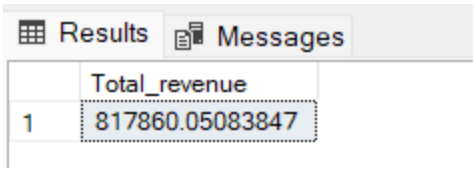
Pizza Data (SQL & PowerBI)

KPI’s requirement

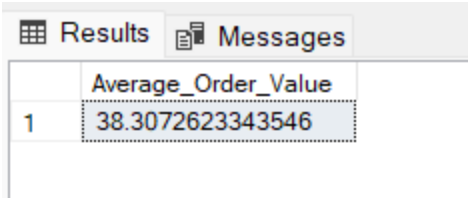
1. Total Revenue: Sum of total price of all pizza orders

```
select SUM(total_price) as Total_revenue from pizza_sales;
```



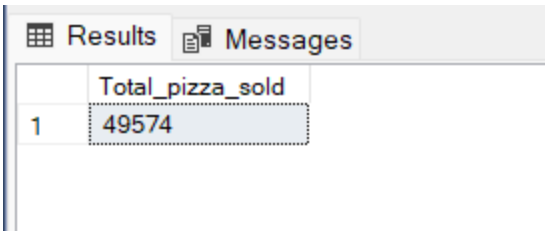
2. Average Order Value: The average amount spent per order, calculated by dividing the total revenue by the total number of orders.

```
select sum(total_price)/ count(distinct order_id) as Average_Order_Value
from pizza_sales;
```



3. **Total Pizzas Sold:** The sum of the quantities of all pizzas sold

```
select sum(quantity) as Total_pizza_sold from pizza_sales
```



4. **Total Orders:** The total number of orders placed.

💡 select count(distinct order_id) as Total_Ordersfrom pizza_sales

5. **Average Pizzas Per Order:** The average number of pizzas sold per order, calculated by dividing the total number of pizzas sold by the total number of orders.

💡 select CAST(CAST(sum(quantity) as DECIMAL(10,2)) / CAST(count(distinct order_id) as DECIMAL(10,2)) as DECIMAL(10,2)) as Average_pizza_sold_per_id from pizza_sales

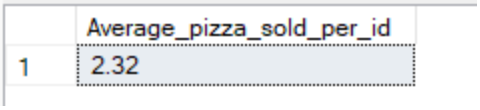


Chart Requirement

1. **Daily Trend for Total Orders:**

Create a bar chart that displays the daily trend of total orders over a specific time period. This chart will help us identify any patterns or fluctuations in order volumes on a daily basis.

💡 select DATENAME(DW, order_date) as order_day, count(distinct order_id) as Total_Orders from pizza_sales GROUP BY DATENAME(DW, order_date)

DW date of week 'retrieve date week'

	order_day	Total_Orders
1	Wednesday	3024
2	Saturday	3158
3	Monday	2794
4	Sunday	2624
5	Friday	3538
6	Thursday	3239
7	Tuesday	2973

2. **Monthly Trend for Total Orders:**

Create a line chart that illustrates the monthly trend of total orders throughout the day. This chart will allow us to identify peak hours or periods of high order activity.

💡 SELECT DATENAME(MONTH, order_date) AS Order_Month, COUNT(distinct order_id) as Total_Orders from pizza_sales GROUP BY DATENAME(MONTH, order_date) ORDER BY Total_Orders DESC;

Results | Messages

	Order_Month	Total_Orders
1	July	1935
2	May	1853
3	January	1845
4	August	1841
5	March	1840
6	April	1799
7	November	1792
8	June	1773
9	February	1685
10	December	1680
11	September	1661
12	October	1646

3. Percentage of Sales by Pizza Category:

Create a pie chart that shows the distribution of sales across different pizza categories. This chart will provide insights into the popularity of various pizza categories and their contribution to overall sales.

💡
```
SELECT pizza_category, SUM(total_price) as Total_Sales,
SUM(total_price) * 100 / (SELECT SUM(total_price) from pizza_sales
where MONTH(order_date) = 1) as Perc from pizza_sales
where MONTH(order_date) = 1
GROUP BY pizza_category
```

This is for January 'It's filtered using MONTH = 1'

If wanna do for 'Quarter' then, we use ***DATEPART(QUARTER, order_date) = 1***

	pizza_category	Total_Sales	Perc
1	Classic	18619.4000015259	26.6779189176038
2	Chicken	16188.75	23.1952780348435
3	Veggie	17055.4000778198	24.4370162489706
4	Supreme	17929.7499866486	25.6897867985821

4. **Percentage of Sales by Pizza Size:**

Generate a pie chart that represents the percentage of sales attributed to different pizza sizes. This chart will help us understand customer preferences for pizza sizes and their impact on sales.

```
SELECT pizza_size, SUM(total_price) as Total_Sales,
CAST(SUM(total_price) * 100 / (SELECT SUM(total_price)
from pizza_sales ) AS DECIMAL(10,2)) as Perc from pizza_sales
GROUP BY pizza_size
ORDER BY Perc DESC
```

Results | Messages

	pizza_size	Total_Sales	Perc
1	L	375318.701004028	45.89
2	M	249382.25	30.49
3	S	178076.49981308	21.77
4	XL	14076	1.72
5	XXL	1006.6000213623	0.12

5. **Top 5 Best Sellers by Total Pizzas Sold:**

Create a bar chart highlighting the top 5 best-selling pizzas based on the total number of pizzas sold. This chart will help us identify the most popular pizza options.

```
SELECT TOP 5 pizza_name, sum(total_price) AS Total_Rev from
pizza_sales
GROUP BY pizza_name
ORDER BY Total_Rev DESC
```

	pizza_name	Total_Rev
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5
4	The Classic Deluxe Pizza	38180.5
5	The Spicy Italian Pizza	34831.25

6. **Bottom 5 Worst Sellers by Total Pizzas Sold:**

Create a bar chart showcasing the bottom 5 worst-selling pizzas based on the total number of pizzas sold. This chart will enable us to identify underperforming or less popular pizza options.

💡 SELECT TOP 5 pizza_name, sum(total_price) AS Total_Rev from pizza_sales
GROUP BY pizza_name
ORDER BY Total_Rev ASC

	pizza_name	Total_Rev
1	The Brie Carre Pizza	11588.4998130798
2	The Green Garden Pizza	13955.75
3	The Spinach Supreme Pizza	15277.75
4	The Mediterranean Pizza	15360.5
5	The Spinach Pesto Pizza	15596

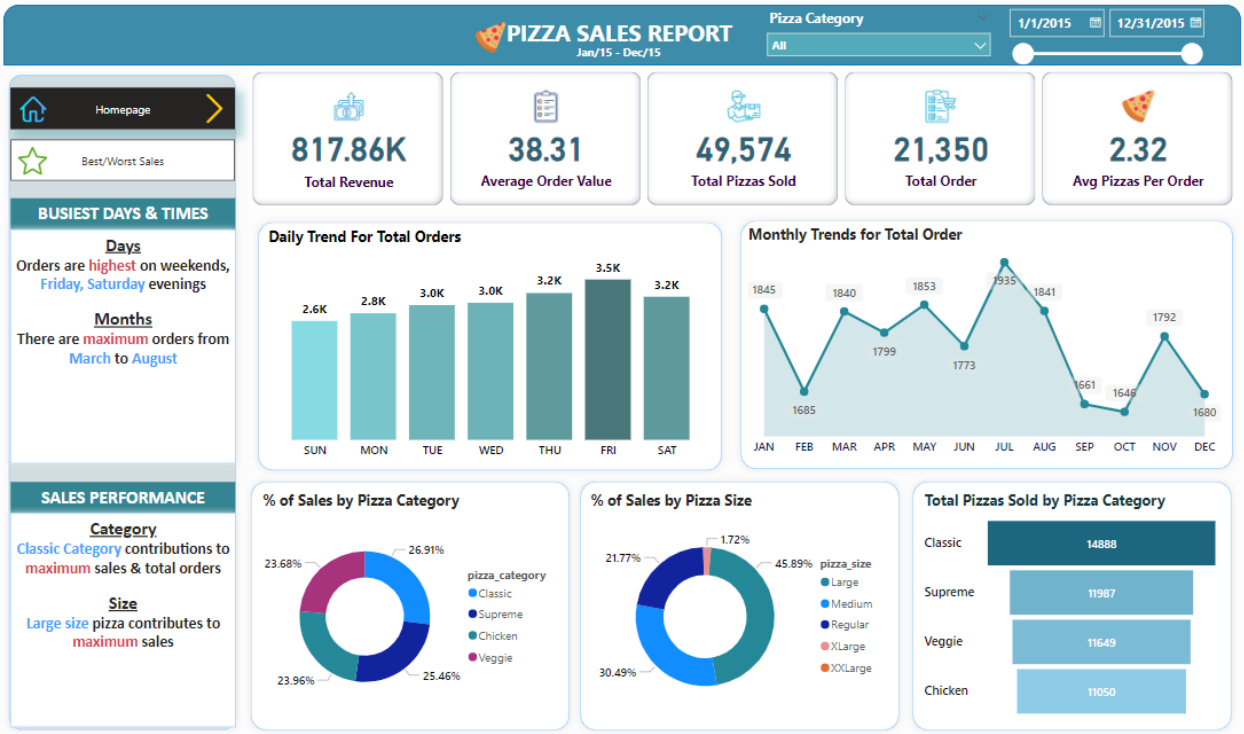
7. Top Quantity Pizza

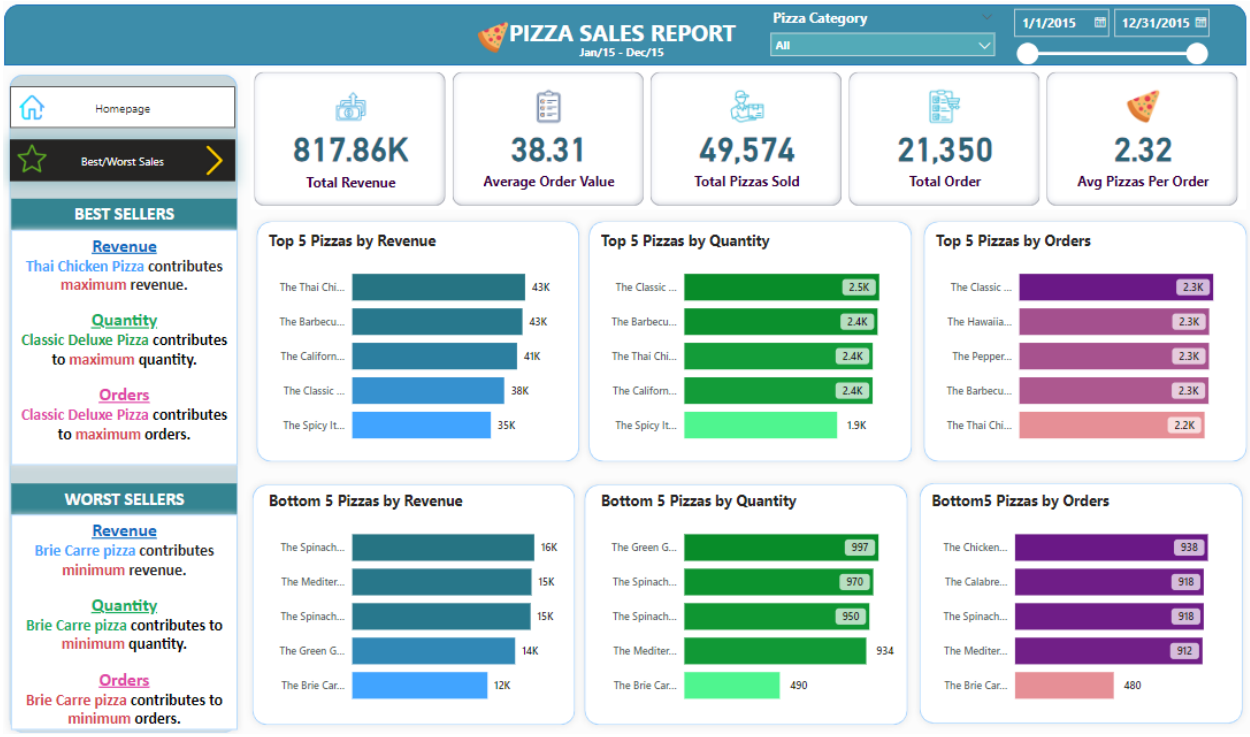
	pizza_name	Total_Quantity
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

Dashboard in PowerBI

Using this data, I created PowerBI dashboards that visualize the busiest days and months along with sales performance. The dashboards also show which pizzas had the highest and lowest demand.

This is how my dashboard looks like:




PIZZA SALES REPORT
Jan/15 - Dec/15
Pizza Category
All
1/1/2015
12/31/2015
Homepage
Best/Worst Sales
BEST SELLERS
Revenue
Thai Chicken Pizza contributes maximum revenue.
Quantity
Classic Deluxe Pizza contributes to maximum quantity.
Orders
Classic Deluxe Pizza contributes to maximum orders.
WORST SELLERS
Revenue
Brie Carre pizza contributes minimum revenue.
Quantity
Brie Carre pizza contributes to minimum quantity.
Orders
Brie Carre pizza contributes to minimum orders.
817.86K
Total Revenue
38.31
Average Order Value
49,574
Total Pizzas Sold
21,350
Total Order
2.32
Avg Pizzas Per Order
Top 5 Pizzas by Revenue
The Thai Chi... 43K
The Barbecu... 43K
The Californ... 41K
The Classic ... 38K
The Spicy It... 35K
Top 5 Pizzas by Quantity
The Classic ... 2.5K
The Barbecu... 2.4K
The Thai Chi... 2.4K
The Californ... 2.4K
The Spicy It... 1.9K
Top 5 Pizzas by Orders
The Classic ... 2.3K
The Hawaiia... 2.3K
The Pepper... 2.3K
The Barbecu... 2.3K
The Thai Chi... 2.2K
Bottom 5 Pizzas by Revenue
The Spinach... 16K
The Mediter... 15K
The Spinach... 15K
The Green G... 14K
The Brie Car... 12K
Bottom 5 Pizzas by Quantity
The Green G... 997
The Spinach... 970
The Spinach... 950
The Mediter... 934
The Brie Car... 490
Bottom5 Pizzas by Orders
The Chicken... 938
The Calabre... 918
The Spinach... 918
The Mediter... 912
The Brie Car... 480