

Pizza Sales

35%
OFF



Pizza Sales SQL Analysis

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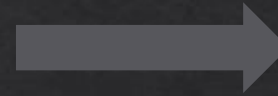
Objective

Exploring pizza sales data to identify sales numbers, trends, insights with the help of SQL queries

(Using various questions to clarify the sales data)

1) Retrieve the total number of orders placed

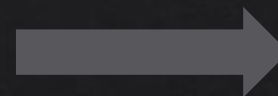
```
SELECT
    COUNT(order_id) AS total_orders
FROM
    orders;
```



Result Grid	
	total_orders
▶	21350

2) Calculate the total revenue generated from pizza sales

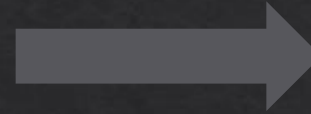
```
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),
          2) AS total_revenue
FROM
    order_details
    JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id
```



Result Grid	
	total_revenue
▶	817860.05

3) Identify the highest-priced pizza

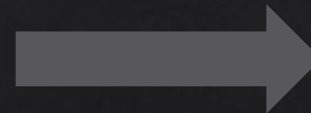
```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```



	name	price
▶	The Greek Pizza	35.95

4) Identify the most common pizza size ordered

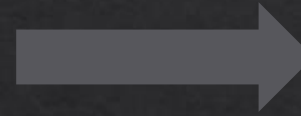
```
SELECT
    pizzas.size,
    COUNT(order_details.order_details_id) AS order_count
FROM
    pizzas
    JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```



	size	order_count
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

5) Top 5 most ordered pizza types along with their quantities

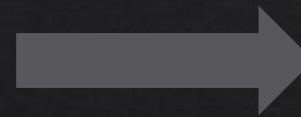
```
SELECT
    pizza_types.name, SUM(order_details.quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```



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

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

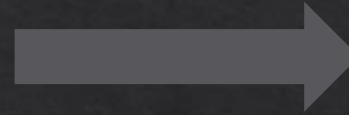
```
SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY category
ORDER BY quantity DESC;
```



	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

7) Determine the distribution of orders by hour of the day

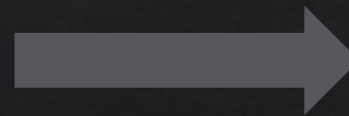
```
select hour(orders_time) as hour,  
count(order_id) as oeder_count  
from orders  
group by hour(orders_time);
```





	hour	oeder_count
▶	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
	10	8
	9	1

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

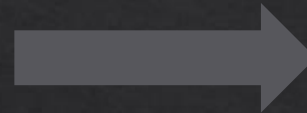
```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY category;
```



Result Grid   Filter		
	category	count(name)
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

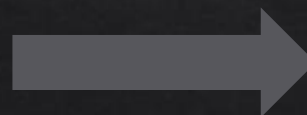
```
SELECT
    ROUND(AVG(quantity), 0) as avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.date, SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.date) AS order_quantity;
```



Result Grid		Filter
	round(avg(quantity),0)	
▶	138	

10) Determine the top 3 most ordered pizza types based on revenue

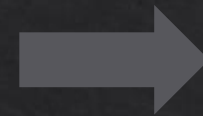
```
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC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



Result Grid			Filter Rows:
	name	revenue	
▶	The Thai Chicken Pizza	43434.25	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41409.5	

11) Calculate the percentage contribution of each pizza type to total revenue

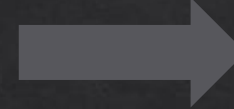
```
SELECT
    pizza_types.category,
    ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
        ROUND(SUM(order_details.quantity * pizzas.price),
            2) AS total_revenue
    FROM
        order_details
        JOIN
            pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,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



Result Grid				
	category	revenue		
▶	Classic	26.91		
	Supreme	25.46		
	Chicken	23.96		
	Veggie	23.68		

12) Analyze the cumulative revenue generated over time

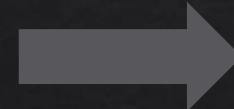
```
select date,
sum(revenue) over(order by date) as cumulative_revenue
from
(select orders.date,
sum(order_details.quantity * pizzas.price) as revenue
from order_details join pizzas
on order_details.pizza_id = pizzas.pizza_id
join orders
on orders.order_id = order_details.order_id
group by orders.date) as sales;
```



Result Grid			Filter Rows:
	date	cumulative_revenue	
▶	2015-01-01	2713.8500000000004	
	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	

13) Top 3 most ordered pizza types 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_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			Filter Rows:
	name	revenue	
▶	The Thai Chicken Pizza	43434.25	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41409.5	
	The Classic Deluxe Pizza	38180.5	
	The Hawaiian Pizza	32273.25	
	The Pepperoni Pizza	30161.75	
	The Spicy Italian Pizza	34831.25	
	The Italian Supreme Pizza	33476.75	
	The Sicilian Pizza	30940.5	
	The Four Cheese Pizza	32265.700000000065	
	The Mexicana Pizza	26780.75	
	The Five Cheese Pizza	26066.5	

Insights

- This analysis shows that **Large size pizza** is most commonly ordered with **18,526 orders**.
- The **Classic deluxe pizza** is the most ordered pizza based on **quantities**.
- The **Thai Chicken Pizza, Barbecue Chicken Pizza, and California Chicken Pizza** generate the highest revenue viz; **\$43434.25, \$42768, and \$41409.5** respectively.
- The **Greek Pizza (\$35.95)** is the **highest-priced** pizza.
- The Average number of pizzas ordered per day is **138**.
- The percentage contribution, Category wise : Classic category (**26.91%**), Supreme Category (**25.46%**), Chicken Category (**23.96%**) and Veggie Category (**23.96%**).
- The overall revenue generation is about **\$817860.05**.

Thank you