



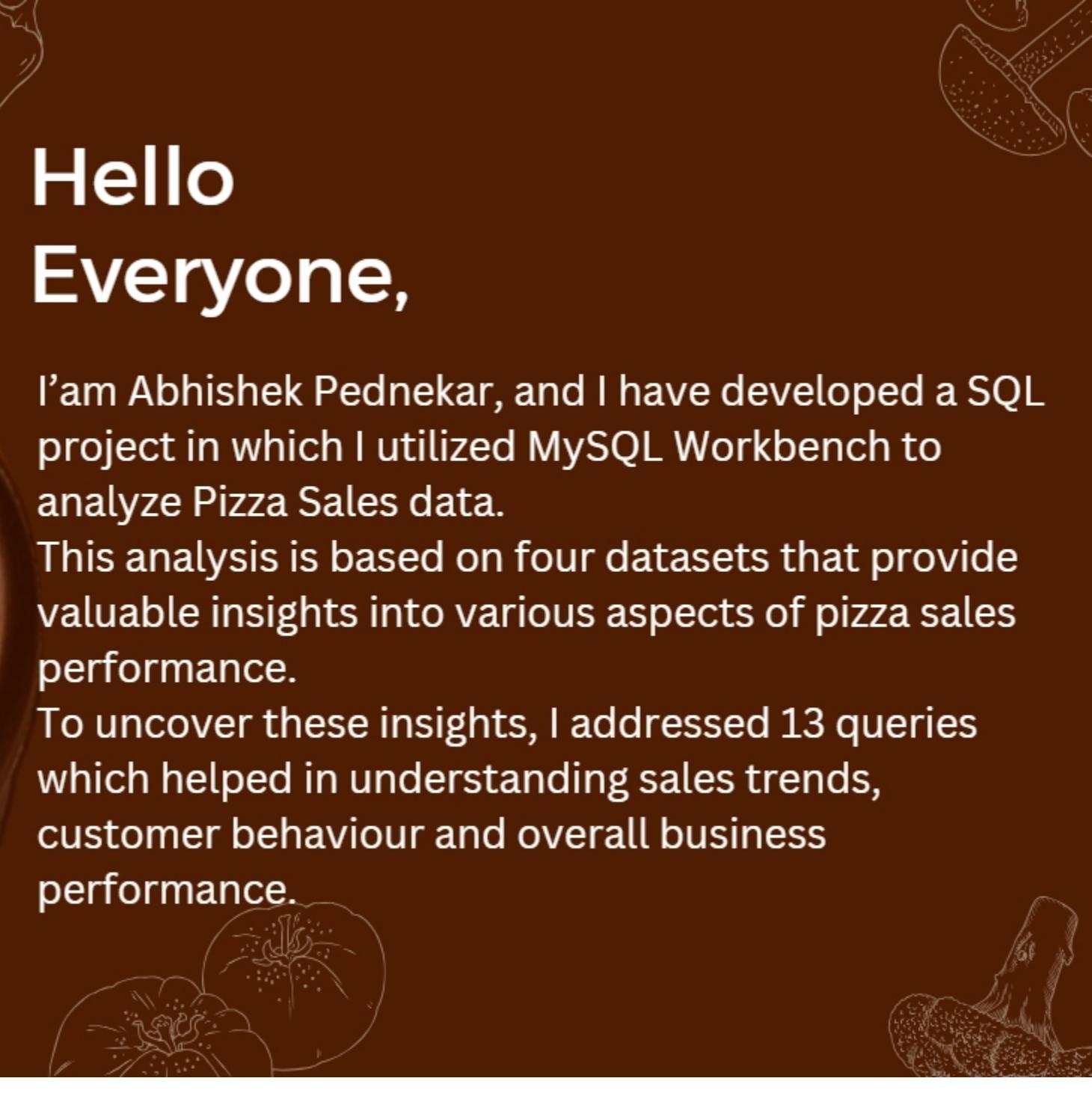
PIZZA SALES ANALYSIS

USING SQL

by ABHISHEK PEDNEKAR



Hello Everyone,



I'm Abhishek Pednekar, and I have developed a SQL project in which I utilized MySQL Workbench to analyze Pizza Sales data.

This analysis is based on four datasets that provide valuable insights into various aspects of pizza sales performance.

To uncover these insights, I addressed 13 queries which helped in understanding sales trends, customer behaviour and overall business performance.

Retrieve the total numbers 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(order_details.quantity * pizzas.price),2) AS total_revenue  
FROM  
    order_details  
    INNER JOIN  
    pizzas ON order_details.pizza_id = pizzas.pizza_id;
```



total_revenue
817860.05

Identify the highest-priced pizza

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



name	price
The Greek Pizza	35.95



Identify the most common pizza size ordered

SELECT

```
pizzas.size, COUNT(order_details_id) AS quantity
```

FROM

```
pizzas
```

JOIN

```
order_details ON pizzas.pizza_id = order_details.pizza_id
```

GROUP BY pizzas.size

ORDER BY quantity DESC;



size	quantity
L	18526
M	15385
S	14137
XL	544
XXL	28

List the Top 5 most ordered pizza types along with their quantities

SELECT

```
    pizza_types.name, COUNT(order_details_id) AS total_quantity
```

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.name
```

```
ORDER BY quantity DESC
```

```
LIMIT 5;
```



name	quantity
The Classic Deluxe Pizza	2416
The Barbecue Chicken Pizza	2372
The Hawaiian Pizza	2370
The Pepperoni Pizza	2369
The Thai Chicken Pizza	2315



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

```
SELECT  
    category, COUNT(category) AS total_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 category  
ORDER BY quantity DESC;
```



category	total_quantity
Classic	14579
Veggie	11449
Supreme	11777
Chicken	10815



Determine distribution of orders by hour of the day

```
SELECT  
    HOUR(order_time) AS hours, COUNT(order_id) AS total_orders  
FROM  
    orders  
GROUP BY HOUR(order_time)  
ORDER BY hours;
```

	hours	total_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

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

```
SELECT  
    category, COUNT(pizza_type_id) AS total_count  
FROM  
    pizza_types  
GROUP BY category  
ORDER BY total_count DESC;
```



category	total_count
Supreme	9
Veggie	9
Classic	8
Chicken	6

Calculate the average number of pizzas ordered per day

SELECT

```
ROUND(AVG(quantity), 0) AS avg_pizzas_ordered_per_day  
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;
```



avg_pizzas_ordered_per_day
138



Determine the Top 3 most ordered pizza types based on revenue

SELECT

```
    name, SUM(quantity * price) AS total_revenue
```

FROM

```
(SELECT
```

```
    pizza_types.name, order_details.quantity, pizzas.price
```

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) AS pizza_details
```

GROUP BY name

ORDER BY total_revenue DESC

LIMIT 3;



name	total_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

SELECT

```
    pizza_types.category,  
    CONCAT(ROUND(SUM(order_details.quantity * pizzas.price) * 100 / (SELECT  
        ROUND(SUM(order_details.quantity * pizzas.price),  
        2) AS total_revenue  
    )  
    FROM  
        order_details  
        INNER JOIN  
        pizzas ON order_details.pizza_id = pizzas.pizza_id),  
    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;
```



category	revenue
Classic	26.91%
Supreme	25.46%
Chicken	23.96%
Veggie	23.68%

Analyze the cumulative revenue generated over time

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

order_date	cum_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
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.35
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3
2015-01-14	32358.7
2015-01-15	34343.5
2015-01-16	36937.65
2015-01-17	39001.75
2015-01-18	40978.6
2015-01-19	43365.75

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

```
SELECT category, name, revenue FROM
(SELECT category, name, revenue,
DENSE_RANK() OVER(PARTITION BY category ORDER BY revenue DESC) AS drnk
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 order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category, pizza_types.name)
AS a)
AS top_3
WHERE drnk <= 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

A large pizza with various toppings like olives, onions, and cheese, served in a metal tray.

**THANK YOU
FOR ATTENTION**

Faint line art of various food items including a pepper, a bowl, a lime, and a flower.