

# PIZZA SALES REPORT

18-August-2024



# INTRODUCTION

In this report, we perform an in-depth analysis of pizza sales data and mine insights using SQL. It encompasses various topics like order details, pizza types quantity top pizzas, profit and customer demographics.

# QUESTIONS

- 01** Retrieve the total number of orders placed
- 02** Calculate the total revenue generated from pizza sales
- 03** Identify the highest-priced pizza
- 04** Identify the most common pizza size ordered
- 05** List the top 5 most ordered pizza types along with their quantities
- 06** Join the necessary tables to find the total quantity of each pizza ordered.
- 07** Join the necessary tables to find the total quantity of each pizza category ordered.
- 08** Determine the distribution of orders by hour of the day.

# QUESTIONS

- 09 Join relevant tables to find the category-wise distribution of pizzas
- 10 Group the orders by date and calculate the average number of pizzas ordered per day
- 11 Determine the top 3 most ordered pizza types based on revenue
- 12 Calculate the percentage contribution of each pizza type to total revenue
- 13 Analyze the cumulative revenue generated over time.
- 14 Determine the top 3 most ordered pizza types based on revenue for each pizza category



# RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```
SELECT  
    COUNT(order_id) AS totals  
FROM  
    orders;
```

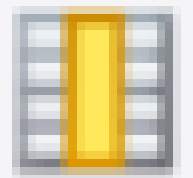
	totals
▶	21350



# 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 Rows
	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;
```

	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;
```

	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 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;
```

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

## DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

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

	hour	order_count
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336

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

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

category	count(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

```
SELECT
    ROUND(AVG(quantity), 0) as avg_pizza_ordered
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;
```

	avg_pizza_ordered
▶	138

# 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;
```

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;
```

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;
```

order_date	cum_revenue
2015-01-01	2713.8500000000000004
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

# 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;
```

order_date	cum_revenue
2015-01-01	2713.850000000000004
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

# THANK YOU

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