

AIM

To study and implement the features of Power BI Desktop by preparing & loading data into Power BI, and developing the data model for analysis and visualization.

TOOLS REQUIRED

1. **Power BI Desktop** (latest version).
2. **Dataset** – Sales Data (CSV/Excel from Kaggle).

ALGORITHM**A: Prepare & Load Data**

1. Open **Power BI Desktop**.
2. Click **Home** → **Get Data** → **Excel/CSV** and select the dataset file.
3. Preview the dataset in the **Navigator** window.
4. Select the required sheet/table and click **Load** (or **Transform Data** if cleaning is needed).
5. In **Power Query Editor**, perform data preparation:
 - Promote headers.
 - Check and change data types (Date, Number, Text).
 - Remove null or duplicate rows if necessary.
 - Rename columns for clarity.
6. Click **Close & Apply** to load the cleaned data into Power BI.

B: DEVELOPING THE DATA MODEL

1. Switch to **Model View** in Power BI.
2. Verify that the table(s) are loaded correctly.
3. If multiple tables exist, define **relationships** between them (e.g., Sales ↔ Customers ↔ Products).
4. Ensure data types and relationships are correct to support meaningful analysis.

5. The developed data model is now ready for building **visualizations** like charts, cards, and slicers.

OUTPUT

Query Settings

Properties

Name: sales data

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type

	country	order_value_EUR	cost	date
1	Sweden	98320.37	77722.25	8/23/2020
2	France	46296.26	40319.41	5/15/2020
3	Portugal	140337.34	115708.14	09-04-2020
4	France	203604.46	175344.16	6/26/2019
5	UK	63979.04	56032.84	10/22/2019
6	Italy	127075.41	110924.13	9/24/2019
7	Sweden	69681.43	55529.13	1/25/2020
8	France	96795.99	81395.75	6/21/2019
9	Portugal	144725.34	115056.65	1/15/2019
10	Germany	32695.37	26375.35	11/28/2020
11	Portugal	121318.55	102890.26	03-10-2020
12	Portugal	147092.62	117806.48	10/31/2020
13	Portugal	187874.45	160031.46	6/26/2019
14	Luxembourg	256603.66	209799.15	7/27/2019
15	Sweden	69626.39	57295.56	6/15/2019
16	Portugal	153029.72	125117.1	1/28/2020
17	France	65193.88	53113.45	10-04-2019
18	Sweden	15817.05	13743.44	03-10-2019
19	France	54079.04	45031.62	5/29/2020

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

PREVIEW DOWNLOADED AT 10:13

Query Settings

Properties

Name: Sales-Data

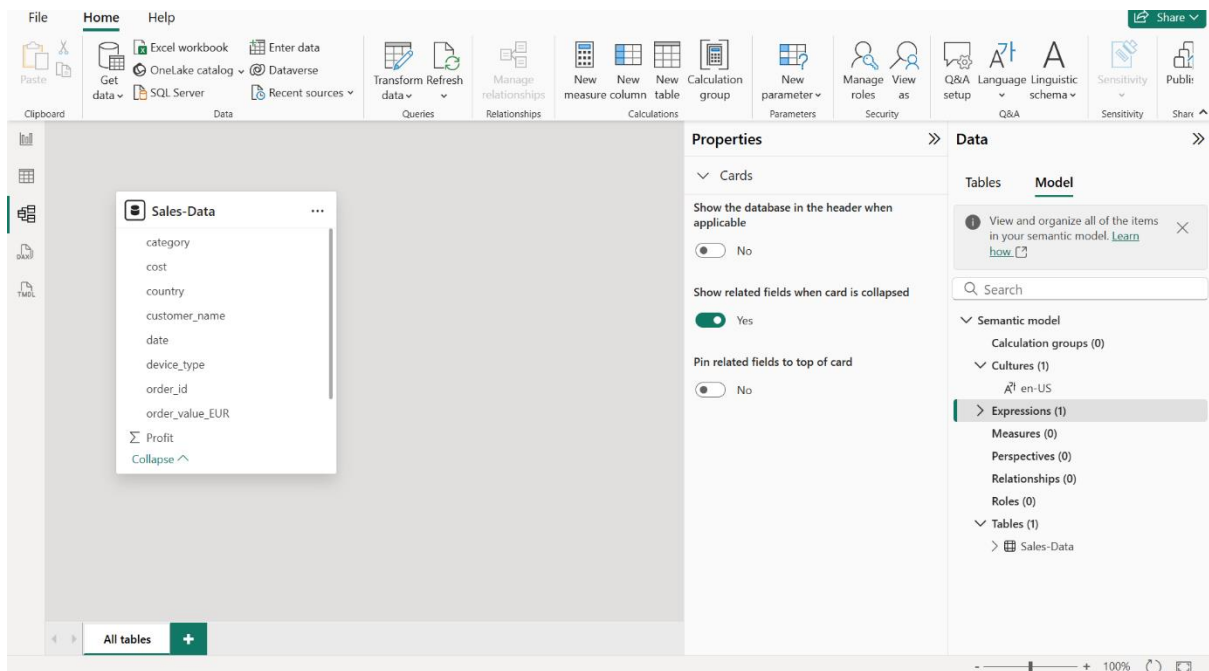
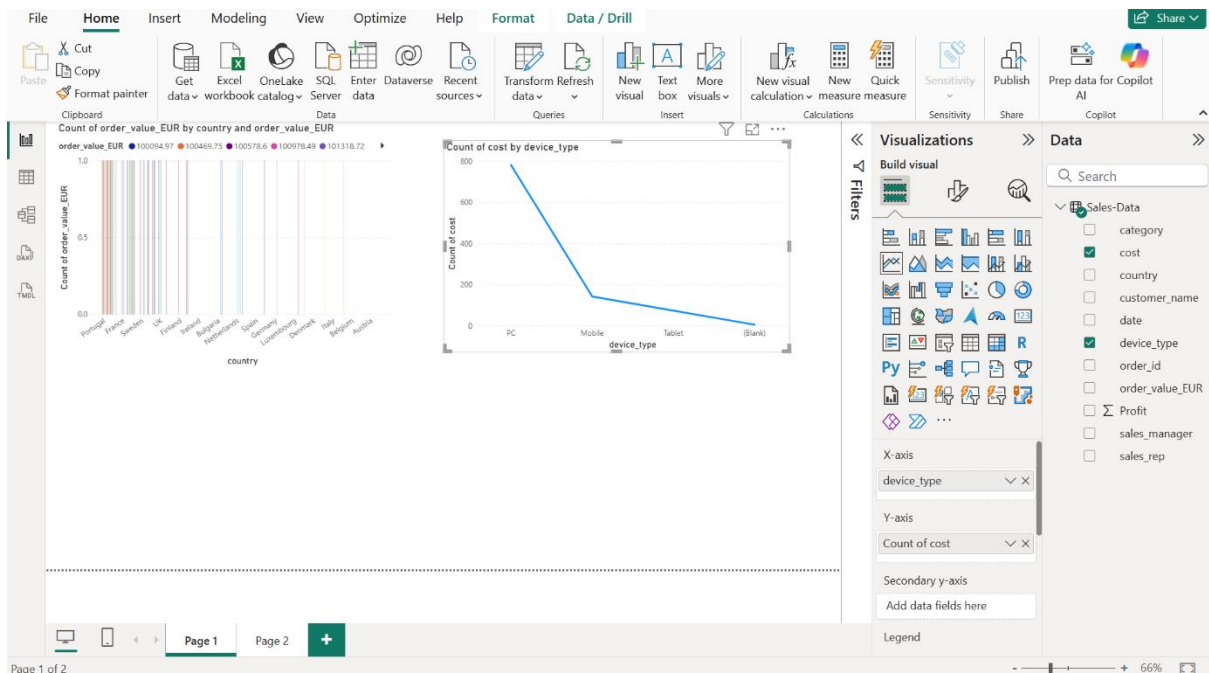
APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Added Custom

	sales_rep	device_type	order_id	Profit
1	Tarrah Castelletti	Tablet	70-0511466	1.2
2	Amelina Piscopiello	Tablet	77-3489084	\$
3	Corene Shirer	PC	65-8218141	Fixed decimal number
4	Crysta Halls	Mobile	29-5478106	Whole Number
5	Genevra Charrisson	PC	27-3437546	Percentage
6	Joshua Prevost	PC	57-6602854	Date/Time
7	Alyosha Meah	PC	78-3301264	Date
8	Avrit Chanders	PC	32-3124563	Time
9	Aurelie Wren	PC	92-7042708	Date/Time/Timezone
10	Casie MacBain	Mobile	15-2994585	Duration
11	Aurelie Wren	Tablet	48-0713329	Text
12	Hortense Gerring	PC	16-0987104	True/False
13	Hortense Gerring	PC	91-8142232	Binary
14	Jocelyn Laurentino	Tablet	85-9787047	Using Locale...
15	Madelon Bront	PC	06-2196763	46804.51
16	Corene Shirer	PC	51-9029547	12330.83
17	Maighdiln Upcraft	PC	74-1131921	27912.62
18	Anita Woakes	PC	26-9787272	12080.43
19	Avrit Chanders	PC	15-6838362	2073.61

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

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RESULT

The sales dataset was successfully prepared, cleaned, and loaded into Power BI Desktop. A simple data model with calculated measures was developed, making the data ready for visualization and analysis.