



# PIZZA SALES SQL ANALYST PROJECT

BY KASHAF NAZ

POWER BI SPECIALIST /  
DATA ANALYST





PIZZA  
SHOP

- This SQL-based data analysis project explores sales performance, customer ordering behavior, and product trends using structured queries and business intelligence techniques.
- Using MySQL, CTEs, and Window Functions, the project extracts key insights about revenue, pizza popularity, ordering patterns, and category-level contributions.
- **The analysis covers:**
  - Total sales and monthly revenue growth
  - Top-performing pizzas and categories
  - Order distribution by time of day
  - Percentage revenue contribution by product type
  - Cumulative revenue trends over time
  - Category-wise consumption patterns
  - Advanced analytics using CTEs & window functions (RANK, cumulative sums)
- **Goal:**
  - To analyze sales, revenue, popularity, and category performance, and uncover meaningful business insights to support decision-making in a pizza retail environment.

# PROJECT OVERVIEW



PIZZA  
SHOP

# DATASET STRUCTURE

## orders

order\_id  
order\_date  
order\_time

## pizza\_types

pizza\_type\_id  
name  
category  
ingredients

## order\_details

order\_details\_id  
order\_id  
pizza\_id  
quantity

## pizzas

pizza\_id  
pizza\_type\_id  
size  
price





PIZZA  
SHOP

21350

TOTAL NUMBER  
OF ORDERS

\$817860.05

TOTAL REVENUE

The Greek  
Pizza

HIGHEST-PRICED  
PIZZA

LARGE

MOST COMMON PIZZA  
SIZE

Classic Deluxe  
Barbecue Chicken  
Hawaiian  
Pepperoni  
Thai Chicken

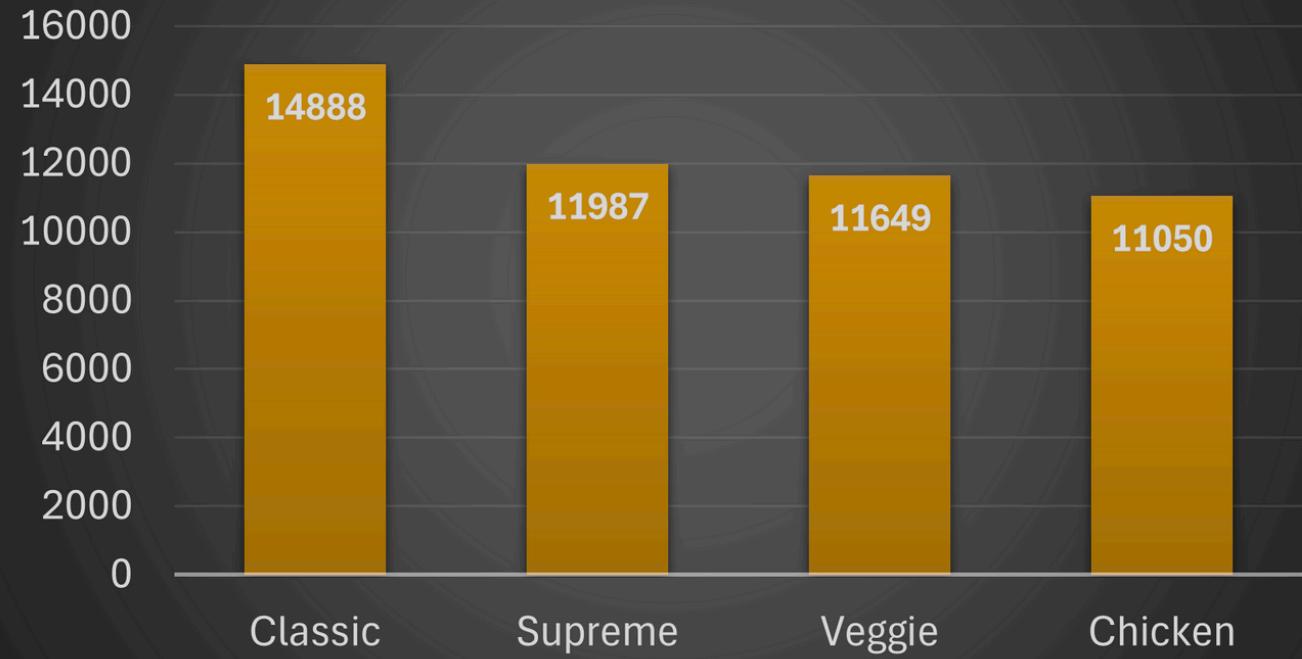
TOP 5 MOST  
ORDERED PIZZAS



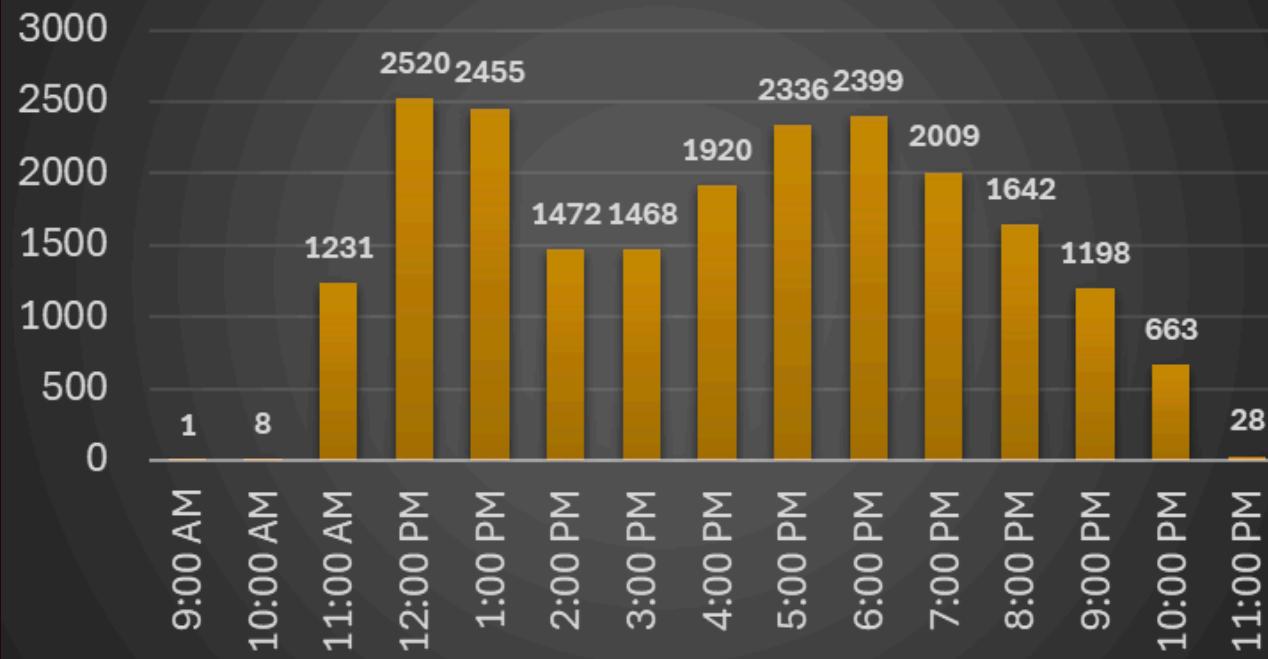
PIZZA  
SHOP

# IMPORTANT INSIGHTS

### Category Wise Pizza Quantity



### Total Orders by Hour Of The Day

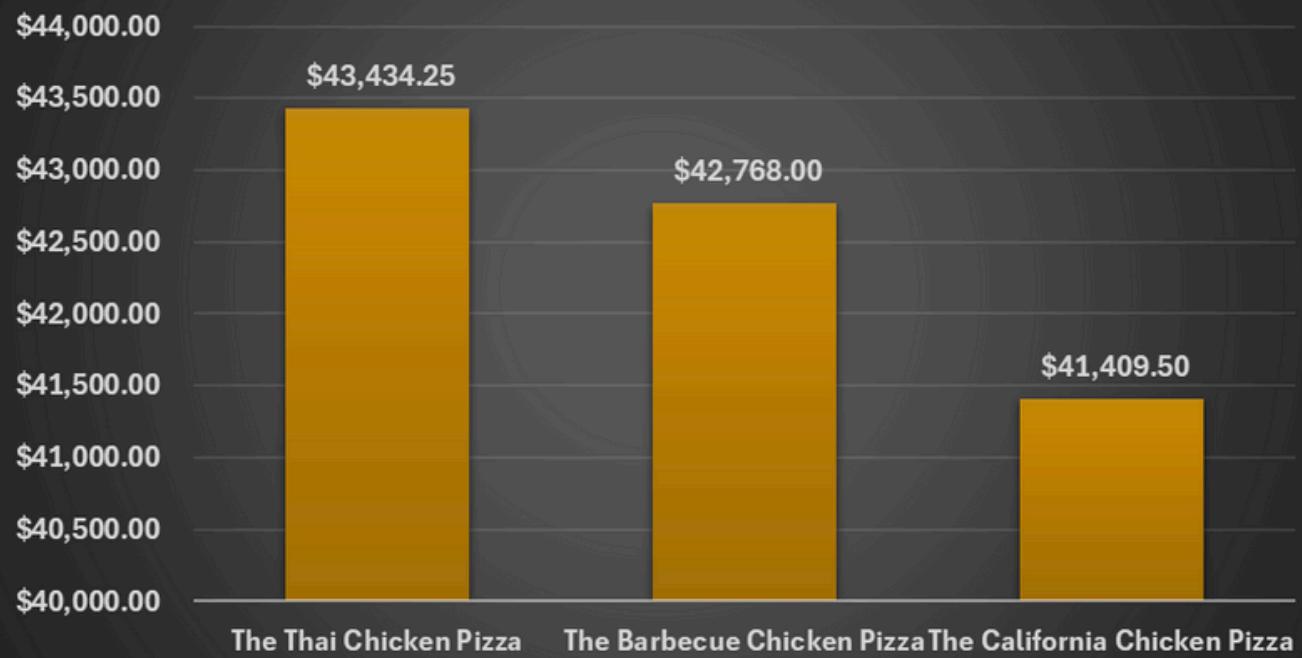


### Category Wise Distribution Of Pizzas

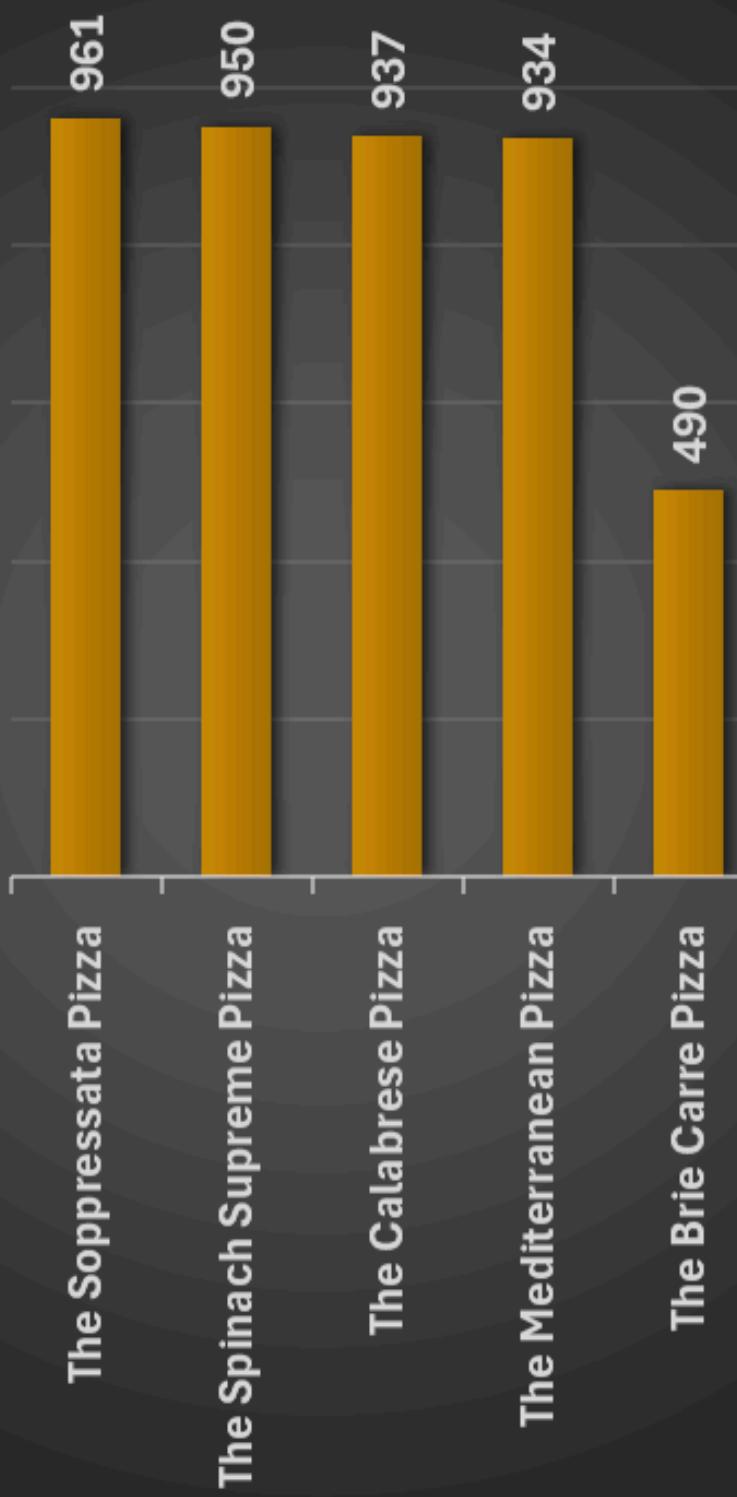


■ Chicken ■ Classic ■ Supreme ■ Veggie

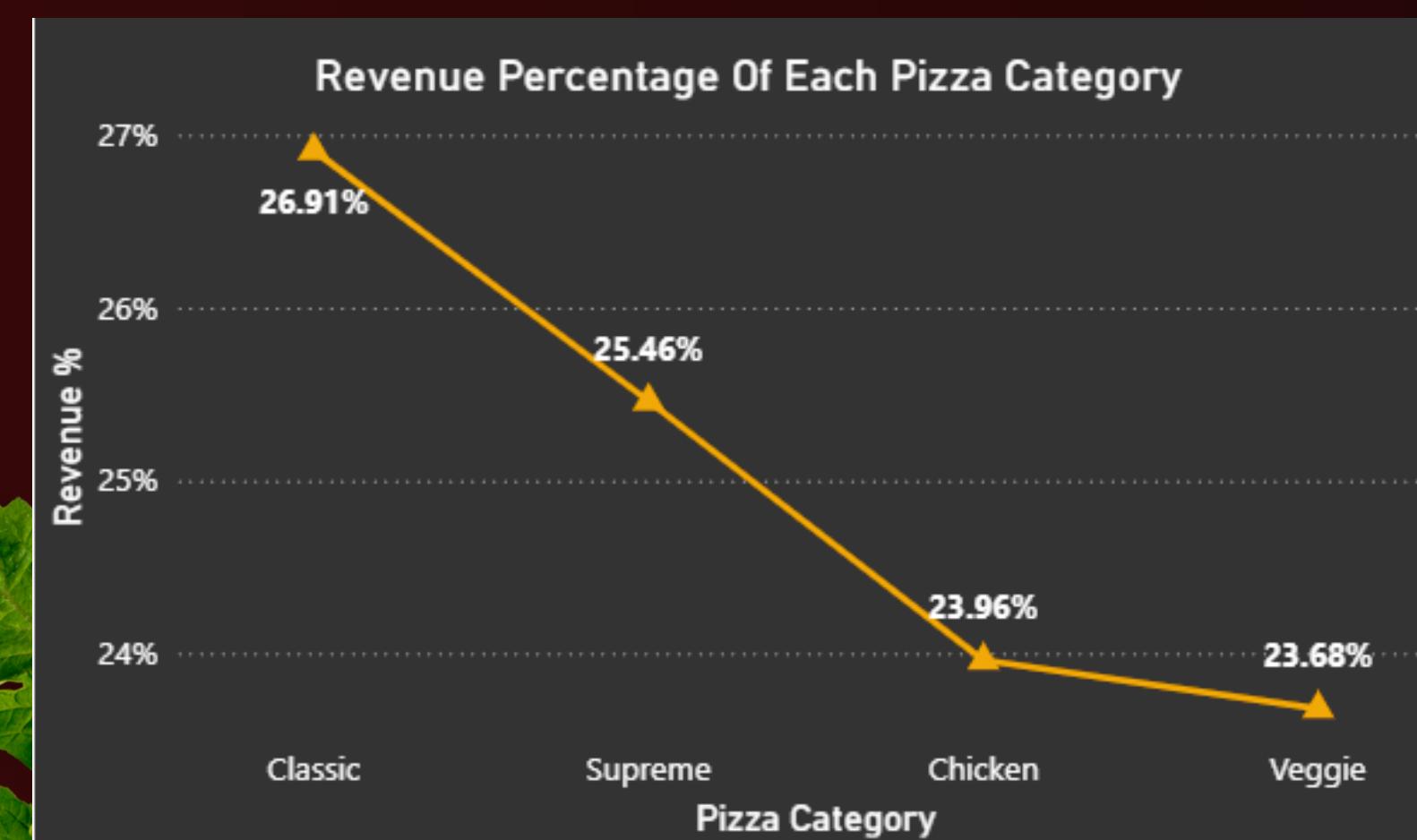
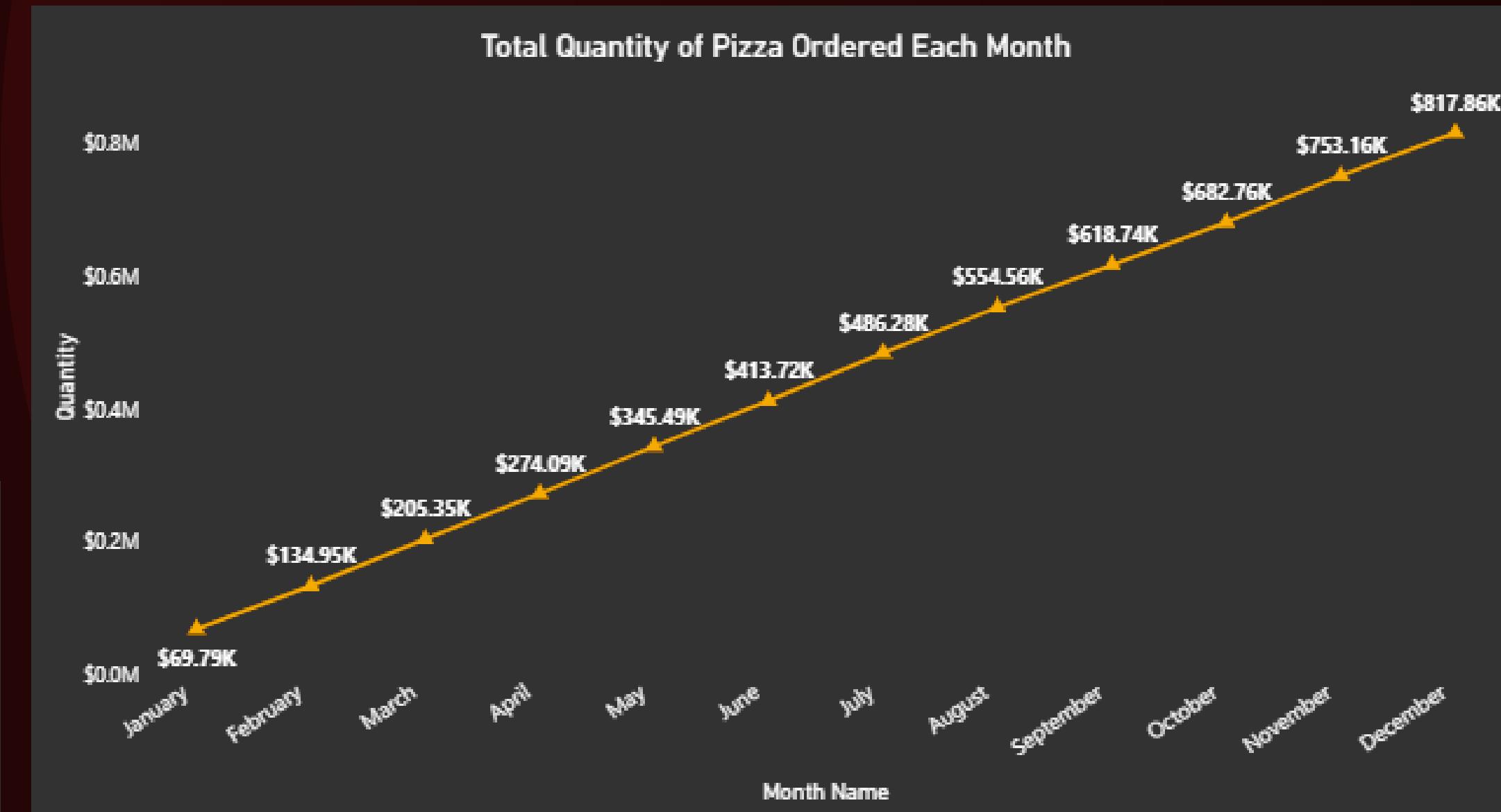
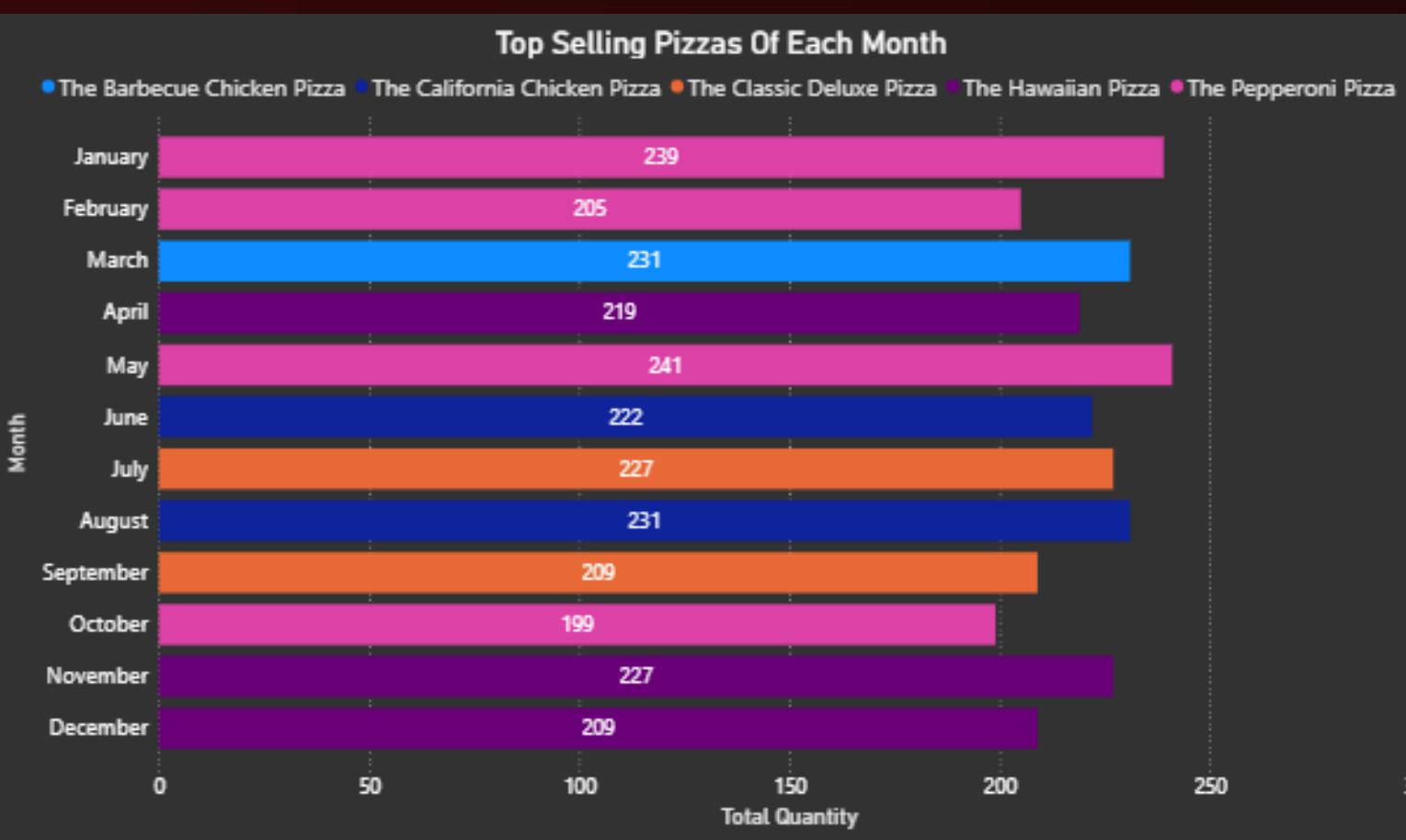
### Top 3 Most Ordered Pizza Based On Revenue



### Pizza Selling The Least (Bottom 5)



# IMPORTANT INSIGHTS





# SQL QUERIES (SCREENSHOTS )



## Monthly Cumulative Revenue

```
1 • ⏷ WITH monthly_sales AS (
2     SELECT
3         DATE_FORMAT(o.order_date, '%Y-%m') AS month,
4         ROUND(SUM(od.quantity * p.price), 2) AS monthly_revenue
5     FROM order_details od
6     JOIN pizzas p
7         ON od.pizza_id = p.pizza_id
8     JOIN orders o
9         ON o.order_id = od.order_id
10    GROUP BY month
11 )
12    SELECT
13        month,
14        monthly_revenue,
15        ROUND(
16            SUM(monthly_revenue) OVER (ORDER BY month),
17            2) AS cumulative_revenue
18    FROM monthly_sales
19    ORDER BY month;
```

	month	monthly_revenue	cumulative_revenue
▶	2015-01	69793.3	69793.3
	2015-02	65159.6	134952.9
	2015-03	70397.1	205350
	2015-04	68736.8	274086.8
	2015-05	71402.75	345489.55
	2015-06	68230.2	413719.75
	2015-07	72557.9	486277.65
	2015-08	68278.25	554555.9
	2015-09	64180.05	618735.95
	2015-10	64027.6	682763.55
	2015-11	70395.35	753158.9
	2015-12	64701.15	817860.05



PIZZA  
SHOP

# SQL QUERIES (SCREENSHOTS )



5 Least Selling Pizza

```
1 • Ⓜ WITH qty AS (
2     SELECT
3         pizza_types.name,
4             SUM(order_details.quantity) AS total_qty
5     FROM order_details
6     JOIN pizzas ON order_details.pizza_id = pizzas.pizza_id
7     JOIN pizza_types ON pizzas.pizza_type_id =
8         pizza_types.pizza_type_id
9     GROUP BY pizza_types.name
10 )
11 SELECT *
12 FROM qty
13 ORDER BY total_qty asc
14 LIMIT 5;
```

	name	total_qty
▶	The Brie Carre Pizza	490
	The Mediterranean Pizza	934
	The Calabrese Pizza	937
	The Spinach Supreme Pizza	950
	The Soppressata Pizza	961



# SQL QUERIES (SCREENSHOTS )



Percentage contribution of each pizza type to total revenue

```
2 • SELECT
3     pizza_types.category AS pizza_category,
4     concat(round(SUM(order_details.quantity * pizzas.price) / (SELECT
5             ROUND(SUM(order_details.quantity * pizzas.price),
6         2) AS total_sales
7
8         FROM
9             order_details
10            JOIN
11                pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
12        2), '%') AS revenue
13
14     FROM
15         pizza_types
16            JOIN
17                pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
18            JOIN
19                order_details ON order_details.pizza_id = pizzas.pizza_id
20
21     GROUP BY pizza_category
22
23     ORDER BY revenue DESC;
```

Result Grid | Filter Rows:

	pizza_category	revenue
▶	Classic	26.91%
	Supreme	25.46%
	Chicken	23.96%
	Veggie	23.68%



PIZZA  
SHOP

# SQL QUERIES (SCREENSHOTS )



Top Selling Pizza of Each Month (by Quantity)

```
1 • ⏷ With monthly_sales AS(
2     select date_format(orders.order_date, '%Y-%m') as month,
3            pizza_types.pizza_type_id,
4            pizza_types.name,
5            sum(order_details.quantity) as total_qty
6        from orders join order_details on order_details.order_id = orders.order_id
7          join pizzas on order_details.pizza_id = pizzas.pizza_id
8          join pizza_types on pizza_types.pizza_type_id = pizzas.pizza_type_id
9      group by month, pizza_types.pizza_type_id, pizza_types.name),
10
11 ⏷ ranked_sales AS (
12     SELECT
13         *,
14         RANK() OVER (PARTITION BY month ORDER BY total_qty DESC) AS rnk
15     FROM monthly_sales
16 )
17     SELECT month, name AS top_pizza, total_qty
18     FROM ranked_sales
19     WHERE rnk = 1
20     ORDER BY month;
```

	month	top_pizza	total_qty
▶	2015-01	The Pepperoni Pizza	239
	2015-02	The Pepperoni Pizza	205
	2015-03	The Barbecue Chicken Pizza	231
	2015-04	The Hawaiian Pizza	219
	2015-05	The Pepperoni Pizza	241
	2015-06	The California Chicken Pizza	222
	2015-07	The Classic Deluxe Pizza	227
	2015-08	The California Chicken Pizza	231
	2015-09	The Classic Deluxe Pizza	209
	2015-10	The Pepperoni Pizza	199
	2015-11	The Hawaiian Pizza	227
	2015-12	The Hawaiian Pizza	209



## KEY INSIGHTS

- PEAK REVENUE COMES FROM LARGE PIZZAS
- THE THAI CHICKEN PIZZA CONTRIBUTES HIGHEST TO REVENUE
- MOST ORDERS OCCUR DURING AFTERNOON HOURS
- CUMULATIVE REVENUE RISES STEADILY DUE TO REPEAT PURCHASES
- CLASSIC PIZZAS HAVE CONSISTENT CATEGORY PERFORMANCE



PIZZA  
SHOP

## TOOLS USED





PIZZA  
SHOP

# THANK YOU



kashafnaz225@gmail.com



[www.linkedin.com/in/kashaf-naz](https://www.linkedin.com/in/kashaf-naz)



[www.github.com/Kashaf-naz](https://www.github.com/Kashaf-naz)