



# PIZZA SALES ANALYSIS

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# ABOUT DATASET

This dataset captures transactional data for a pizza delivery business, including order details, pizza types, sizes, quantities, and sales revenue. It offers insights into customer preferences, peak order times, and top-performing products. By analyzing this data, businesses can optimize inventory, refine marketing strategies, and improve operational efficiency to drive profitability and customer satisfaction.







# SCHEMA

pizzahut	
Tables	
▶	order_details
▶	orders
▶	pizza_types
▶	pizzas



**BEST  
SELLER**



**THE THAI CHICKEN PIZZA**








# RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED?

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

	total_orders
▶	21350







# CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES ?

```
SELECT
    ROUND(SUM(p.price * od.quantity), 2) AS total_revenue
FROM
    pizzas p
    JOIN
    order_details od ON p.pizza_id = od.pizza_id;
```

	total_revenue
▶	817860.05





# IDENTIFY THE HIGHEST-PRICED PIZZA ?

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

name	price
The Greek Pizza	35.95







# IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED ?

```
SELECT
    p.size, COUNT(od.order_id) AS order_count
FROM
    order_details od
    JOIN
    pizzas p ON p.pizza_id = od.pizza_id
GROUP BY p.size
ORDER BY order_count DESC
LIMIT 1;
```

size	order_count
L	18526







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

```
SELECT
    pt.name, SUM(od.quantity) AS quantity
FROM
    order_details od
    JOIN
    pizzas p ON p.pizza_id = od.pizza_id
    JOIN
    pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.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 CATEGORY ORDERED.E TOP 5  
MOST ORDERED PIZZA TYPES ALONG  
WITH THEIR QUANTITIES ?

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

Hour	ORDER_COUNT
12	2520
13	2455
18	2399
17	2336
19	2009
16	1920
20	1642
14	1472
15	1468
11	1231
21	1198
22	663
23	28
10	8
9	1








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

```
SELECT  
    category, COUNT(pizza_type_id) AS order_count  
FROM  
    pizza_types  
GROUP BY category;
```

category	order_count
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_pizzas_ordered_per_day
FROM
    (SELECT
        o.order_date, SUM(od.quantity) AS quantity
    FROM
        orders o
    JOIN order_details od ON o.order_id = od.order_id
    GROUP BY o.order_date) AS order_quantity;
```

Avg_pizzas_ordered_per_day
138





# DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE ?

```
SELECT
    pt.name, ROUND(SUM(od.quantity * p.price), 0) AS revenue
FROM
    pizzas p
    JOIN
    order_details od ON p.pizza_id = od.pizza_id
    JOIN
    pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY revenue DESC
LIMIT 3;
```

name	revenue
The Thai Chicken Pizza	43434
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41410






# CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE ?

```
SELECT
    pt.category,
    ROUND(SUM(od.quantity * p.price) / (SELECT
        ROUND(SUM(od.quantity * p.price), 2) AS total_sales
    FROM
        pizzas p
    JOIN
        order_details od ON p.pizza_id = od.pizza_id) * 100,
    2) AS revenue
FROM
    pizzas p
    JOIN
    order_details od ON p.pizza_id = od.pizza_id
    JOIN
    pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.category;
```

category	revenue
Classic	26.91
Veggie	23.68
Supreme	25.46
Chicken	23.96






# ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME ?

```
SELECT order_date, SUM(revenue) OVER (ORDER BY order_date) AS cumulative_revenue FROM
(SELECT o.order_date, ROUND(SUM(quantity*price),2) AS revenue
FROM orders o
JOIN order_details od
ON o.order_id = od.order_id
JOIN pizzas p
ON p.pizza_id = od. pizza_id
GROUP BY o.order_date) AS sales;
```

order_date	cumulative_revenue
2015-01-01	2713.85
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55







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

```
SELECT category,name,revenue FROM
(SELECT category,name,revenue,
RANK() OVER (PARTITION BY category ORDER BY revenue DESC) AS ranking FROM
(SELECT pt.category, pt.name , ROUND(SUM(od.quantity*p.price),2) AS revenue
FROM pizzas p
JOIN order_details od
ON p.pizza_id = od.pizza_id
JOIN pizza_types pt
ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.category, pt.name) as a) AS b
WHERE ranking <= 3;
```

category	name	revenue
Chicken	The Thai Chicken Pizza	43434.25
Chicken	The Barbecue Chicken Pizza	42768
Chicken	The California Chicken Pizza	41409.5
Classic	The Classic Deluxe Pizza	38180.5
Classic	The Hawaiian Pizza	32273.25
Classic	The Pepperoni Pizza	30161.75
Supreme	The Spicy Italian Pizza	34831.25
Supreme	The Italian Supreme Pizza	33476.75
Supreme	The Sicilian Pizza	30940.5
Veggie	The Four Cheese Pizza	32265.7
Veggie	The Mexicana Pizza	26780.75
Veggie	The Five Cheese Pizza	26066.5





# INSIGHTS

- **Top-Selling Pizza:** The Thai Chicken Pizza is the most popular, driving significant sales.
- **Most Popular Pizza Size:** Large size is consistently preferred by customers.
- **Top 5 Pizza Types by Quantity:** Certain pizza types such as The Classic Deluxe Pizza, The Barbecue Chicken Pizza, The Hawaiian Pizza, The Pepperoni Pizza, The Thai Chicken Pizza dominate orders, highlighting customer favorites.
- **Hourly Order Distribution:** Peak order times occur during lunch and dinner hours, showing demand patterns.
- **Category-Wise Performance:** Different categories significantly contribute to revenue and sales volume.







# RECOMENDATIONS

- **Focus on Best Sellers:** Prioritize the Thai Chicken Pizza and other top performers to sustain customer demand.
- **Optimize Inventory:** Stock inventory based on popular sizes and pizza types to reduce waste.
- **Peak Hour Strategies:** Enhance staffing and kitchen readiness during peak times to maximize efficiency.
- **Targeted Promotions:** Promote top pizza categories and sizes through strategic marketing campaigns.
- **Expand High-Performing Categories:** Introduce new options in successful categories to attract more customers.







THANK YOU!

