



PIZZA SALES REPORT



INTRODUCTION

HELLO! I'M RITIK RAHI, AN ASPIRING DATA ANALYST SHOWCASING MY SQL AND POWER BI SKILLS THROUGH THIS PROJECT.

OBJECTIVE-TO ANALYZE PIZZA SALES USING MYSQL AND DERIVE ACTIONABLE INSIGHTS FOR UNDERSTANDING CUSTOMER PREFERENCES, IDENTIFYING SALES PATTERNS, AND OPTIMIZING INVENTORY MANAGEMENT.

KEY ACTIVITIES

- **DATA ANALYSIS WITH SQL : EXTRACTED AND ANALYZED DATA FROM FOUR DATASETS:**
- **ORDERS, ORDER_DETAILS, PIZZAS, AND PIZZA_TYPES.**
- **DYNAMIC QUERYING : USED JOINS, AGGREGATIONS, AND FILTERING TO UNCOVER TRENDS AND CORRELATIONS.**
- **INSIGHT GENERATION: IDENTIFIED TOP-SELLING PIZZAS, PEAK SALES TIMES, AND INGREDIENT DEMAND PATTERNS**

OUTCOME

SQL'S DYNAMIC CAPABILITIES ENABLED EFFICIENT DATA MANIPULATION, PATTERN RECOGNITION, AND ACTIONABLE REPORTING, DEMONSTRATING ITS ROLE IN SOLVING REAL-WORLD BUSINESS CHALLENGES.

BUSINESS IMPACT

THIS PROJECT HIGHLIGHTS HOW SQL-DRIVEN INSIGHTS CAN OPTIMIZE INVENTORY, REDUCE WASTE, AND ENHANCE OPERATIONAL EFFICIENCY. UNDERSTANDING SALES TRENDS AND CUSTOMER PREFERENCES HELPS BUSINESSES IMPROVE SATISFACTION AND BOOST PROFITABILITY.



QUESTIONS

Basic:

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.

Intermediate:

- Join the necessary tables to find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day.
- Join relevant tables to find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.

Advanced:

- Calculate the percentage contribution of each pizza type to total revenue.
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza category.

BUSINESS INSIGHTS

- **Top-Selling Pizzas:**

The Thai Chicken Pizza, Barbecue Chicken Pizza, and California Chicken Pizza are the top 3 selling pizzas, generating the highest revenue.

- **Peak Sales Periods:**

Most orders occur during afternoon (**12–1 PM**) and evening (**6–7 PM**), marking the peak sales hours.

- **Total Pizza Category Ordered:**

The **Classic** category has the highest orders, outperforming other categories like Supreme, Veggie, and Chicken.

- **Revenue Contribution by Chicken Pizzas:**

The **Chicken** category generated the highest revenue, with its top 3 pizza types contributing approximately **23.96%**.

- **Total Orders and Revenue:**

A total of **21,350** orders were placed, generating **₹8,17,860** in revenue.

- **Average Pizzas Ordered Per Day:**

An average of **138** pizzas were ordered daily.

- **Most Preferred Pizza Size:**

Large-sized pizzas were the most preferred, with **18,526** units sold.

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT count(Order_id) AS total_orders  
FROM orders;
```

Result Grid	
	total_orders
▶	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

SELECT

```
ROUND(SUM(order_details.Quantity * pizzas.price),  
      2) AS total_sales
```

FROM

```
order_details
```

JOIN

```
pizzas ON pizzas.pizza_id = order_details.Pizza_id;
```

Result Grid

	total_sales
▶	817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
    JOIN
        pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

Result Grid			Filter R
	name	price	
▶	The Greek Pizza	35.95	

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
SELECT
    pizzas.size,
    COUNT(order_details.Order_details_id) AS order_count
FROM
    pizzas
    JOIN
    order_details ON pizzas.pizza_id = order_details.Pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

Result Grid		
	size	order_count
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT
    pizza_types.name, SUM(order_details.Quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.Pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

Result Grid



Filter Rows:

name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371



JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT
    pizza_types.category,
    SUM(order_details.Quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.Pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

Result Grid			Filter
	category	quantity	
▶	Classic	14888	
	Supreme	11987	
	Veggie	11649	
	Chicken	11050	

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT
    HOUR(Order_time), COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```

Result Grid   Filter Rows: <input type="text"/>		
	HOUR(Order_time)	order_count
	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009
	20	1642
	21	1198
	22	663
	23	28
	10	8
	9	1

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT
    ROUND(AVG(quantity), 0) as avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(order_details.Quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.Order_id = order_details.Order_id
    GROUP BY orders.Order_date) AS order_quantity;
```

Result Grid



Filter Rows:

	avg_pizza_ordered_per_day
▶	138

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY category;
```

Result Grid			Filter Row
	category	count(name)	
▶	Chicken	6	
	Classic	8	
	Supreme	9	
	Veggie	9	

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```
SELECT
    pizza_types.name,
    SUM(order_details.Quantity * pizzas.price) AS revenue
FROM
    pizza_types
    JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
    JOIN
    order_details ON order_details.Pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

Result Grid			Filter Rows:
	name	revenue	
▶	The Thai Chicken Pizza	43434.25	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41409.5	

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
select pizza_types.category,  
round(sum(order_details.Quantity * pizzas.price) / (SELECT  
    ROUND(SUM(order_details.Quantity * pizzas.price),  
        2) AS total_sales  
FROM  
    order_details  
    JOIN  
    pizzas ON pizzas.pizza_id = order_details.Pizza_id) * 100,2) as revenue  
from pizza_types join pizzas  
ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
join order_details  
on order_details.Pizza_id = pizzas.pizza_id  
group by pizza_types.category order by revenue desc;
```

Result Grid			Filter
	category	revenue	
▶	Classic	26.91	
	Supreme	25.46	
	Chicken	23.96	
	Veggie	23.68	

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
SELECT order_date,  
sum(revenue) over (order by order_date) as cum_revenue  
from  
(select orders.Order_date,  
sum(order_details.Quantity * pizzas.price) as revenue  
from order_details join pizzas  
on order_details.Pizza_id = pizzas.pizza_id  
join orders  
on orders.Order_id = order_details.Order_id  
group by orders.order_date) as sales;
```

Result Grid			Filter Rows:
	order_date	cum_revenue	
▶	2015-01-01	2713.85000000000004	
	2015-01-02	5445.75	
	2015-01-03	8108.15	
	2015-01-04	9863.6	
	2015-01-05	11929.55	
	2015-01-06	14358.5	
	2015-01-07	16560.7	
	2015-01-08	19399.05	
	2015-01-09	21526.4	
	2015-01-10	23990.3500000000002	
	2015-01-11	25862.65	

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```
select name, revenue from
(select category, name, revenue,
rank() over(partition by category order by revenue desc) as rn
from
(select pizza_types.category, pizza_types.name,
sum((order_details.Quantity) * pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details
on order_details.Pizza_id = pizzas.pizza_id
group by pizza_types.category, pizza_types.name) as a) as b
where rn <= 3;
```

Result Grid			Filter Rows:
	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 Hawaiian Pizza	32273.25	
	The Pepperoni Pizza	30161.75	
	The Spicy Italian Pizza	34831.25	
	The Italian Supreme Pizza	33476.75	
	The Sicilian Pizza	30940.5	
	The Four Cheese Pizza	32265.70000000065	
	The Mexicana Pizza	26780.75	
	The Five Cheese Pizza	26066.5	



CHEESE AND QUERIES

THANK YOU!



PIZZA SALES REPORT

SALES PERFORMANCE

The Highest sales in a single day occurred on November 15, generating a revenue of 4,422 Rs.

CATEGORY- Classic category contributes to maximum Sales, Total Orders and Total Pizzas sold.

SIZE- Large Size, contributes to maximum Total Sales.

50K

Sum of quantity

818K

Total Revenue

21K

Total Orders

38

AOV

CATEGORY ▾

- ☐ Chicken
- ☐ Classic
- ☐ Supreme

SIZE ▾

- ☐ L
- ☐ M
- ☐ S

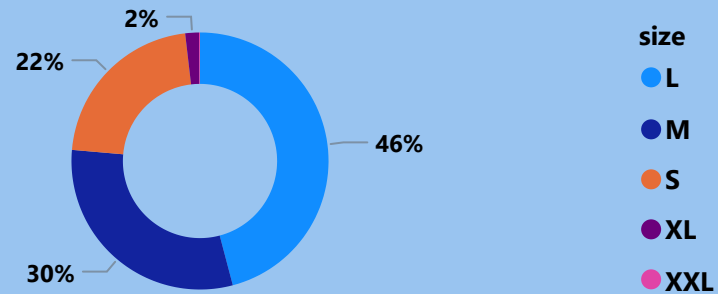
DATE ▾

- ☐ 1/1/2015
- ☐ 1/2/2015
- ☐ 1/3/2015

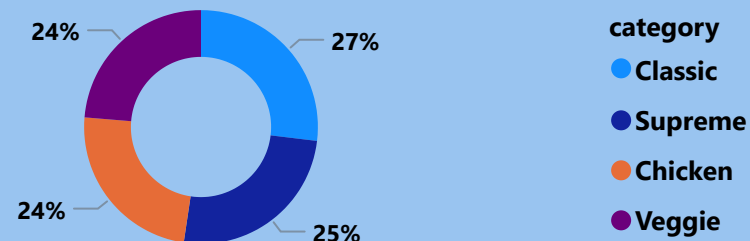
PRICE ▾

- ☐ 9.75
- ☐ 10.50
- ☐ 11.00

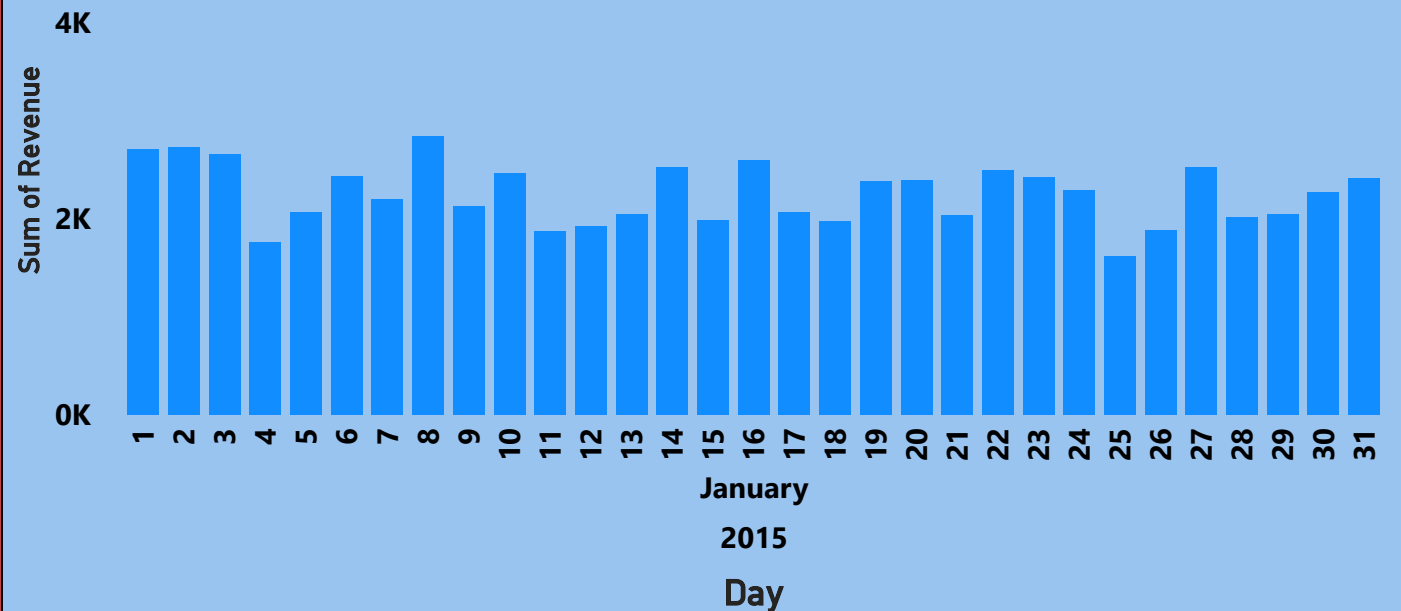
%GT Total Revenue by size



%GT Total Revenue by category



Sum of Revenue by Year, Month and Day



PIZZA NAME

- ☐ The Barbecue Chicken Pizza
- ☐ The Big Meat Pizza
- ☐ The Brie Carre Pizza
- ☐ The Calabrese Pizza

INGREDIENTS

- ☐ 'Nduja Salami, Pancetta, Tom...
- ☐ Bacon, Pepperoni, Italian Sau...
- ☐ Barbecued Chicken, Red Pep...
- ☐ Brie Carre Cheese, Prosciutto,...

DAY

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

MONTH

- ☐ January
- ☐ February
- ☐ March
- ☐ April

SALES PERFORMANCE

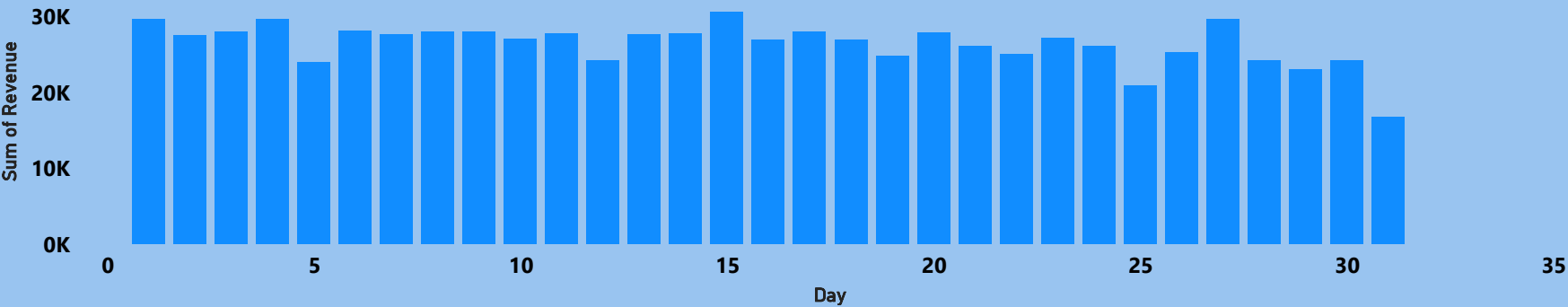
The Highest Revenue for Pizza was in the month of JULY, amounting to ₹ 72,557.

The Lowest Revenue for Pizza was in the month of SEPTEMBER, amounting to ₹ 64,180.

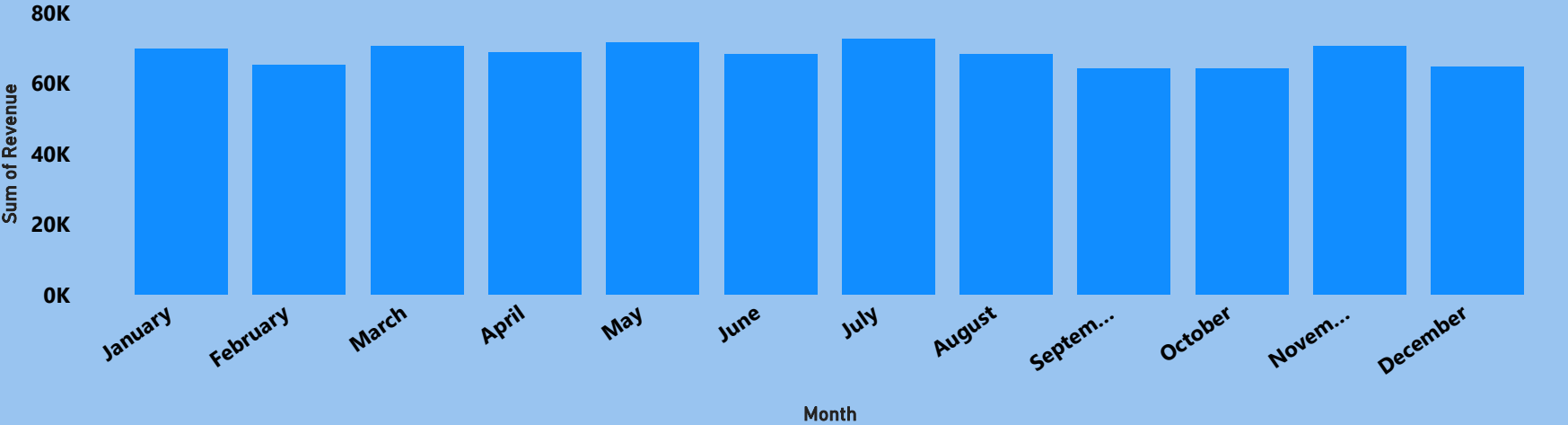
The Highest Sales were recorded on the 15th day of the month.

The Lowest Sales occurred on the last day of month, that is, the 31st.

Sum of Revenue by Day



Month Wise Sales



SALES PERFORMANCE

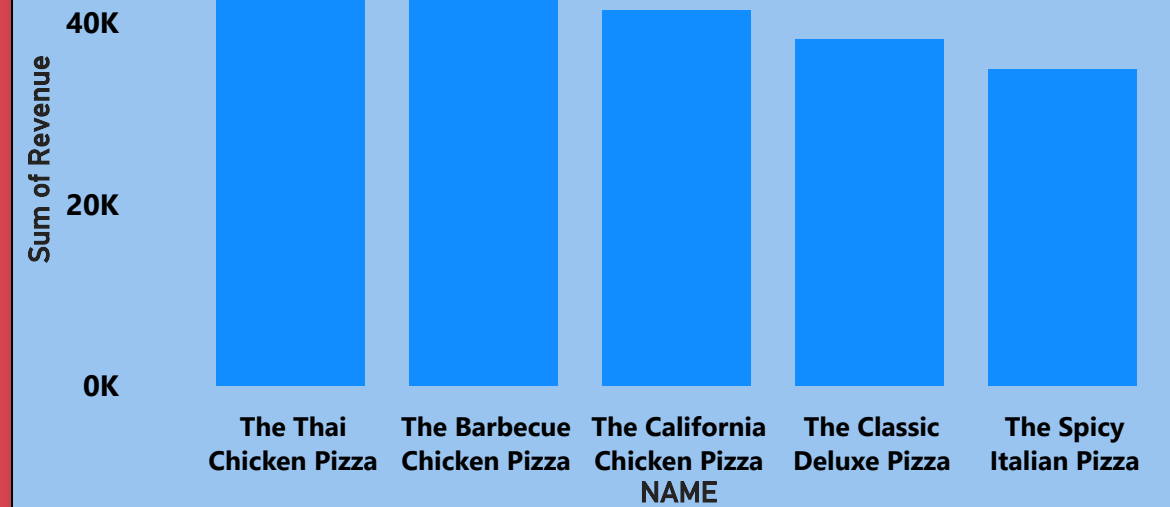
The Thai Chicken Pizza Has generated the Highest Revenue of ₹ 43,434.

The Brie Carre Pizza has generated the Lowest Revenue of ₹ 11,588.

The Classic Deluxe Pizza has the Highest Quantity sold, with 2,453 units.

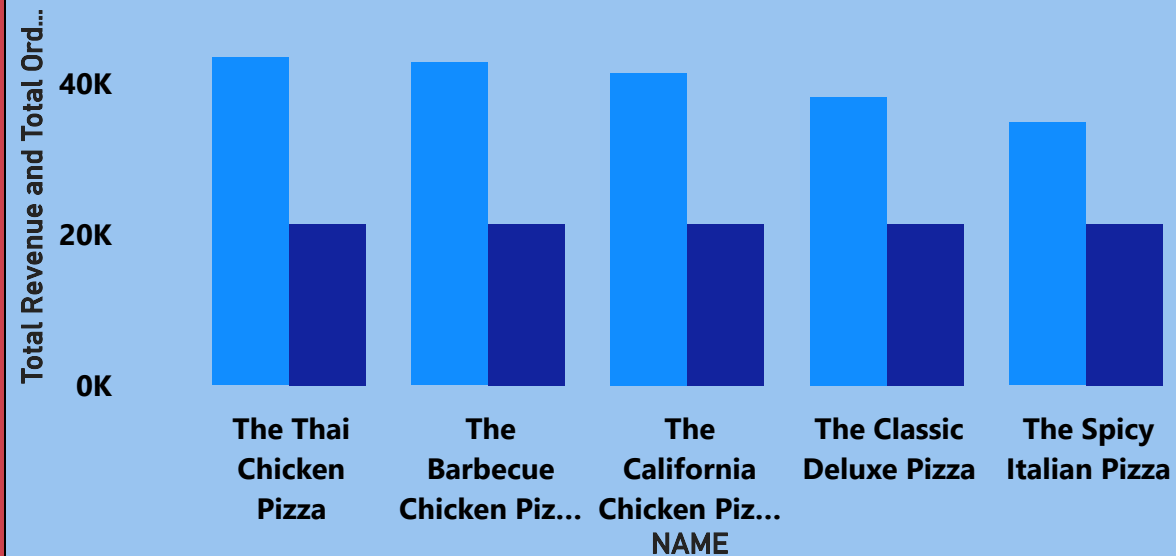
The Brie Carre Pizza has the Lowest Quantity sold, with 490 units.

Top 5 Pizzas by Revenue

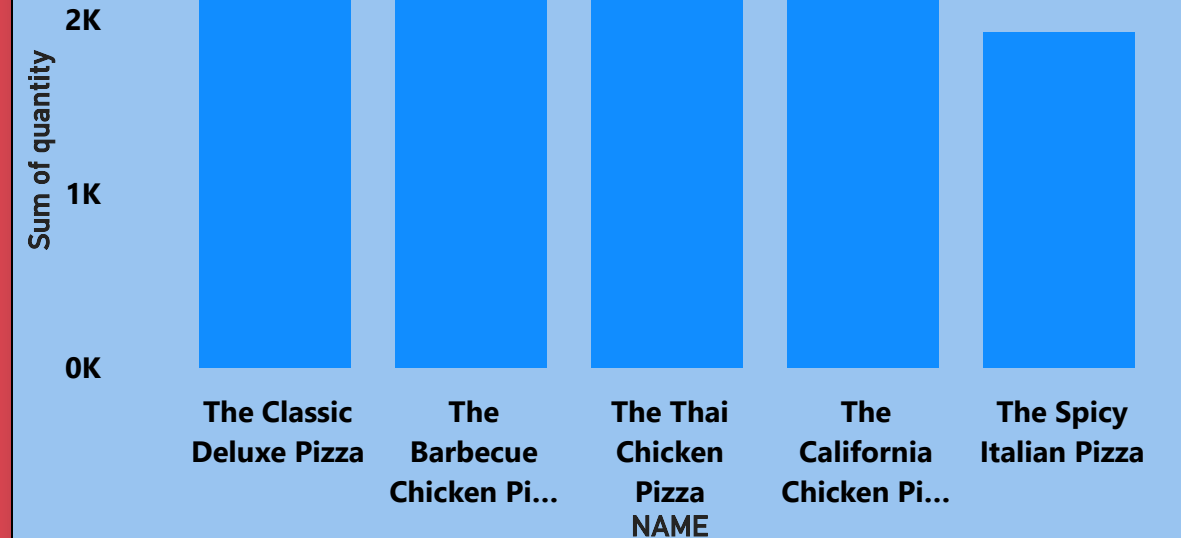


Top 5 Pizzas by Revenue and Number of Orders

● Total Revenue ● Total Orders



Top 5 Pizzas by Quantity



Sum of Revenue by date

