

Pizza_Point SQL Project

Comprehensive Data Analysis of
Pizza Sales

Presented by Pankaj Kumar
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Introduction

Overview of the Project:

- Name: Pizza_Point
- Objective: Analyze sales data to provide insights into revenue, order patterns, and customer preferences.

Tables Used:

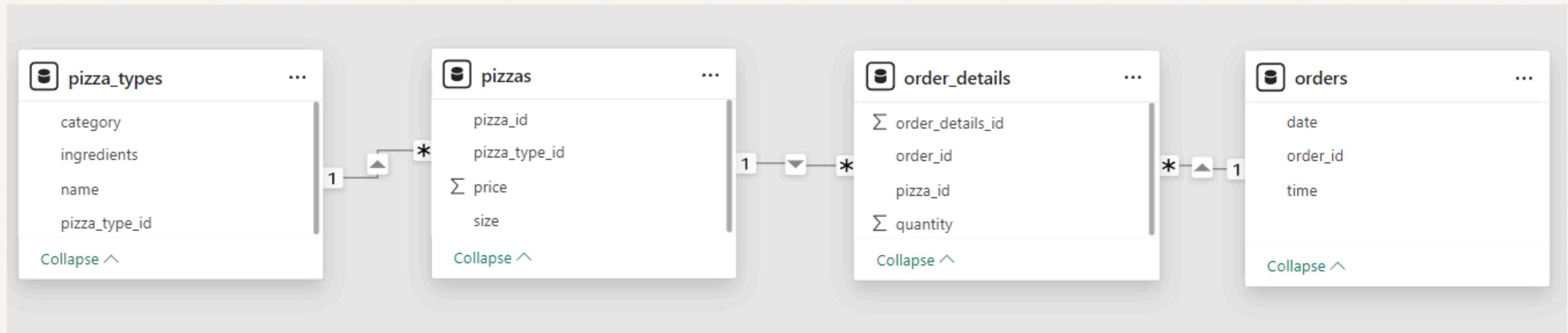
- order_details , orders, pizzas, pizza_types.

Tools :

- SQL,MySQL



Database Schema



pizzas → pizza_types (via pizza_type_id).
order_details → pizzas (via pizza_id)
order_details → orders (via order_id)



Retrieve the total number of orders placed.

Query

```
SELECT  
    COUNT(order_id) AS Total_Orders  
FROM  
    orders
```

Result

Total_Orders
21350



Calculate the total revenue generated from pizza sales

Query

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

Result

Total_Revenue
817860.05



Identify the highest-priced pizza

Query

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

Result

Name	Price
The Greek Pizza	35.95



Identify the most common pizza size ordered

Query

```
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

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

Query

```
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

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.

Query

```
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

category	Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Determine the distribution of orders by hour of the day.

Query

```
SELECT  
    HOUR(order_time) AS Hour, COUNT(order_id) AS Order_Count  
FROM  
    orders  
GROUP BY HOUR(order_time)
```

Result

Hour	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



Join relevant tables to find the category-wise distribution of pizzas

Query

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

Result

category	Count
Chicken	6
Classic	8
Supreme	9
Veggie	9



Group the orders by date and calculate the average number of pizzas ordered per day.

Query

```
SELECT  
    ROUND(AVG(Quantity), 0)  
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

Avg_Order_Per_Day
138



Determine the top 3 most ordered pizza types based on revenue.

Query

```
SELECT
    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.name
ORDER BY Revenue DESC
LIMIT 3
```

Result

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

Query

```
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 order_details.pizza_id = pizzas.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

category	Revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time

Query

```
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 orders join order_details on orders.order_id=order_details.order_id
join pizzas on order_details.pizza_id=pizzas.pizza_id
group by orders.order_date) as Sales
```

Result

order_date	cum_revenue
2015-01-01	2713.850000000004
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	23990.350000000002



Determine the top 3 most ordered pizza types based on revenue for each pizza category.

Query

```
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 pizzas.pizza_id=order_details.pizza_id
group by pizza_types.category,pizza_types.name) as b
where rn <= 3
```

Result

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

**Thank you
very much!**