Pizza Sales Analysis (SQL)

Identify the highest-priced pizza.

name ___ price

The Greek Pizza 35.95

Identify the most common pizza size ordered

size	order_count
L	18526
М	15385
S	14137
XL	544
XXL	28

List the 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

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 pizza_types.category
ORDER BY quantity DESC;
```

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

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 pizza_types.category
ORDER BY quantity DESC;
```

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Determine the distribution of orders by hour of the day.

```
SELECT
   HOUR(order_tine) AS hour, COUNT(order_id) AS orders
FROM
   orders
GROUP BY HOUR(order_tine);
```

hour	orders
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

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

```
SELECT
    ROUND (AVG ( Avr_Pizza_order_per_day))
FROM

(SELECT
    orders.order_date,
        SUM(order_details.quantity) AS Avr_Pizza_order_per_day
FROM
    orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

Avr_Pizza_order_per_day)

.38

Find the category-wise distribution of pizzas.

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

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

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 pizzas.pizza_type_id = pizza_types.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;
```

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

Calculate the contribution of each pizza type to total revenue.

```
SELECT
    pizza_types.category,
    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
ORDER BY revenue DESC;
```

category	revenue
Classic	220053.1000000001
Supreme	208196.9999999822
Chicken	195919.5
Veggie	193690.45000000298

Analyze the cumulative revenue generated over time.

```
select order_date,
sum(revenue) over(order by order_date) 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	2713.8500000000004
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
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.50000000001
2015-01-16	36937.65000000001
2015-01-17	39001.75000000001
2015-01-18	40978.600000000006

Determine the 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;
```

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	32265.70000000065
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5

Conclusion



By implementing a well-researched and innovative sales strategy, our goal is not only to boost immediate sales figures but also to establish a sustainable framework for continued growth and success.



Thank you