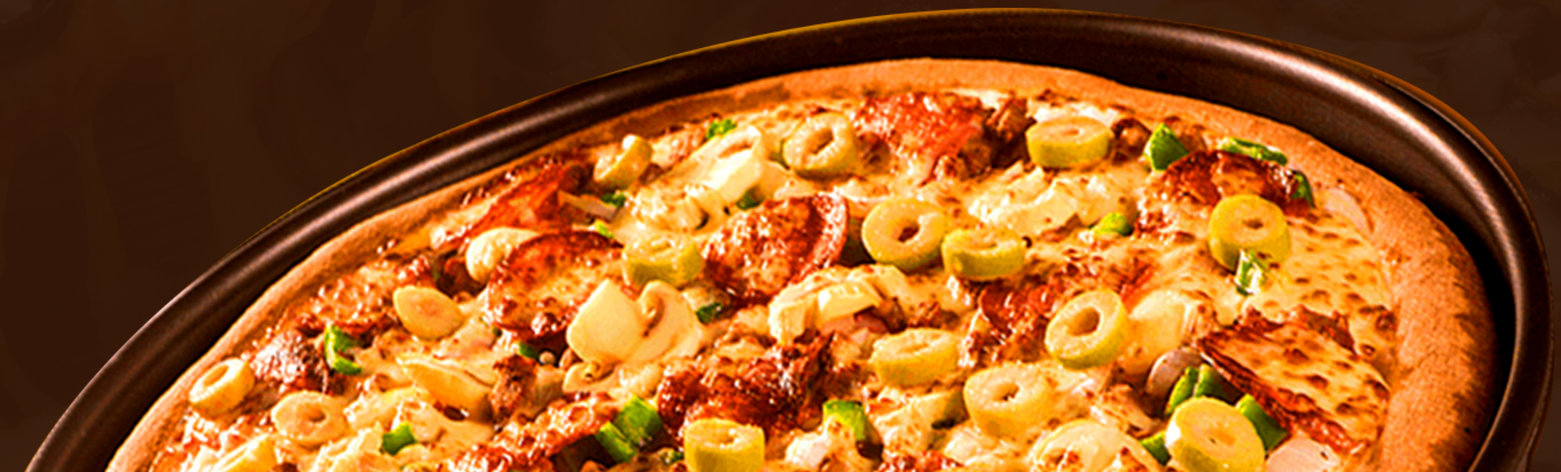
Project Description:

This project analyzes pizza sales data using SQL to uncover key business insights. It covers:

- Basic Analysis: Total orders, revenue, most ordered pizza size, and top-selling pizzas.
- Intermediate Analysis: Category-wise sales, order distribution by time, and daily order trends.
- Advanced Analysis: Revenue contribution, cumulative sales tracking, and category-based top-selling pizzas.



IDENTIFY MOST COMMON PIZZA SIZE ORDERED ?

```
SELECT
COUNT(order_detail.Order_details_id), pizzas.size
FROM
order_detail
JOIN
pizzas ON order_detail.Pizza_id = pizzas.Pizza_id
GROUP BY pizzas.size;
```

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT round(sum(order_detail.Quintity *pizzas.price),2) as
Total_Sales
FROM
order_detail join pizzas ON pizzas.Pizza_id=order_detail.Pizza_id;
```

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```
select * from orders;
SELECT count(Order_Id) AS TOTAL_ORDERS FROM orders;
```

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT round(sum(order_detail.Quintity *pizzas.price),2) as
Total_Sales
FROM
order_detail join pizzas ON pizzas.Pizza_id=order_detail.Pizza_id;
```

IDENTIFY HIGHEST PRICE 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;
```

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY FOR EACH PIZZA CATEGORY ORDERED ?

```
select sum(order_detail.Quintity) as Quantity,
pizza_types.category from pizza_types
join
pizzas on pizza_types.pizza_type_id=pizzas.pizza_type_id
join
order_detail on order_detail.Pizza_id=pizzas.pizza_id
group by category;
```

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY ?

```
select hour(orders.Order_Time ),
count(orders.Order_Id) from orders
group by hour(Order_Time);
```

JOIN THE RELEVENT TABLE AND FIND THE CATEGORY WISE DISTRIBUTION OF PIZZAS

```
select sum(order_detail.Quintity) as Total_Quantity,
pizza_types.category from order_detail
join pizzas
on order_detail.Pizza_id=pizzas.pizza_id
join pizza_types
on pizza_types.pizza_type_id=pizzas.pizza_type_id
group by category order by Total_Quantity Desc;
```

GROUP THE ORDERS BY DATE AND CALCULATE THE AVG NUMBER OF PIZZAS ORDER PER DAY ?

```
select round(avg(Order_Quantity),0) from
(select sum(order_detail.Quintity) As
Order_Quantity,orders.Order_Date
from order_detail
join
orders on order_detail.Order_id=orders.Order_Id
group by Order_Date) as OrderQ;
```

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

```
select (sum(order_detail.Quintity*pizzas.price)) as
Revenue,pizzas.Pizza_id
from order_detail
join
pizzas on
order_detail.pizza_id=pizzas.pizza_id
join pizza_types
on pizzas.pizza_type_id=pizzas.pizza_type_id
group by pizzas.pizza_id order by Revenue Desc;
```

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

```
select pizza_types.category,
sum(order_detail.Quintity*pizzas.price)*100 / (select
sum(order_detail.Quintity*pizzas.price)) as revenue_per
from pizza_types
join pizzas on pizza_types.pizza_type_id=pizzas.pizza_type_id
join order_detail on order_detail.Pizza_id=pizzas.pizza_id
group by category order by revenue_per;
```

CUMULITIVE REVENUE GENRATED OVER TIME ?

```
select order_date,
sum(Revenue) over(order by order_date) as cum
from
(select orders.Order_Date,
sum(order_detail.Quintity*pizzas.price) as Revenue from orders
join order_detail
on orders.Order_Id=order_detail.order_id
join pizzas on pizzas.pizza_id=order_detail.Pizza_id
group by orders.Order_Date) as sales;
```

DETERMINE THE TOP 3 MOST ORDERED PIZZA 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_detail.Quintity)*pizzas.price) as revenue
from pizza_types
join pizzas on pizza_types.pizza_type_id=pizzas.pizza_type_id
join order_detail on order_detail.Pizza_id=pizzas.pizza_id
group by pizza_types.category,pizza_types.name order by
revenue Desc) as M)as b
where rn<=3;
```

CONCLUSION

This SQL-based analysis provided valuable insights into pizza sales trends, helping identify the most popular pizza types, peak ordering times, and revenue contributions. By leveraging SQL queries for data aggregation and trend analysis, the project highlighted key business metrics, enabling data-driven decision-making. These insights can assist in optimizing inventory, pricing strategies, and marketing efforts to boost sales and efficiency.

THANK YOU FOR ATTENTION