



# **Pizza Sales Analysis**

**From SSMS  
To Power BI**

# KPI Findings

## Revenue & Order Analysis

### 1. What is the total revenue generated from all pizza sales?

```
SELECT CONCAT('$',CAST(ROUND(SUM(total_price), 2) AS DECIMAL(10,2))) AS Total_Revenue from p_sales
```

Total_Revenue	
1	\$817860.05

### 2. What is the average amount spent per order?

```
SELECT CONCAT('$',CAST(ROUND(SUM(total_price) / COUNT(DISTINCT order_id), 2) AS DECIMAL(10,2))) AS Avg_Spen  
FROM p_sales;
```

Avg_Spend_Per_Order	
1	\$38.31

### 3. How many total pizzas have been sold?

```
--  
SELECT(SUM(quantity)) as Total_Pizza_sold from p_sales  
--
```

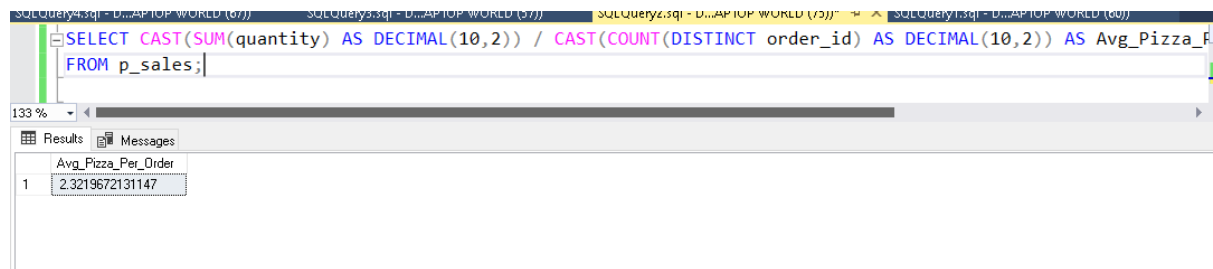
Total_Pizza_sold	
1	49574

### 4. How many total orders have been placed?

```
--  
select count(distinct(order_id)) as Totl_order from p_sales  
--
```

Totl_order	
1	21350

## 5. What is the average number of pizzas purchased per order?



The screenshot shows a SQL query editor with a query to calculate the average number of pizzas purchased per order. The query is as follows:

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

The query is executed, and the results are displayed in a table with the following data:

	Avg_Pizza_Per_Order
1	2.3219672131147

# Deep Insights:

## Monthly & Weekly Order Analysis

### 6. Which months had the highest number of orders?

```
--select * from p_sales
select DATENAME(MONTH, order_date) AS Month_Name, count(distinct(order_id)) as total_orders from p_sales
group by DATENAME(MONTH, order_date) , MONTH(order_date)
order by count(distinct(order_id)) desc
```

	Month_Name	total_orders
1	July	1935
2	May	1853
3	January	1845
4	August	1841
5	March	1840
6	April	1799
7	November	1792

### 7. Which days of the week had the highest number of orders?

```
select TOP 4 DATENAME(WEEKDAY, order_date) AS DAY_NAME , count(distinct(order_id)) as total_orders from p_sales
group by DATENAME(WEEKDAY, order_date) , DATEPART(WEEKDAY, order_date)
order by count(distinct(order_id)) desc
```

	DAY_NAME	total_orders
1	Friday	3538
2	Thursday	3239
3	Saturday	3158
4	Wednesday	3024

## Hourly Order Analysis

### 8. During which hours of the day are the most orders placed?

```
SELECT top 5
    DATEPART(HOUR, order_time) AS Order_Hour,
    COUNT(DISTINCT order_id) AS Total_Orders
FROM p_sales
GROUP BY DATEPART(HOUR, order_time)
ORDER BY COUNT(DISTINCT order_id) DESC;
```

	Order_Hour	Total_Orders
1	12	2520
2	13	2455
3	18	2399
4	17	2336
5	19	2009

## Category & Size Sales Analysis

### 9. What is the total sales revenue and percentage contribution for each pizza category?

```
--select pizza_category, ROUND(SUM(total_price),2) as Total_Sales,concat((sum(total_price)* 100 /(select sum(total_price) from p_sales)) as Percentage
from p_sales
group by pizza_category
order by (sum(total_price)* 100 /(select sum(total_price) from p_sales)) desc
--NOTE:
```

	pizza_category	Total_Sales	Percentage
1	Classic	220053.1	26.906%
2	Supreme	208197	25.4563%
3	Chicken	195919.5	23.9551%
4	Veggie	193690.45	23.6826%

### 10. What is the total revenue generated by each pizza size?

```
--SELECT pizza_size ,ROUND(SUM(total_price),2) as Total_Sales, concat(round(sum(total_price) *100 / (select sum(total_price) from p_sales)) as Percentage
from p_sales
group by pizza_size
---
```

	pizza_size	Total_Sales	Percentage
1	L	375318.7	45.89%
2	XXL	1006.6	0.12%
3	M	249382.25	30.49%
4	XL	14076	1.72%
5	S	178076.5	21.77%

## Best & Worst Selling Pizzas

### 11. Which are the top 5 best-selling pizzas based on revenue?

```
--Select top 5 pizza_name , ROUND(SUM(total_price),2) as Total_Sales,concat(round(sum(total_price) *100 / (select sum(total_price) from p_sales)) as Percentage
from p_sales
group by pizza_name
order by concat(round(sum(total_price) *100 / (select sum(total_price) from p_sales),2),'%') desc
---
```

	pizza_name	Total_Sales	Percentage
1	The Thai Chicken Pizza	43434.25	5.31%
2	The Barbecue Chicken Pizza	42768	5.23%
3	The California Chicken Pizza	41409.5	5.06%
4	The Classic Deluxe Pizza	38180.5	4.67%
5	The Spicy Italian Pizza	34831.25	4.26%

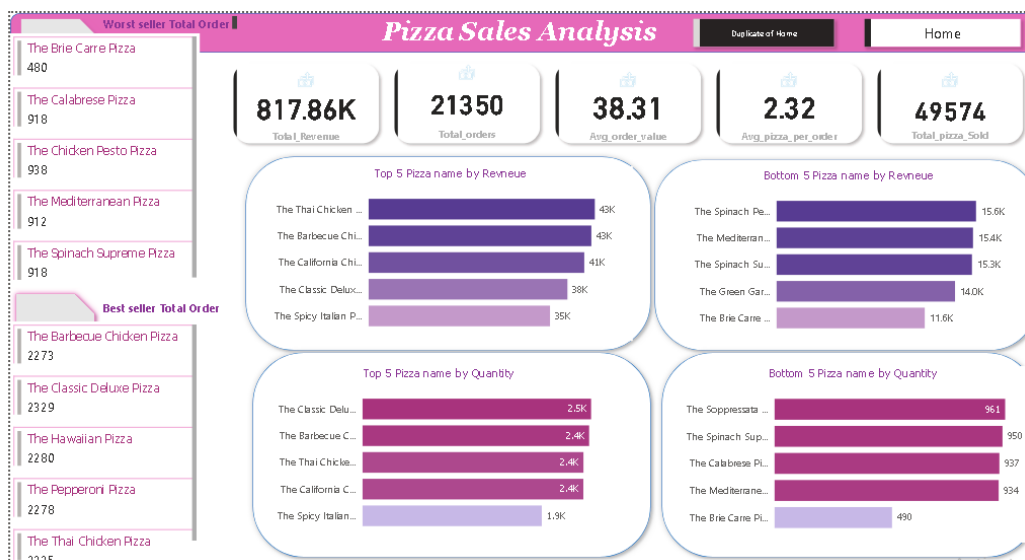
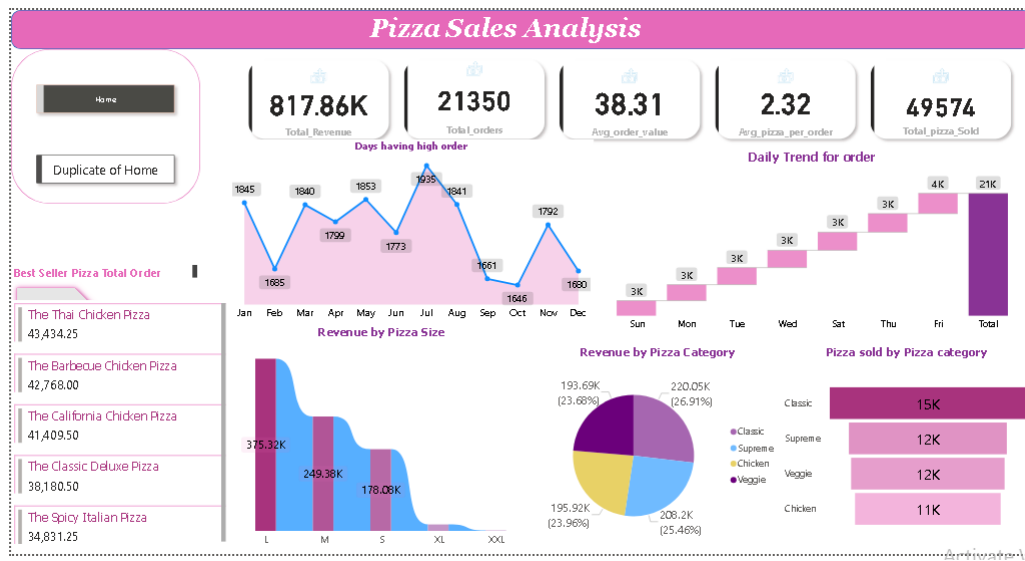
## 12. Which are the bottom 5 worst-selling pizzas based on revenue?

Results				Messages	
	pizza_name	Total_Sales	Percentage		
1	The Brie Carre Pizza	11588.5	1.42%		
2	The Green Garden Pizza	13955.75	1.71%		
3	The Spinach Supreme Pizza	15277.75	1.87%		
4	The Mediterranean Pizza	15360.5	1.88%		
5	The Spinach Pesto Pizza	15596	1.91%		

## Checking for null values

Results											Messages	
er_id_nulls	pizza_name_id_nulls	quantity_nulls	order_date_nulls	order_time_nulls	unit_price_nulls	total_price_nulls	pizza_size_nulls	pizza_category_nulls	pizza_ingredients_nulls	pizza_name_nulls		
1	0	0	0	0	0	0	0	0	0	0		

# Power bi Analysis



## Insights

1. **Total Revenue & Orders:**
  - Total Revenue: **817.86K**
  - Total Orders: **21,350**
  - Avg. Order Value: **38.31**
  - Avg. Pizza per Order: **2.32**
  - Total Pizza Sold: **49,574**
2. **Pizza Size Revenue Analysis:**
  - Large (L) size dominates sales with the highest Total Revenue of 375,318.70, contributing 45.89% of total revenue.
  - XXL has the lowest Total Revenue (1,006.60), making it the least preferred size.
3. **Order Trends & Peak Days:**
  - Friday has the highest sales (**4K orders**), followed by Saturday.
  - Monday sees the lowest orders (3K), indicating a potential drop in demand at the start of the week.
4. **Pizza Category Sales:**
  - Classic category leads with 15K pizzas sold, followed by Supreme and Veggie (12K each).
  - Chicken category has the lowest sales (11K).
  - This suggests a higher preference for classic flavors compared to meat-based options.
5. **Top-Selling Pizza:**
  - The Thai Chicken Pizza is the best seller with 43,434.25 revenue, contributing 21.65% of total revenue.
  - It outsells the lowest seller (Spicy Italian Pizza) by 24.70%, indicating strong customer preference.
6. **Bottom-Selling Pizza:**
  - The Spicy Italian Pizza has the lowest total revenue (34,831.25).
  - However, the worst performer in quantity is "The Brie Carre Pizza" with only 490 sales, suggesting very low demand for this flavor.
7. **Best vs. Worst Sellers in Quantity:**
  - The Classic Deluxe Pizza has the highest quantity sales (2.5K), followed by The Barbecue Chicken Pizza (2.4K).
  - The Brie carie Pizza is the least sold (961 orders), indicating weak demand.



