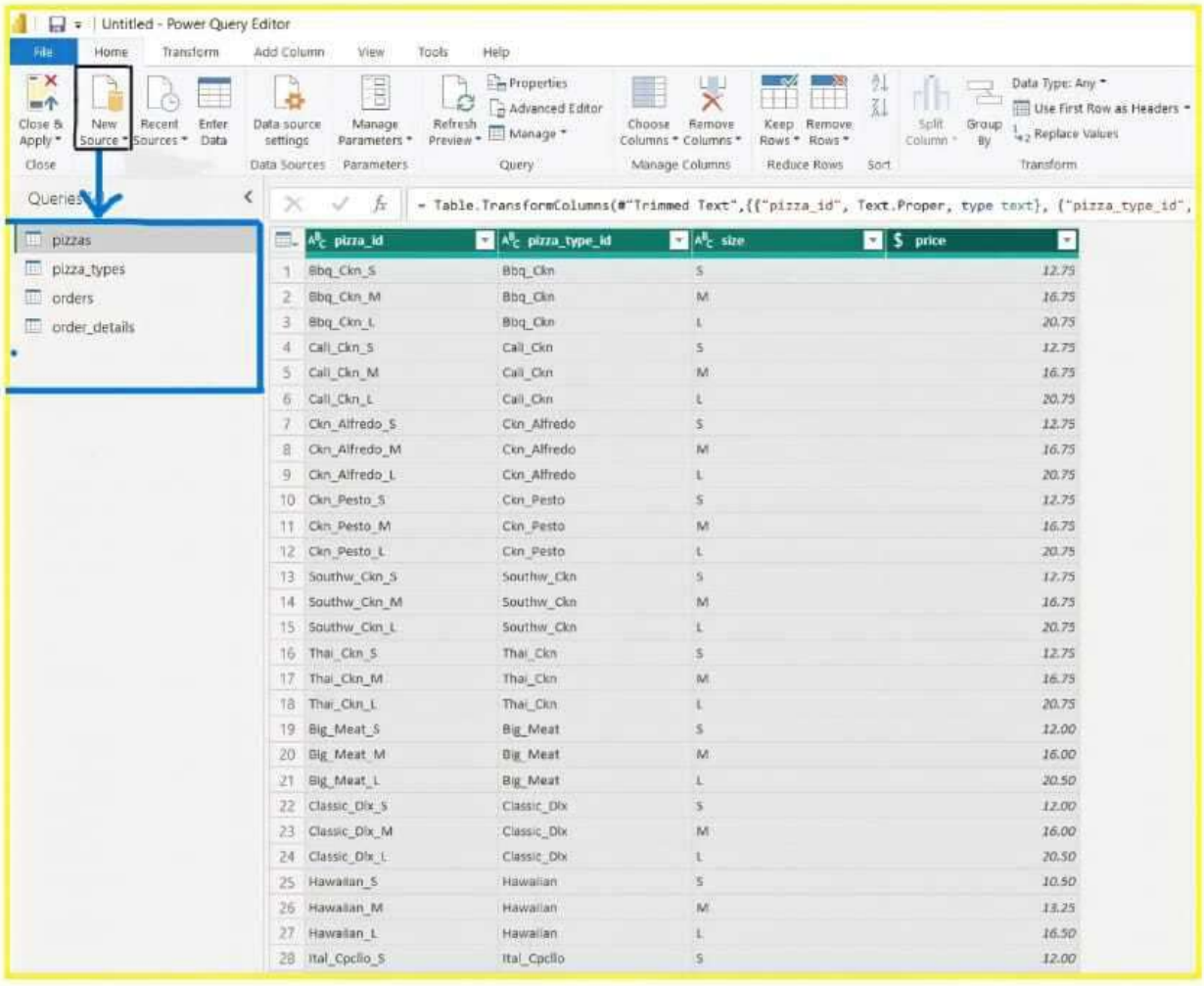
Pizza Sales Analytics

Project Overview:

This project focuses on analysing pizza sales data using Power BI. The goal of this project is to create a dashboard that provides insights into pizza sales, customer behaviour, and trends.

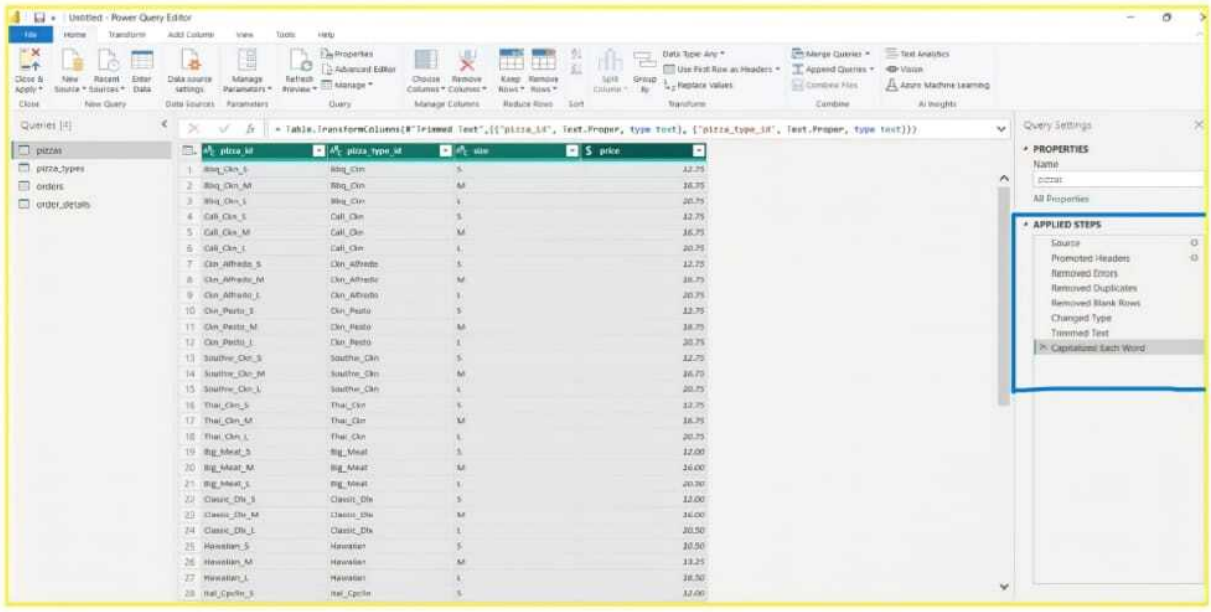
Data Import:

The first step in this project involved importing three datasets using the Get Data - pizzas, pizza types, and orders - into Power BI.



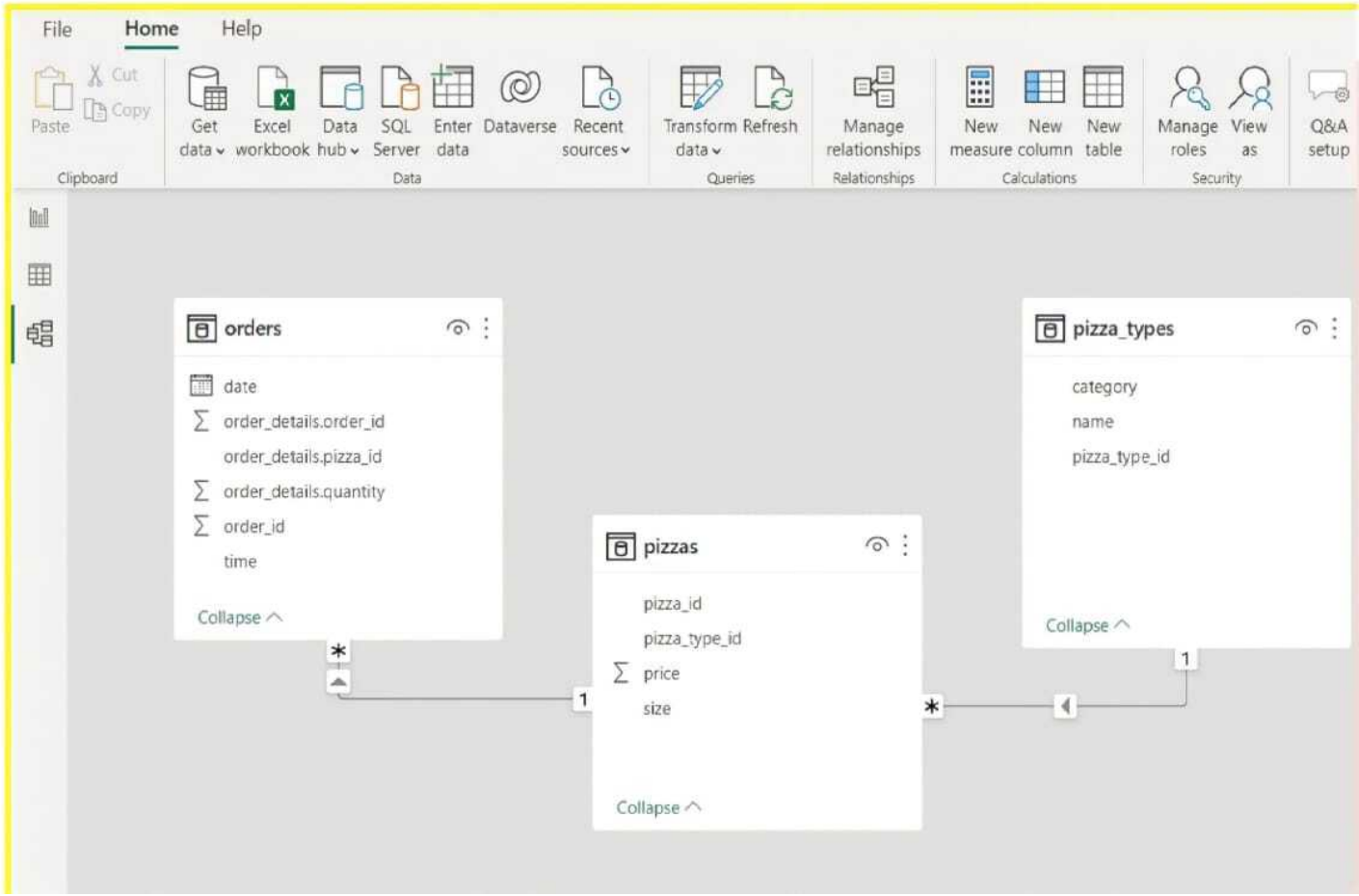
Data Cleaning:

To ensure the accuracy of the analysis, the data was cleaned using Power Query. The cleaning process included promoting headers, removing duplicates, errors, and blank rows, as well as updating data types.



Data Modeling:

To create a solid foundation for the analysis, the data was modeled using the fact dimensional model. The orders and pizza types tables were considered as dimensional tables, while the pizzas table was the fact table.



Measure Creation:

Several measures were created to calculate key metrics, including revenue, total revenue, % contribution, and average order value. Additionally, a calculated column was created for the day name to enhance time-based analysis.

```
Revenue = SUMX(orders,orders[quantity] *RELATED(pizzas[price]))
```

```
Total Revenue = CALCULATE([Revenue],ALLEXCEPT(pizza_types,pizza_types[pizza_type_id]))
```

```
%Contribution = [Revenue]/[Total Revenue]
```

```
Avg order value = [Revenue]/DISTINCTCOUNT(orders[order_id])
```

```
Day_Name = FORMAT(orders[date],"dddd")
```

Dashboard Creation:

To visualize and communicate insights, a dashboard was created using the report view in Power BI.

The dashboard included the following:

1. Text boxes
2. Images
3. Slicers
4. Bookmarks to clear slicer filters
5. Buttons
6. Cards to display KPIs
7. Multi-row card
8. Line chart
9. Bar chart

Insights Gained:

1. The Classic Deluxe pizza is the most frequently ordered pizza. As a result, it should be closely monitored to avoid going out of stock.
2.
3. July is the month when the most orders are received. The sales show a fluctuating trend over the months, and this data can be used to plan promotions and offers to drive sales during slower months.

4. Thai Chicken pizza is the highest-selling pizza, contributing 5.31% of total sales. This data suggests that Thai Chicken pizza is a popular choice among customers and can be used to plan promotions around this pizza to boost sales further.

5. The Brie Carre pizza and Green Garden pizza have the lowest contribution to overall sales at 1.42% and 1.71%, respectively. These pizzas should be reviewed to determine if they are worth keeping on the menu.

6. The Classic category is the top-performing category of pizzas, followed by Gourmet, Signature, and Vegetarian categories. This information can be used to guide menu planning and promotions to boost sales in underperforming categories.

7. Large-sized pizzas are the top-performing size, while XL and XXL pizzas have the lowest contribution to overall sales. This data suggests that customers prefer the large size, and the pizza business should consider focusing on this size.

Conclusion:

By leveraging the insights gained from this analysis, the project aims to assist in optimizing the menu, planning promotions and offers, and making informed decisions to drive sales growth.