

Where Every Slice is a Taste of Perfection

PIZZA SALES ANALYSIS USING SQL

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KEY HIGHLIGHTS

- Ranking best selling pizza types and categories.
- Identifying peak hours and the distribution of orders by hour of the day
- Cumulative revenue generated by over time
- Total number of orders, total revenue and identifying highest priced pizza
- Most common pizza size ordered



PROJECT GOAL

The goal was to help stakeholders understand which products perform best and identify trends to improve business strategies.

Retrieve the total number of orders placed

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

Result Grid

	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
    JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

Result Grid

	Total_Revenue
▶	817860.05

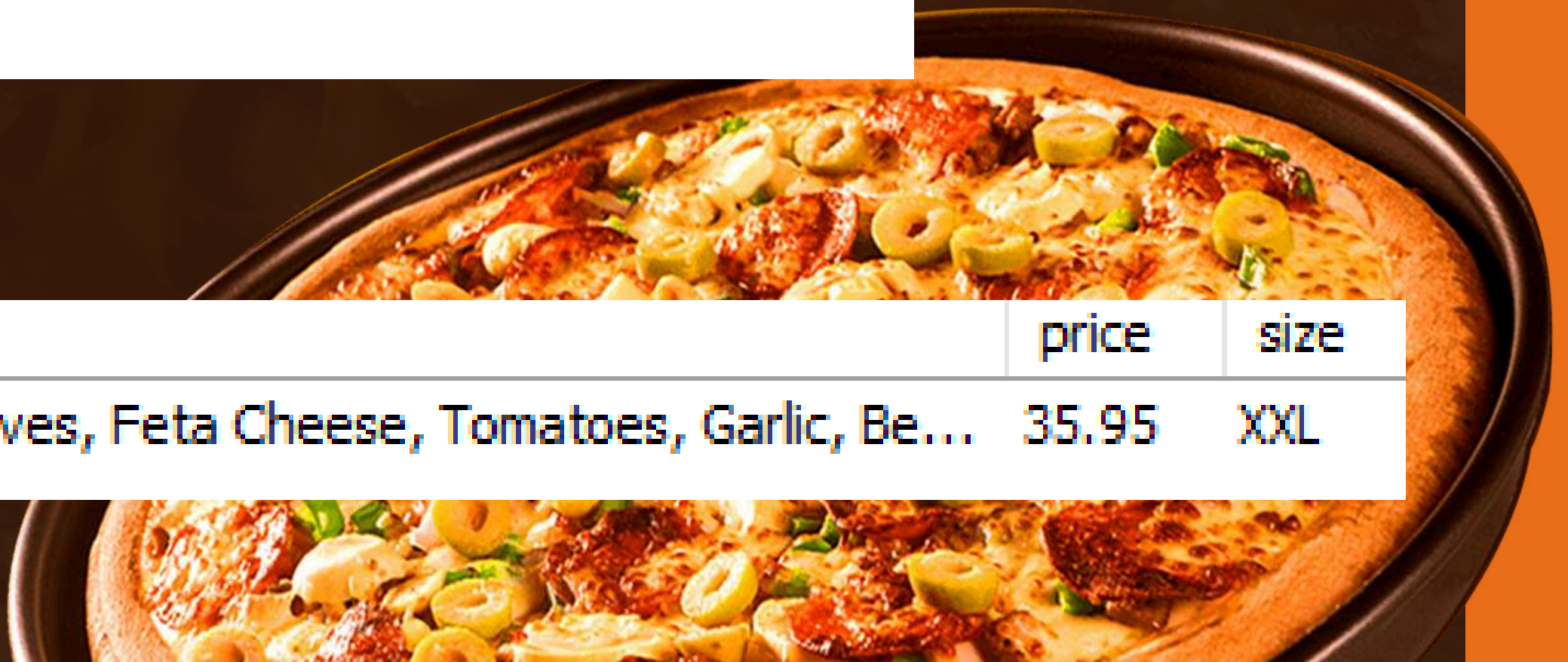


Identify the highest-priced pizza

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

Result Grid

name	category	ingredients	price	size
The Greek Pizza	Classic	Kalamata Olives, Feta Cheese, Tomatoes, Garlic, Be...	35.95	XXL



Identify the most common pizza size ordered

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

Result Grid

size	order_count
L	18526



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

```
SELECT
    pizza_types.name AS Pizza_name,
    SUM(order_details.quantity) 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 pizza_types.name
ORDER BY Total_quantity DESC LIMIT 5;
```

Result Grid

Pizza_name	Total_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

```
SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS Total_quantity
FROM order_details
    JOIN
    pizzas ON order_details.pizza_id = pizzas.pizza_id
    JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.category ORDER BY Total_quantity DESC;
```

Result Grid

	category	Total_quantity
	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050



Determine the distribution of orders by hour of the day

```
SELECT
    HOUR(time) AS Hour, COUNT(order_id) AS Order_count
FROM
    orders
GROUP BY HOUR(time);
```

Result Grid

	Hour	Order_count
	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399



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

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

Result Grid

	category	count(name)
	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9



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

```
SELECT  
    ROUND(AVG(quantity), 0)  
FROM  
    (SELECT  
        orders.date, SUM(order_details.quantity) AS quantity  
    FROM  
        orders  
    JOIN order_details ON orders.order_id = order_details.order_id  
    GROUP BY orders.date) AS order_quantity;
```

Result Grid

	round(AVG(quantity), 0)
	138



Determine the top 3 most ordered pizza types based on revenue

```
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS Total_Revenue
FROM
    order_details
    JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id
    JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.name
ORDER BY Total_revenue DESC LIMIT 3;
```

Result Grid

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

Result Grid

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time

```
SELECT
    date, sum(revenue) over(order by date) as Cum_revenue
FROM
    (SELECT orders.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.date) AS Sales;
```

Result Grid

date	Cum_revenue
2015-01-01	2713.85000000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55



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

```
SELECT
    category, 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 order_details.pizza_id = pizzas.pizza_id
        GROUP BY pizza_types.category, pizza_types.name) AS A)
    AS B
WHERE rn <=3;
```

Result Grid

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



THANK YOU FOR ATTENTION



I hope this analysis provided useful insights and
how data can drive better business decisions

Feel free to reach out with any feedback or
question!

