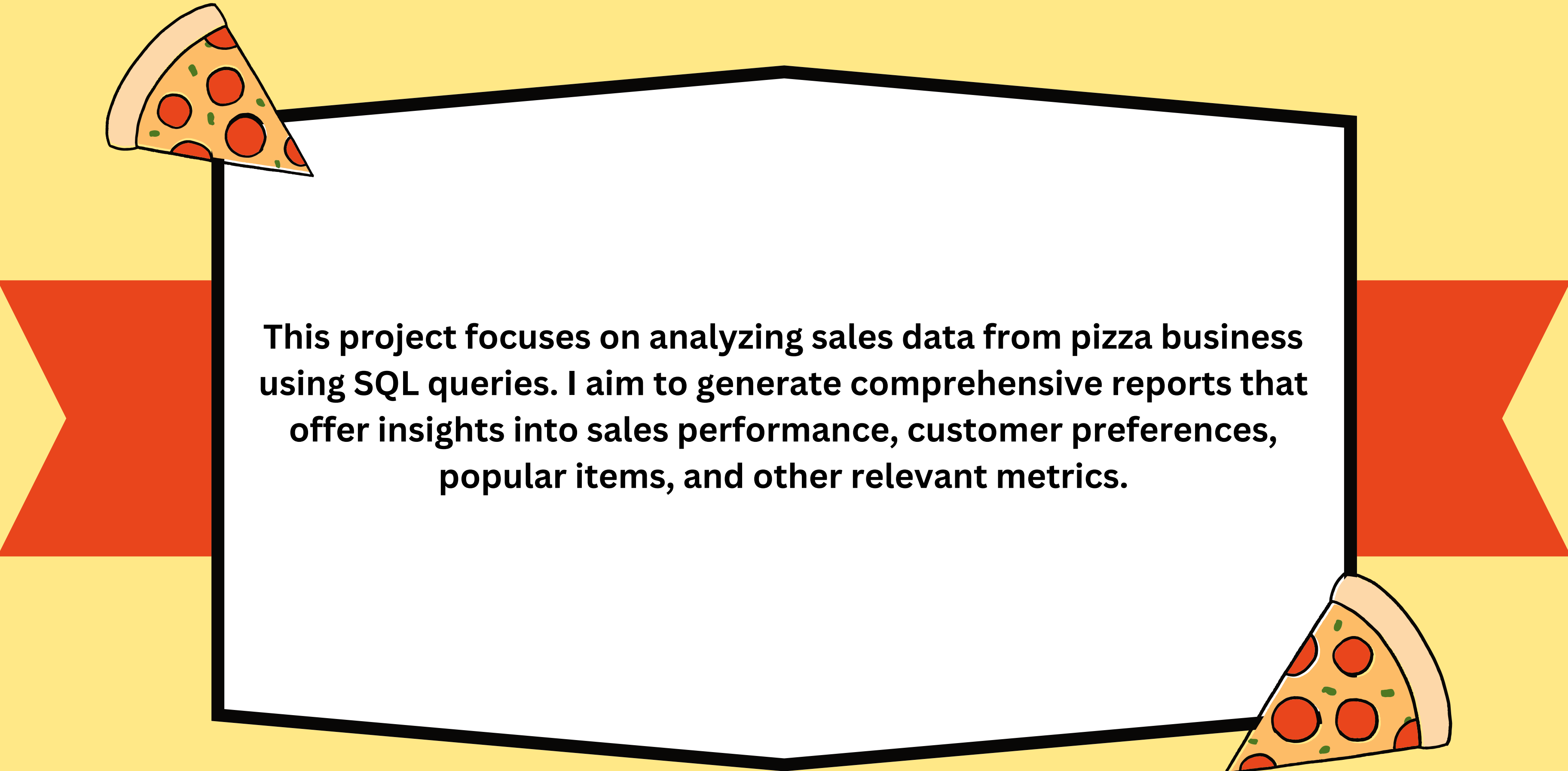




Pizza Sales Report

By: Modita



This project focuses on analyzing sales data from pizza business using SQL queries. I aim to generate comprehensive reports that offer insights into sales performance, customer preferences, popular items, and other relevant metrics.

Question #1

Retrieve the total number of orders placed.

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

total_orders
21350

Question #2

Calculate the total revenue generated from pizza sales.

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

total_revenue	
817860.05	

Question #3

Identify the highest-priced pizza.

```
SELECT  
  *  
FROM  
  pizzas  
ORDER BY price DESC  
LIMIT 1;
```

pizza_id	pizza_type_id	size	price
the_greek_xxl	the_greek	XXL	35.95

Question #4

Identify the most common pizza size ordered.

```
SELECT
  pizzas.size AS common_ordered_size,
  COUNT(pizzas.size) AS count_of_pizza
FROM
  pizzas
  INNER JOIN
  order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY count_of_pizza DESC
LIMIT 1;
```

common_ordered_size	count_of_pizza	
L	18526	

Question #5

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

```
SELECT
  pizza_types.name AS most_ordered_pizza_type,
  SUM(order_details.quantity) AS total_pizza_quantity
FROM
  pizzas
  INNER JOIN
  order_details ON pizzas.pizza_id = order_details.pizza_id
  INNER JOIN
  pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.name
ORDER BY total_pizza_quantity DESC
LIMIT 5;
```

most_ordered_pizza_type	total_pizza_quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Question #6

Join the necessary tables to find the total quantity of each pizza category ordered.

```
SELECT
  pizza_types.category AS category_of_pizza,
  SUM(order_details.quantity) AS total_quantity
FROM
  order_details
  INNER JOIN
  pizzas ON order_details.pizza_id = pizzas.pizza_id
  INNER JOIN
  pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.category;
```

category_of_pizza	total_quantity	
Classic	14888	
Veggie	11649	
Supreme	11987	
Chicken	11050	

Question #7

Determine the distribution of orders by hour of the day.

```
SELECT
    HOUR(order_time) AS hour_, COUNT(order_id) as no_of_orders
FROM
    orders
GROUP BY HOUR(order_time)
ORDER BY hour_;
```

hour_	no_of_orders
9	1
10	8
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

Question #8

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

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

	category	distribution	
	Chicken	6	
	Classic	8	
	Supreme	9	
	Veggie	9	

Question #9

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

```
SELECT
    ROUND(AVG(total_pizza), 0) AS avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date AS date_,
        SUM(order_details.quantity) AS total_pizza
    FROM
        orders
    INNER JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY order_date) AS data;
```

avg_pizza_ordered_per_day
138

Question #10

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

```
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    pizzas
    JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
    INNER JOIN
    order_details ON pizzas.pizza_id = order_details.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

Question #11

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

```
SELECT
  pizza_types.category,
  ROUND(((SUM(order_details.quantity * pizzas.price) / (SELECT
    SUM(order_details.quantity * pizzas.price) AS Total_revenue
  FROM
    pizzas
    JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id)) * 100),
  2) AS percentage
FROM
  pizzas
  JOIN
  pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
  INNER JOIN
  order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY percentage DESC;
```

category	percentage
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Question #12

Analyze the cumulative revenue generated over time for the first 5 days

```
select order_date, round(sum(revenue) over(order by order_date),2) as cum_rev
from (
select orders.order_date,sum(order_details.quantity * pizzas.price) as revenue
from pizzas join order_details on pizzas.pizza_id=order_details.pizza_id
join orders on order_details.order_id = orders.order_id
group by orders.order_date) as rev
order by order_date limit 5;
```

order_date	cum_rev
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

Question #13

Determine the top 2 most ordered pizza types based on revenue for each pizza category.

```
with cte as (  
  select category,name,round(revenue,2) as revenue,  
  rank() over(partition by category order by revenue desc) as rnk_  
  from (  
    select pizza_types.category,pizza_types.name,  
    sum(order_details.quantity * pizzas.price) as revenue  
    from pizzas join pizza_types  
    on pizzas.pizza_type_id = pizza_types.pizza_type_id  
    join order_details on pizzas.pizza_id=order_details.pizza_id  
    group by pizza_types.category,pizza_types.name  
  ) as rev_  
)  
  
select category,name,revenue from cte where rnk_<=2
```

category	name	revenue
Chicken	The Thai Chicken Pizza	43434.25
Chicken	The Barbecue Chicken Pizza	42768
Classic	The Classic Deluxe Pizza	38180.5
Classic	The Hawaiian Pizza	32273.25
Supreme	The Spicy Italian Pizza	34831.25
Supreme	The Italian Supreme Pizza	33476.75
Veggie	The Four Cheese Pizza	32265.7
Veggie	The Mexicana Pizza	26780.75



Insights



- 21350 orders brought in \$817,860 in revenue.
- Pizza Classic category stands out as the most popular choice among customers.
- Peak ordering times between 11 am and 9 pm suggest adjusting staff schedules accordingly.
- The top revenue-generating pizzas are The Thai Chicken Pizza, The Barbecue Chicken Pizza, and The California Chicken Pizza.
- On average, around 138 pizzas are sold per day.



Thank You!



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