

Combine Files

Text Analytics

Vision

Azure Machine Learning

Queries [1]

e33952a7b79341025642

RowID	State_Name	District_Name	Crop_Year	Season	Crop
0	Bihar	NALANDA	2005	Rabi	Wheat
1	Assam	KARBI ANGLONG	2019	Whole Year	Onion
2	Gujarat	ANAND	2020	Summer	Maize
3	Karnataka	UTTAR KANNAD	2013	Rabi	Groundnut
4	Uttar Pradesh	JAUNPUR	2016	Rabi	Onion
5	Assam	MARIGAON	2014	Rabi	Rapeseed & Mustard
6	Odisha	SONEPUR	2006	Winter	Rapeseed & Mustard
7	Rajasthan	DHOLPUR	2017	Whole Year	Garlic
8	Karnataka	BELGAUM	2018	Whole Year	Coconut
9	Bihar	MUNGER	2020	Summer	Moong(Green Gram)
10	Chhattisgarh	JANIGIR-CHAMPA	2013	Kharif	Other Kharif pulses
11	Assam	KARBI ANGLONG	2019	Rabi	Rapeseed & Mustard
12	Uttar Pradesh	SHRAVASTI	2005	Kharif	Groundnut
13	Gujarat	PATAN	2019	Kharif	Moong(Green Gram)
14	Tamil Nadu	KARUR	2008	Whole Year	Sweet potato
15	Uttar Pradesh	KASGANJ	2019	Rabi	Tobacco
16	Haryana	MAHENDRAGARH	2006	Rabi	Wheat
17	Assam	DHEMAJI	2017	Whole Year	Turmeric
18	Assam	BAKSA	2015	Kharif	Small millets
19	Kerala	PATHANAMTHITTA	2008	Whole Year	Sugarcane
20	Chhattisgarh	JANIGIR-CHAMPA	2018	Rabi	Linseed
21	Chhattisgarh	DHAMTARI	2020	Whole Year	Banana
22	Karnataka	BEHALY	2016	Rabi	Maize

Query Settings

PROPERTIES

Name

e33952a7b79341025642

APPLIED STEPS

Source

Promoted Headers

Changed Type

12 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 11:44 AM

Data Types **Remove the Columns , Rows which are not required**

The screenshot illustrates the Power BI Desktop interface during data transformation. The ribbon at the top includes tabs like 'File', 'Home', 'Transform', 'Add Column', 'View', 'Tools', and 'Help'. The 'Transform' tab is active, showing options such as 'Remove Columns' and 'Remove Rows'. A filter pane on the left shows the 'Season' column with checkboxes for 'Autumn', 'Kharif', 'Rabi', 'Summer', 'Whole Year', and 'Winter'. The main table displays crop data with columns for 'Crop', 'Area', and 'Production'. The right-hand pane shows 'Query Settings' with 'APPLIED STEPS' including 'Source', 'Promoted Headers', and 'Changed Type'.

Select the required data

Here Applied steps Will be displayed .You can undo steps by clicking 'x' symbol

Step 5 : After done with all transformation then clicking on “Close & Apply” .The all transformations will be applied and the data will be loaded on Dashboard.

In the left-hand navigation pane, there are four symbols such as Report view , Table View , Model View , DAX query view .

Report View : This is the main interface where you build and design your visuals. It's the canvas for creating dashboards and reports using visualizations. Drag and drop fields to create visualizations like bar charts, pie charts, tables, and more. Format and customize visuals with colors, filters, and styles.

Table View : Displays the raw data from your connected datasets, allowing you to inspect and explore tables. View data in table format for all imported and transformed data. Apply row -level filters to verify data correctness.

Model View : Focuses on managing the relationships between tables in your dataset. Define, modify, or delete relationships using drag-and-drop. Set table properties like cardinality (one-to-many, many-to-many) and cross-filter directions.

DAX Query View : Used for writing and testing DAX (Data Analysis Expressions) formulas, which help create calculated fields, measures, and tables. Write custom DAX queries to manipulate or analyze data. Perform advanced calculations, aggregations, and dynamic filtering.

