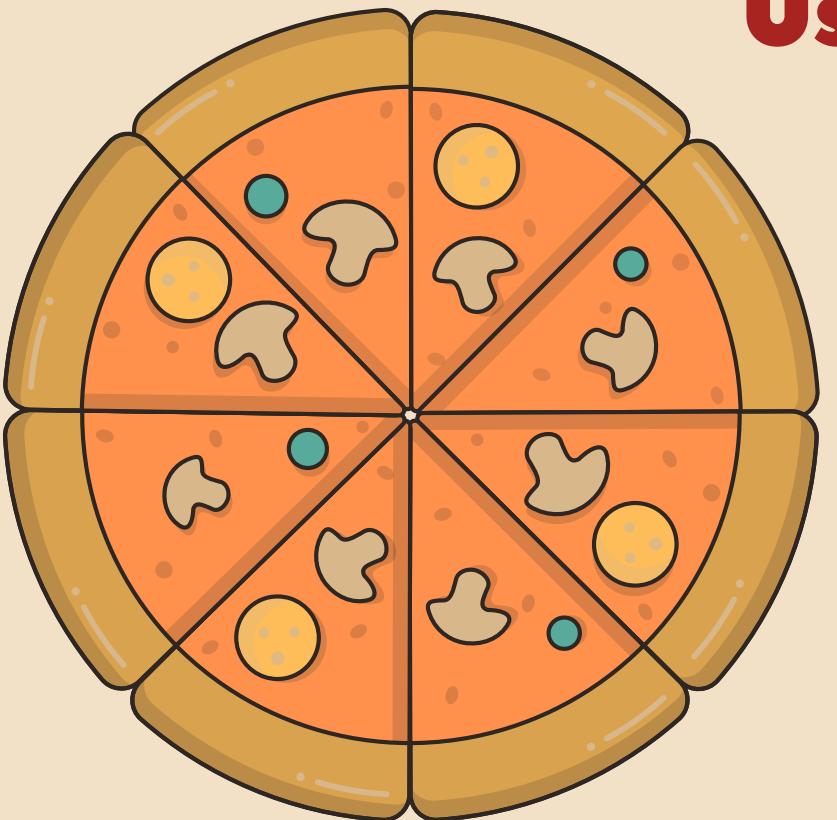


# PIZZA SALES ANALYSIS

**Using MS SQL & PowerBI**



# Objective

Leveraging SQL and Power BI, our objective was to extract invaluable insights for informed decision-making. By scrutinizing key trends, customer behaviors, and sales patterns, our endeavor aimed to lay the groundwork for optimizing inventory management and operational efficiency, thereby catalyzing future growth and profitability.



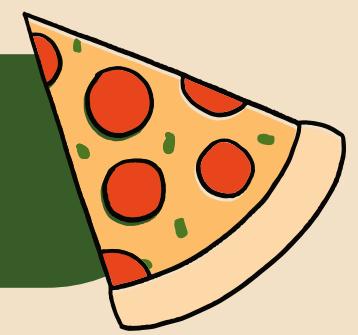
# Problem Statement

We need to analyse key indicators for our pizza sales data to gain insights into our business performance such as:

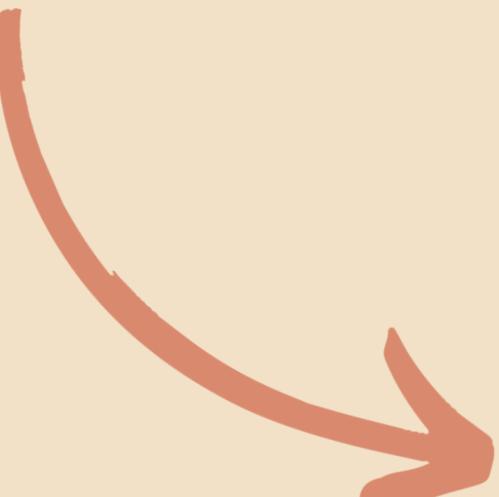
1. Total Revenue
2. Average Order Value
3. Total Pizza Sold
4. Total Orders
5. Average Pizza Sold per Order.

These KPIs provide a comprehensive overview of our business, guiding our strategic decisions.

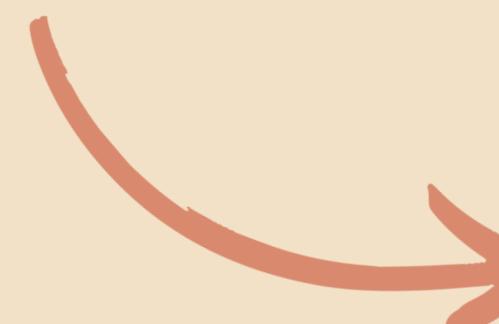
# Total Revenue



```
SELECT SUM(total_price) AS Total_Revenue  
FROM pizza_sales;
```



Results	Messages
Total_Revenue	
817860.05083847	



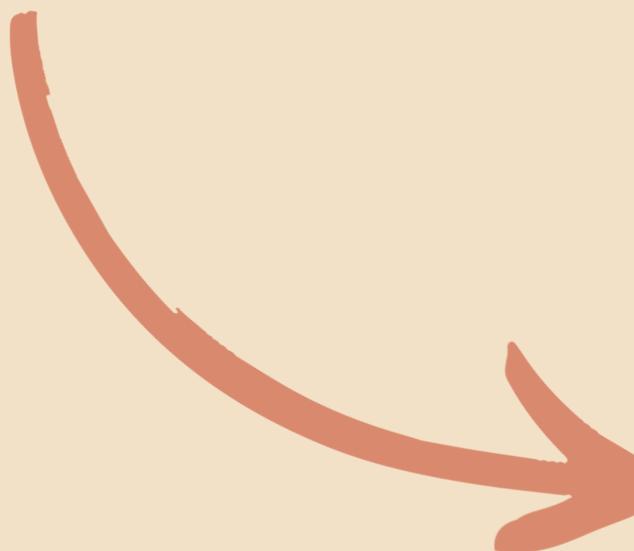
 817.86K  
TotalRevenue



# Average Order Value

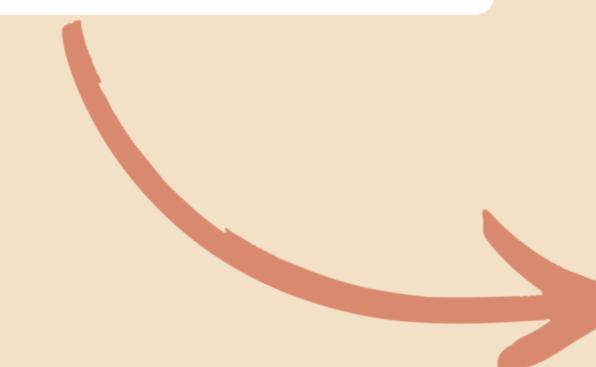


```
SELECT  
    SUM(total_price) / COUNT(DISTINCT(order_id)) AS  
    Avg_order_value FROM pizza_sales;
```

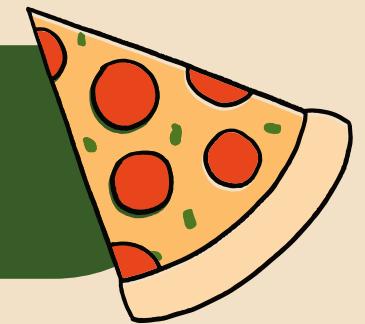


Results    Messages

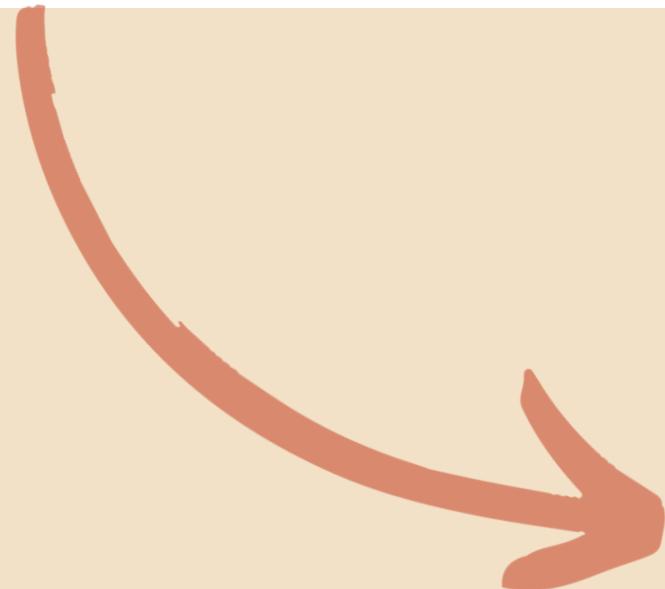
Avg_order_value
38.3072623343546



# Total Pizza Sold

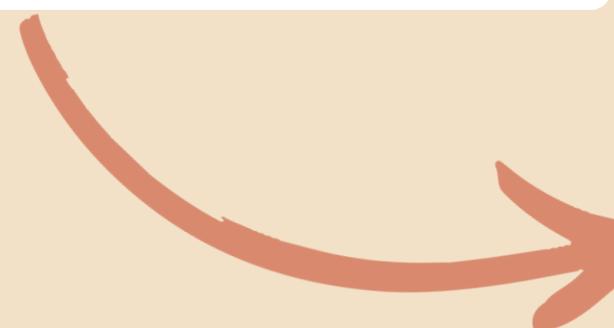


```
SELECT SUM(quantity) AS Total_pizza_sold  
FROM pizza_sales
```

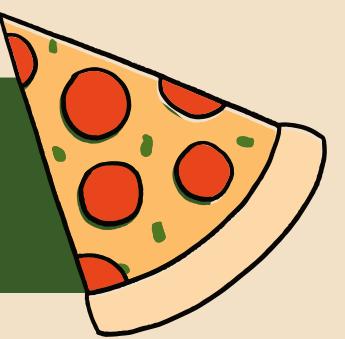


Results    Messages

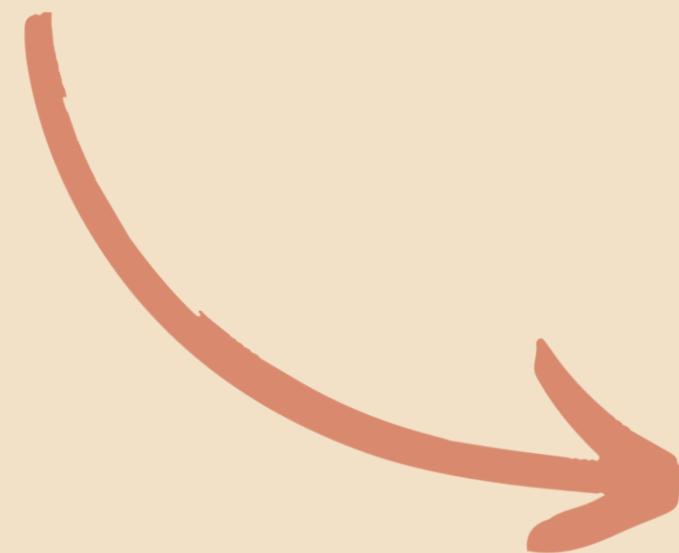
Total_pizza_sold
49574



# Total Orders

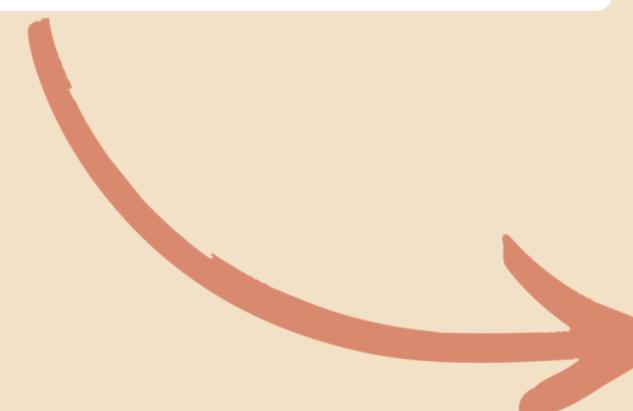


```
SELECT COUNT(DISTINCT(order_id)) AS  
Total_Orders FROM pizza_sales
```



Results Messages

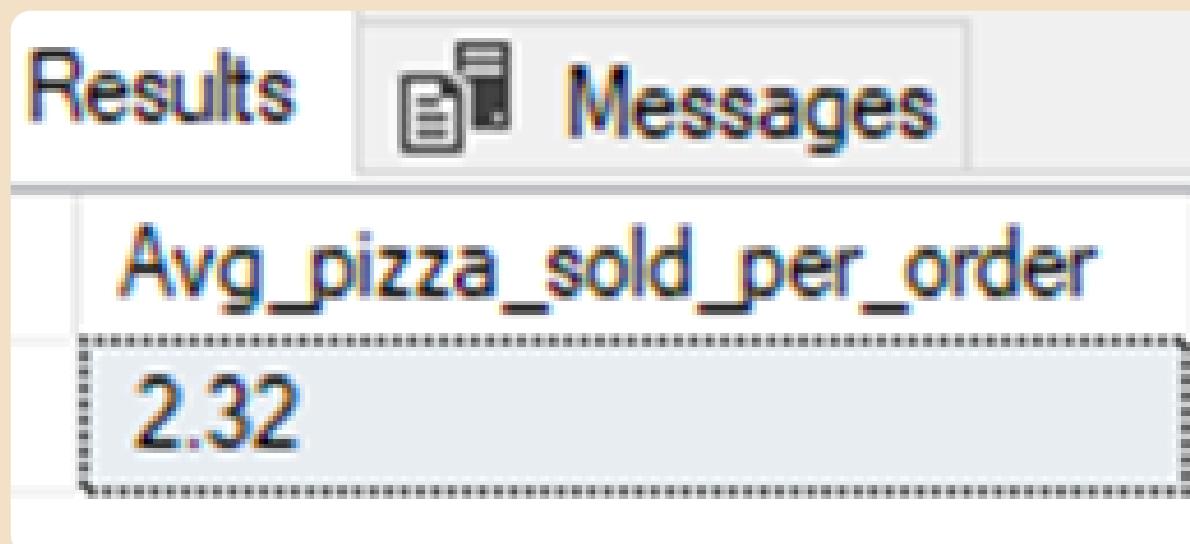
Total_Orders
21350



# Avg Pizza sold per order



```
SELECT CAST(CAST(SUM(quantity) AS DECIMAL(10,2))/CAST(COUNT(DISTINCT(order_id)) AS DECIMAL(10,2)) AS DECIMAL(10,2)) AS Avg_pizza_sold_per_order  
FROM pizza_sales;
```



# Daily Trend for Total Orders

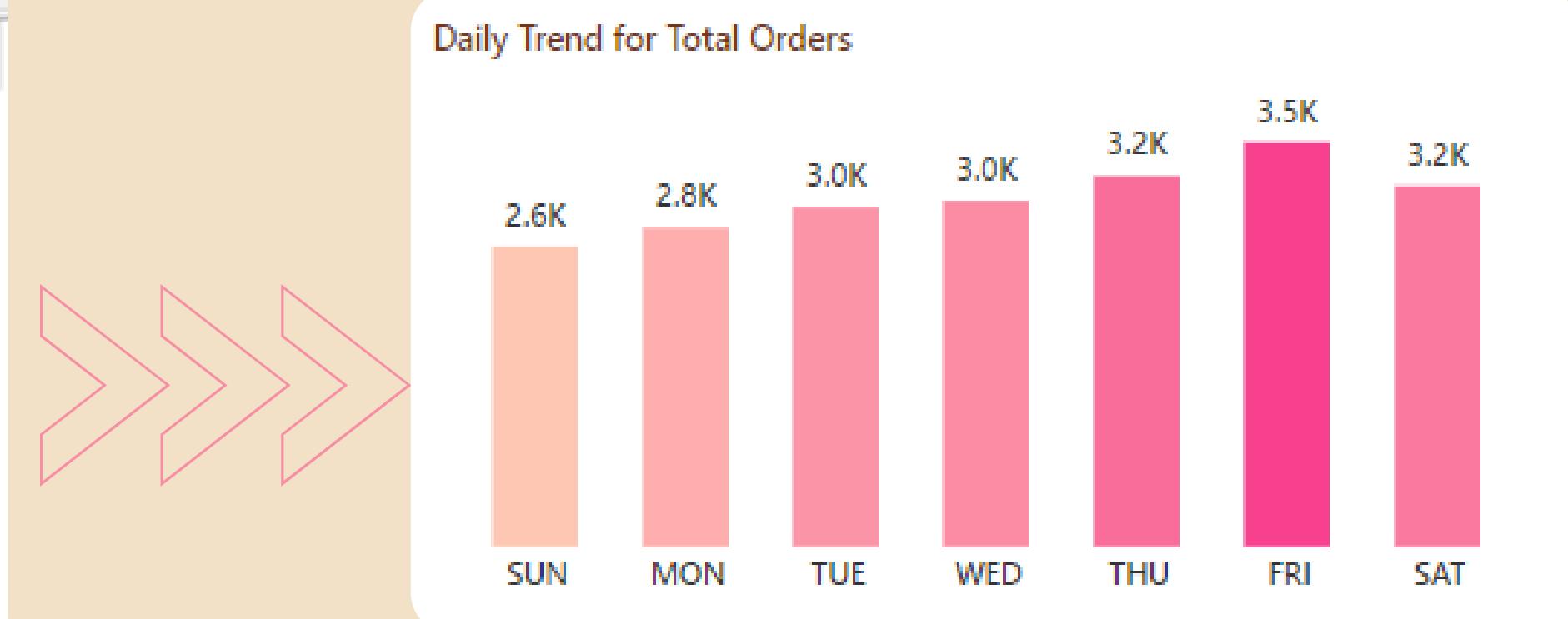


```
SELECT DATENAME(DW, order_date) AS order_day,  
       COUNT(DISTINCT(order_id)) AS Total_orders  
  FROM pizza_sales  
 GROUP BY DATENAME(DW, order_date)  
 ORDER BY Total_orders DESC;
```



Results Messages

order_day	Total_orders
Friday	3538
Thursday	3239
Saturday	3158
Wednesday	3024
Tuesday	2973
Monday	2794
Sunday	2624



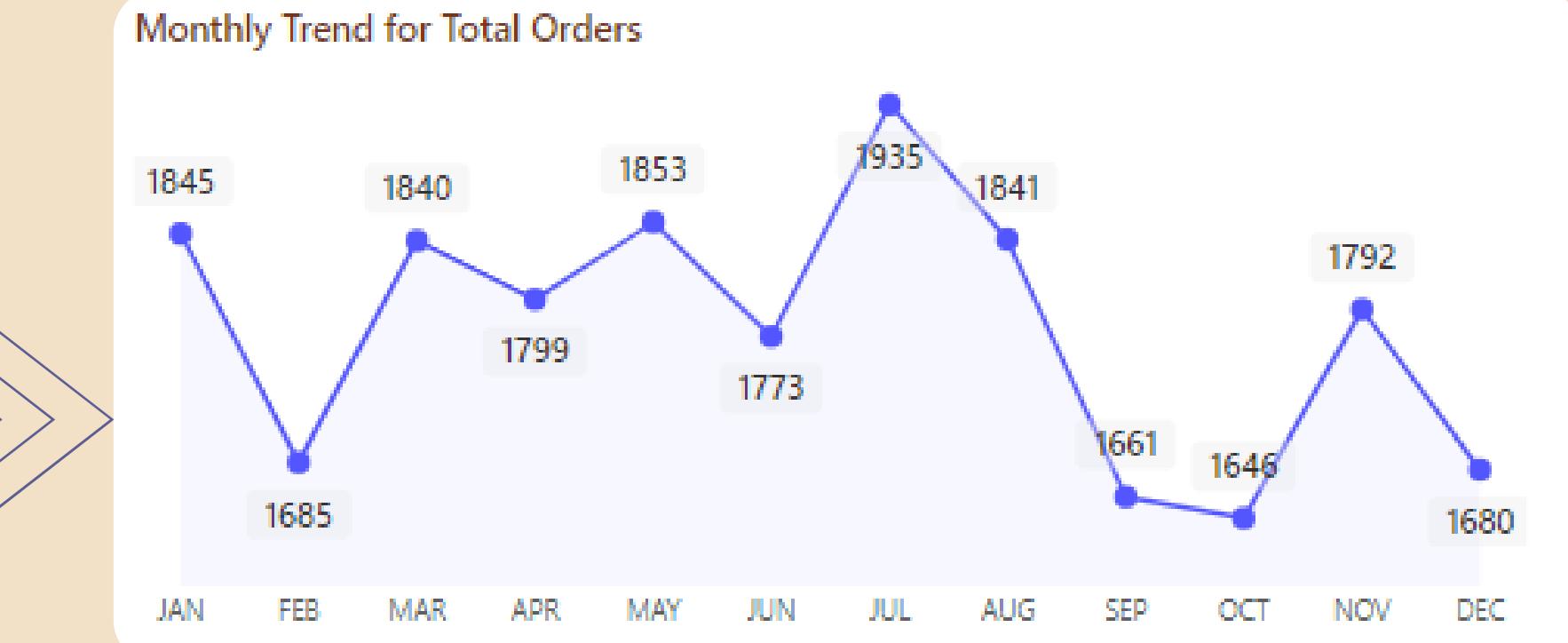
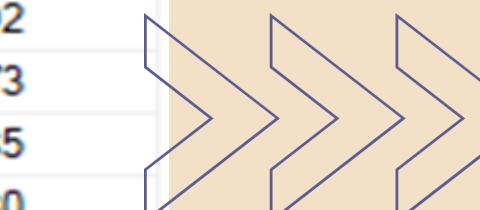
# Monthly Trend for Total Orders



```
SELECT DATENAME(MONTH, order_date) AS month_name,  
       COUNT(DISTINCT(order_id)) AS total_order  
  FROM pizza_sales  
 GROUP BY DATENAME(MONTH, order_date)  
 ORDER BY total_order DESC;
```

Results    Messages

month_name	total_order
July	1935
May	1853
January	1845
August	1841
March	1840
April	1799
November	1792
June	1773
February	1685
December	1680
September	1661
October	1646



# Percentage of sales by Pizza Category

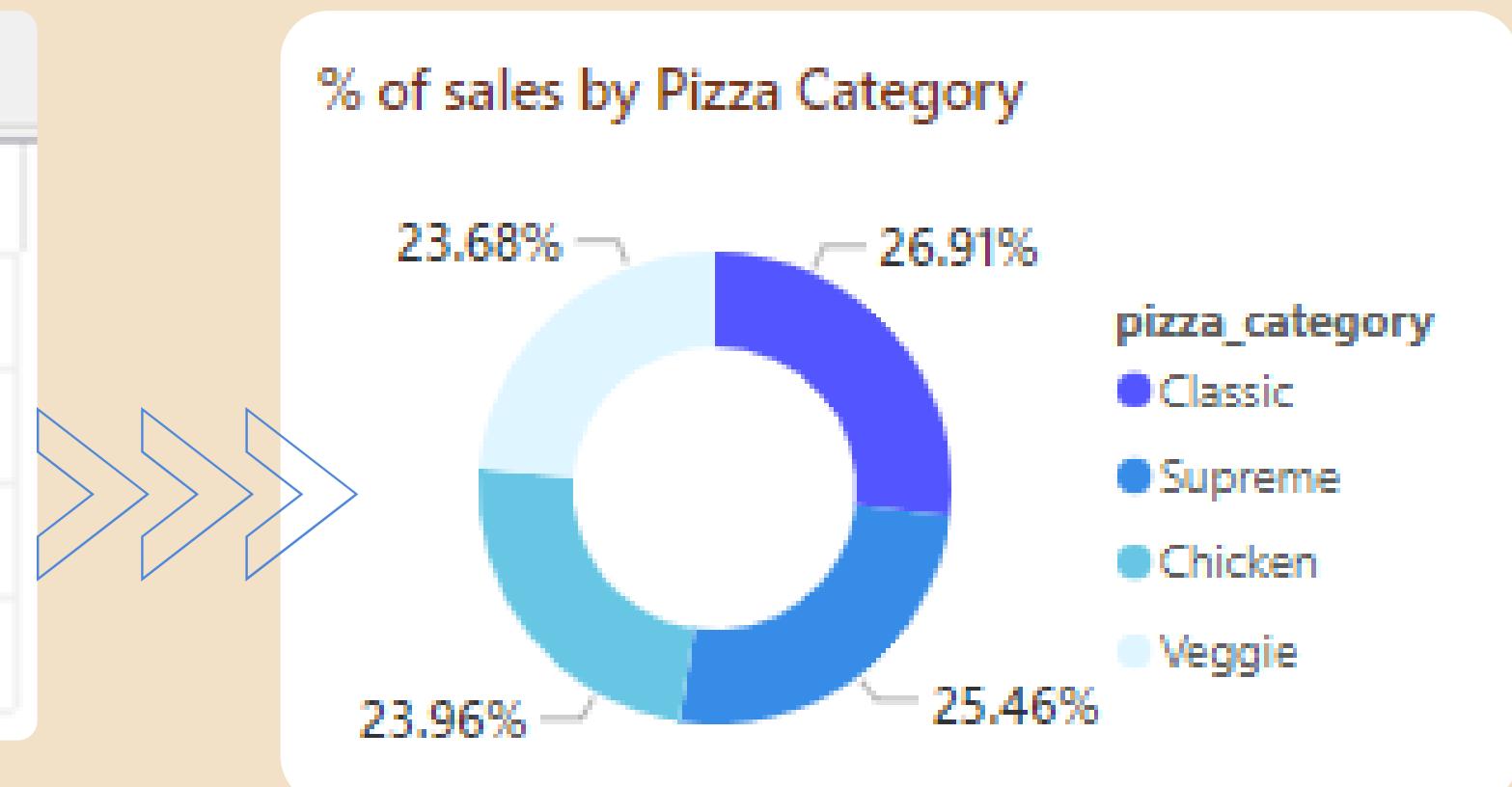


```
SELECT pizza_category,  
       CAST(SUM(total_price) AS DECIMAL (10,2)) AS Total_sales,  
       CONCAT(CAST(SUM(total_price) *100 / (SELECT SUM(total_price) FROM pizza_sales)  
                  AS DECIMAL(10,2)), '%') AS PCT  
  FROM pizza_sales  
 GROUP BY pizza_category;
```



Results Messages

pizza_category	Total_sales	PCT
Classic	220053.10	26.91%
Chicken	195919.50	23.96%
Veggie	193690.45	23.68%
Supreme	208197.00	25.46%



# Percentage of sales by Pizza Size

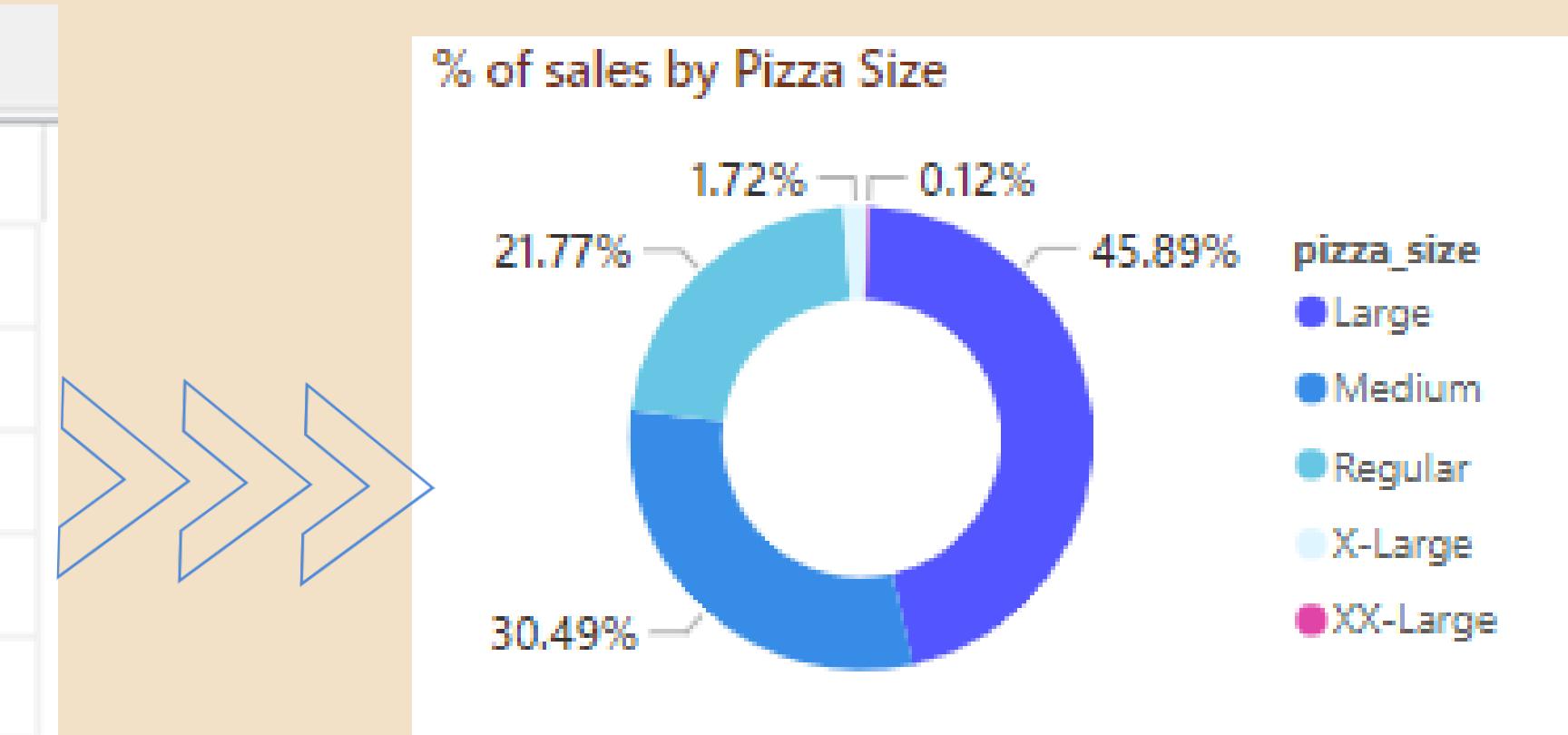


```
SELECT pizza_size,
       CAST(SUM(total_price) AS DECIMAL (10,2)) AS Total_sales,
       CONCAT(CAST(SUM(total_price) *100 / (SELECT SUM(total_price) FROM pizza_sales)
AS DECIMAL(10,2)), '%') AS PCT
FROM pizza_sales
GROUP BY pizza_size;
```



Results Messages

pizza_size	Total_sales	PCT
L	375318.70	45.89%
XXL	1006.60	0.12%
M	249382.25	30.49%
XL	14076.00	1.72%
S	178076.50	21.77%



# Top 5 sellers by Revenue

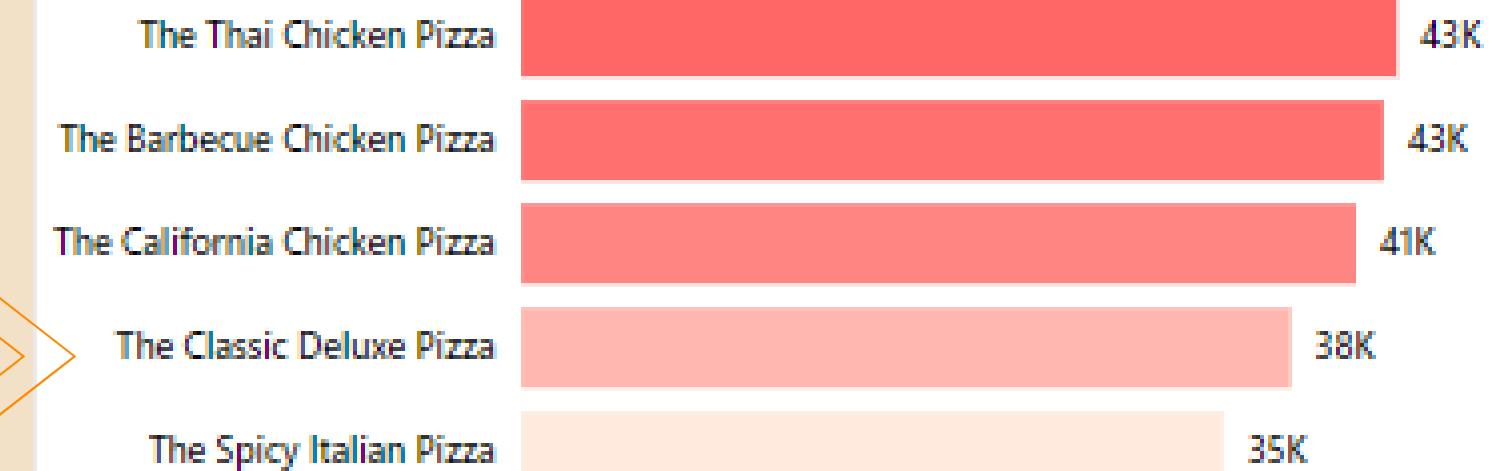


```
SELECT TOP 5 pizza_name, SUM(total_price) AS Revenue  
FROM pizza_sales  
GROUP BY pizza_name  
ORDER BY Revenue DESC;
```

Results Messages

pizza_name	Revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5
The Classic Deluxe Pizza	38180.5
The Spicy Italian Pizza	34831.25

Top 5 Pizzas by Revenue



# Bottom 5 sellers by Revenue



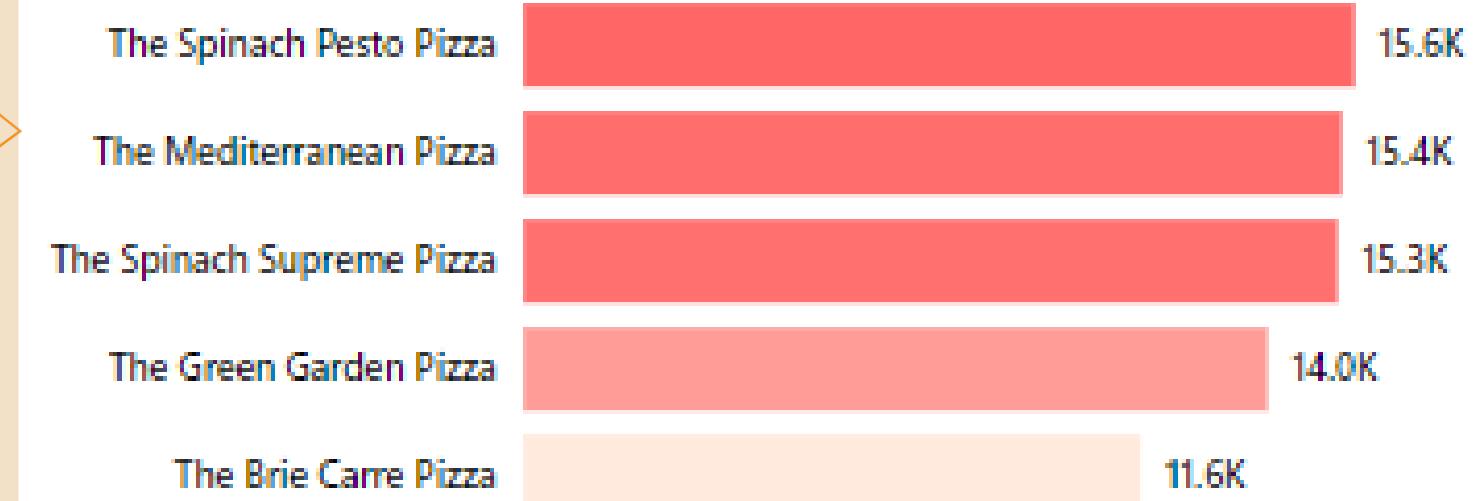
```
SELECT TOP 5 pizza_name, SUM(total_price) AS Revenue  
FROM pizza_sales  
GROUP BY pizza_name  
ORDER BY Revenue ASC;
```

Results    Messages

pizza_name	Revenue
The Brie Came Pizza	11588.4998130798
The Green Garden Pizza	13955.75
The Spinach Supreme Pizza	15277.75
The Mediterranean Pizza	15360.5
The Spinach Pesto Pizza	15596



Bottom 5 Pizzas by Revenue



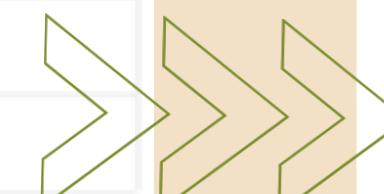
# Top 5 sellers by Total Quantity



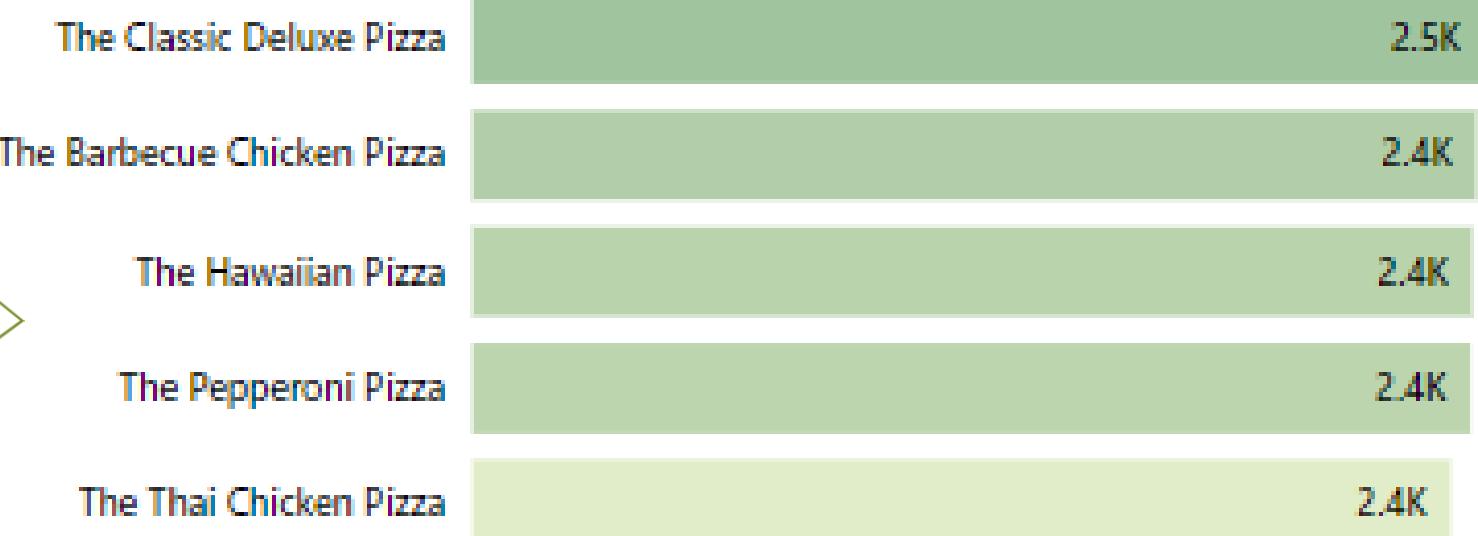
```
SELECT TOP 5 pizza_name, SUM(quantity) AS Total_quantity  
FROM pizza_sales  
GROUP BY pizza_name  
ORDER BY Total_quantity DESC;
```

Results Messages

pizza_name	Total_quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371



Top 5 Pizzas by Quantity



# Bottom 5 sellers by Total Quantity



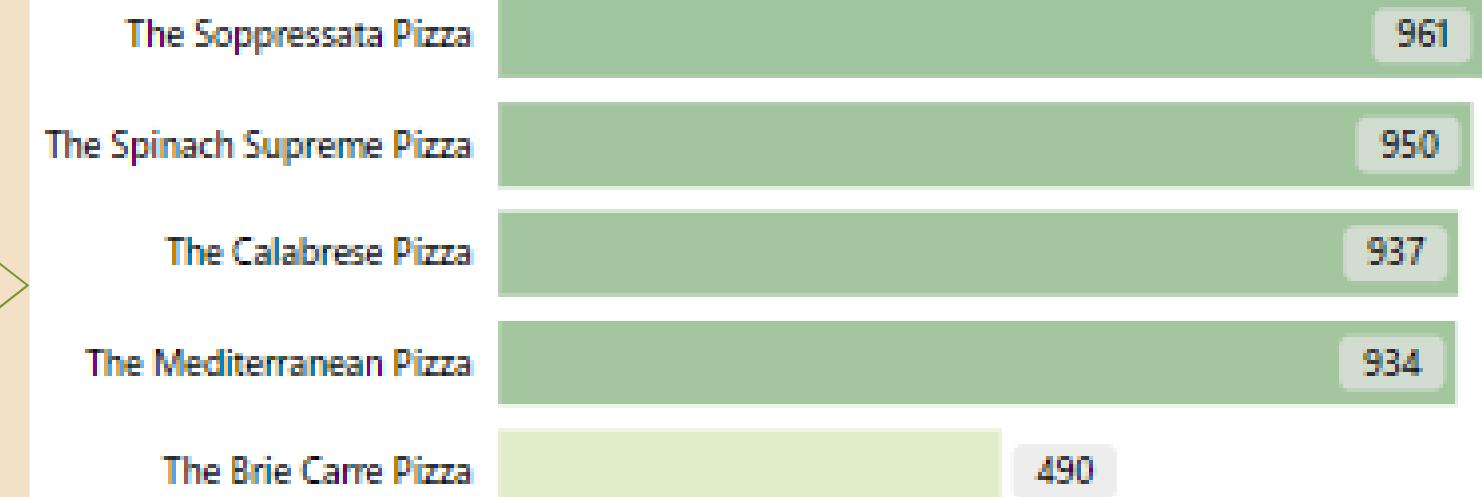
```
SELECT TOP 5 pizza_name, SUM(quantity) AS Total_quantity  
FROM pizza_sales  
GROUP BY pizza_name  
ORDER BY Total_quantity ASC;
```

Results Messages

pizza_name	Total_quantity
The Brie Came Pizza	490
The Mediterranean Pizza	934
The Calabrese Pizza	937
The Spinach Supreme Pizza	950
The Soppressata Pizza	961



## Bottom 5 Pizzas by Quantity



# Top 5 sellers by Total Orders

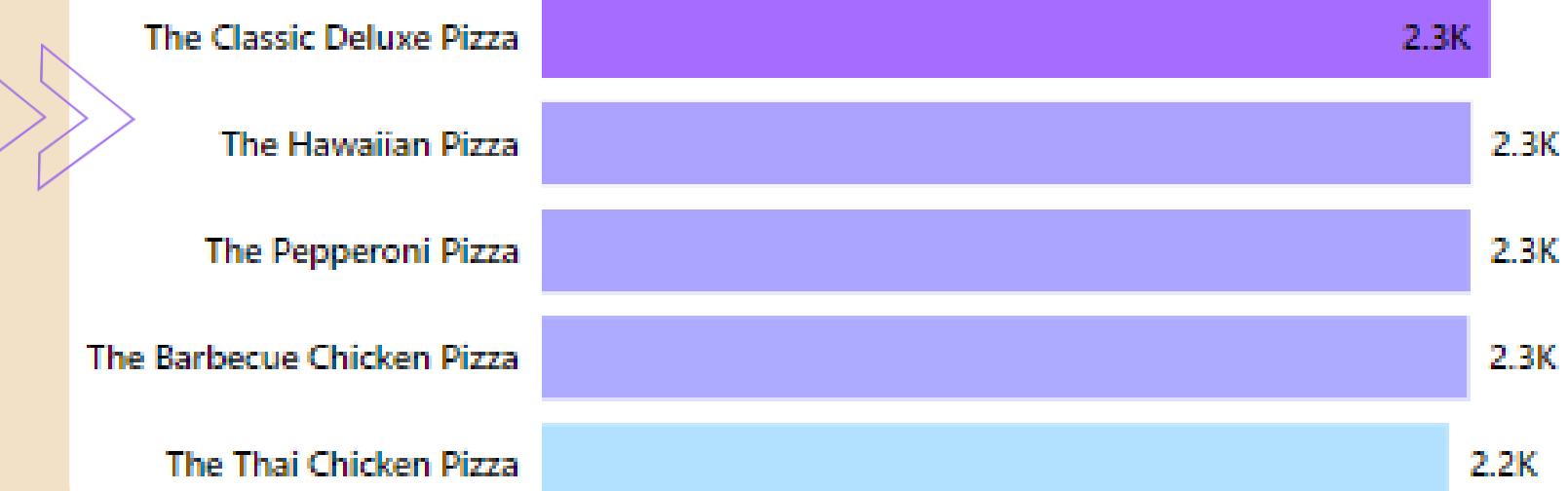


```
SELECT TOP 5 pizza_name, COUNT(DISTINCT(order_id)) AS Total_orders  
FROM pizza_sales  
GROUP BY pizza_name  
ORDER BY Total_orders DESC;
```

Results Messages

pizza_name	Total_orders
The Classic Deluxe Pizza	2329
The Hawaiian Pizza	2280
The Pepperoni Pizza	2278
The Barbecue Chicken Pizza	2273
The Thai Chicken Pizza	2225

Top 5 Pizzas by Total Orders



# Bottom 5 sellers by Total Orders



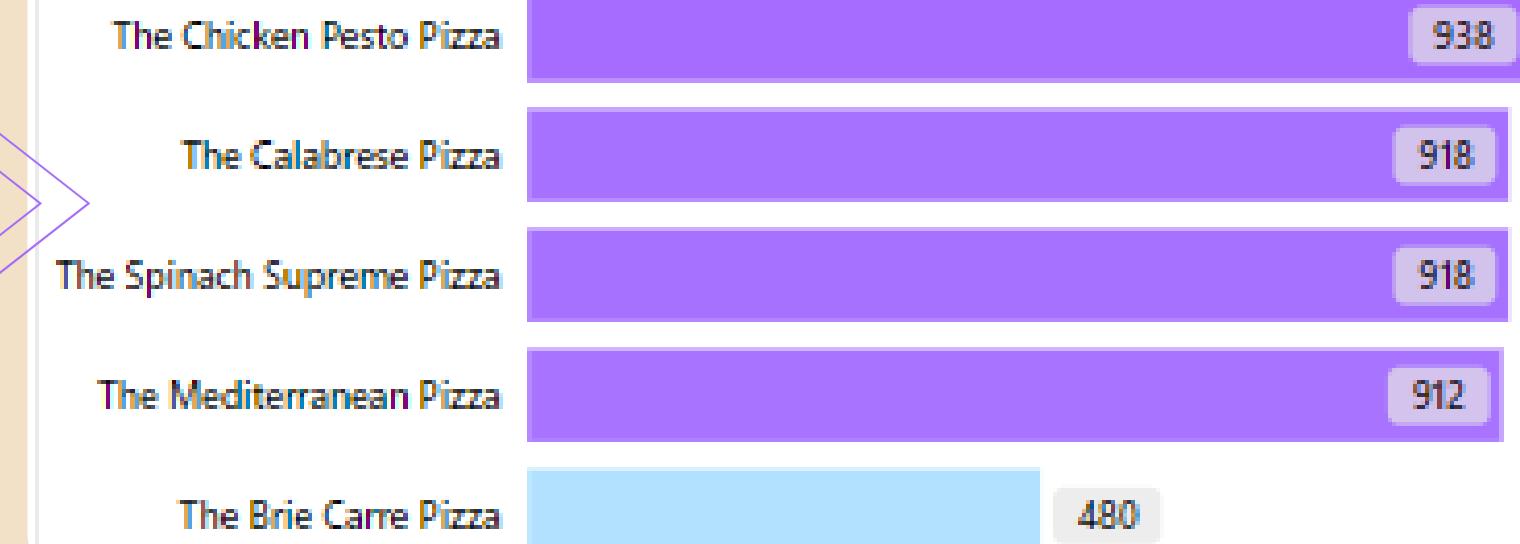
```
SELECT TOP 5 pizza_name, COUNT(DISTINCT(order_id)) AS Total_orders  
FROM pizza_sales  
GROUP BY pizza_name  
ORDER BY Total_orders ASC;
```

Results Messages

pizza_name	Total_orders
The Brie Came Pizza	480
The Mediterranean Pizza	912
The Spinach Supreme Pizza	918
The Calabrese Pizza	918
The Chicken Pesto Pizza	938

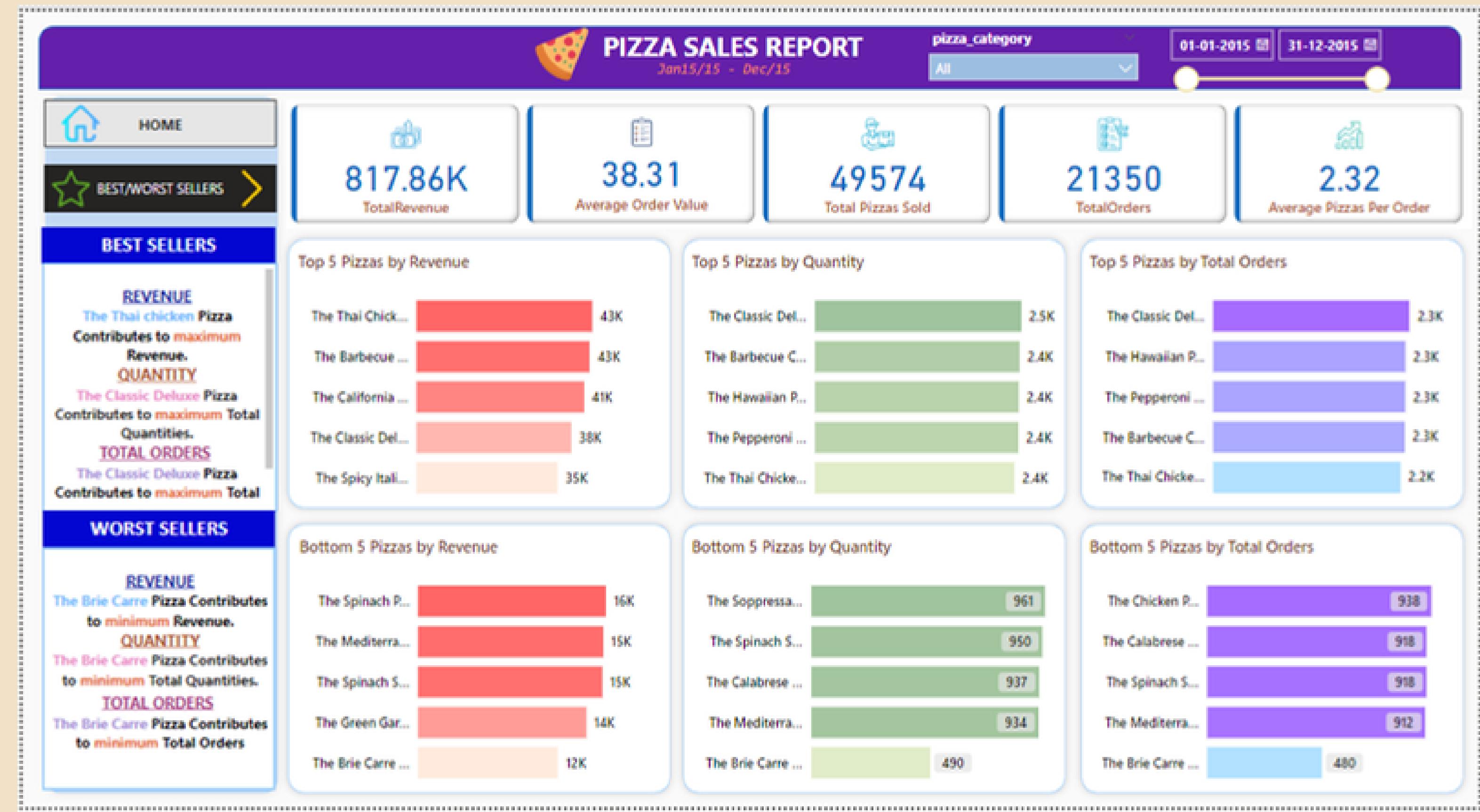


Bottom 5 Pizzas by Total Orders



# Pizza sales report





# Insights

- The **peak** for orders is during weekends, especially on **Friday** and **Saturday** evenings.
- The months of **May** and **July** record the **highest** number of **orders**, while **September** and **October** see the **lowest**. This indicates a trend where summer months have the highest order volume compared to lower orders in winter.
- Analyzing sales performance by pizza category reveals that the **Classic Category pizza** garners the **most** sales and total orders.
- In terms of pizza size, the majority of people prefer ordering **Large size pizzas**.



# THANK YOU