PIZZA SALES

SQL PROJECT OVERVIEW

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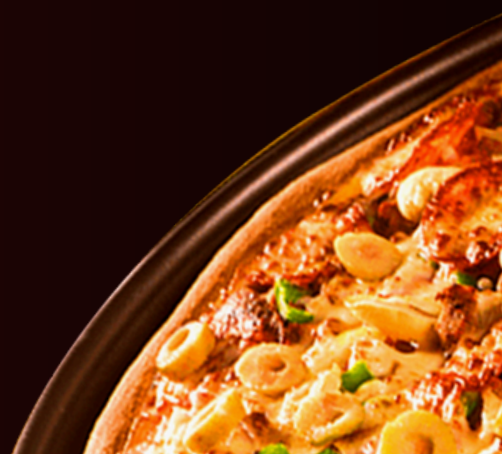

Project Overview

This project analyzes pizza sales data using SQL to answer key questions related to revenue generation, ordering patterns, and product performance. The analysis demonstrates how SQL can be used to extract meaningful insights from a relational database.

Dataset Overview

The dataset is organized as a relational database and includes the following tables:

- orders
- order_details
- pizzas
- pizza_types

These tables capture order-level details, product information, and category classification.

Scope of This Document

This document presents selected SQL queries and their outputs to highlight important analytical questions and results. The complete set of SQL queries used in this project is available in the project repository as SQL (.sql) files

Tools Used

- SQL (MySQL)

Calculate the total revenue generated from pizza sales.

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

total_sales
817860.05

Total revenue generated:
$817,860.05 across all orders.

List the top 5 most ordered pizza types along with their quantities.

```sql
SELECT
    pt.name, SUM(od.quantity) AS qty
FROM
    pizzas AS p
        JOIN
    order_details AS od ON p.pizza_id = od.pizza_id
        JOIN
    pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY qty DESC
LIMIT 5;
```

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

The **Classic Deluxe Pizza** is the **most ordered item**, followed closely by Barbecue and Hawaiian variants.

Calculate the average number of pizzas ordered per day.

```sql
SELECT
    ROUND(AVG(qty), 1) AS average_qyantity_per_day
FROM
    (SELECT
        o.order_date AS date, SUM(od.quantity) AS qty
    FROM
        orders AS o
    JOIN order_details AS od ON o.order_id = od.order_id
    GROUP BY date) AS t;
```

	average_qyantity_per_day
▶	138.5

On **average**, around **138.5** pizzas are ordered per day.

Calculate the percentage contribution of each pizza type to total revenue.

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

category	percentage
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Classic pizzas contribute the **highest share of revenue** (~26.9%), while the other categories contribute nearly equal portions.

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

```sql
select category , name , revenue   from
(select category , name , revenue , rank()
over(partition by category   order by revenue  desc) as rn
from
(SELECT
    pt.category, pt.name, SUM(od.quantity * p.price) AS revenue
FROM
    order_details AS od
        JOIN
    pizzas AS p ON od.pizza_id = p.pizza_id
        JOIN
    pizza_types AS pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.category , pt.name)as t )
as a
where rn <=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	32265.70000000065
Veggie	The Mexicana Pizza	26780.75
Veggie	The Five Cheese Pizza	26066.5

Conclusion

This project demonstrates the application of SQL to analyze pizza sales data and extract meaningful insights from a relational database. By using joins, aggregations, subqueries, and window functions, key metrics such as total revenue, order volume, top-performing pizza types, and category-level revenue contributions were identified. The analysis highlights how structured SQL queries can be effectively used to answer business-focused questions using real-world data.