SQL Project on Pizza Sales Data

Dive into the world of pizza sales data to uncover valuable insights and drive business strategy. This SQL project will explore various aspects of pizza orders, customer preferences, and operational efficiency.

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Retrieve the total number of orders placed.

```
select count(order_id) as total_orders from orders;
```

Total Orders :21350

Calculate the total revenue generated from pizza sales.

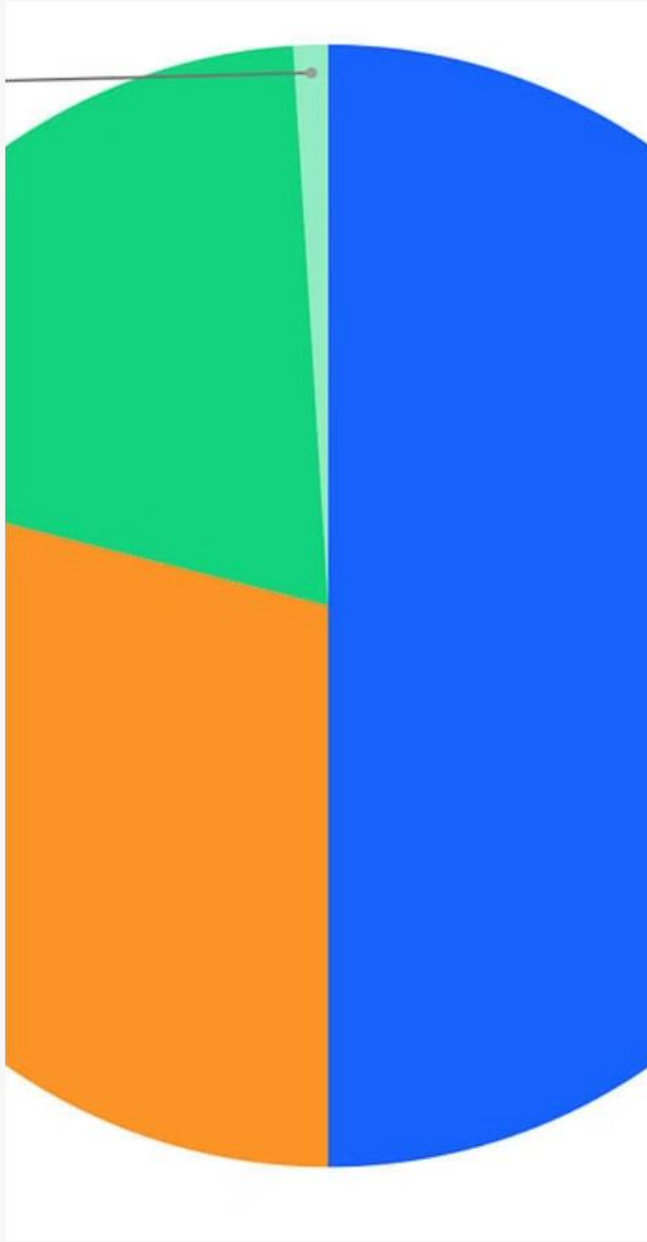
```
select round(sum(order_details.quantity * pizzas.price),2) as
total_sales from order_details join pizzas on pizzas.pizza_id =
order_details.pizza_id
```

Total Sales	1635720.10

Identify the highest-priced pizza.

```
select pizza_type.name,pizzas.price from pizza_type join
pizzas on pizza_type.pizza_type_id =
pizzas.pizza_type_id order by pizzas.price desc limit 1;
```

The Greek Pizza 35.95



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
1	L	37052
2	M	30770
3	S	28274
4	XL	1088
5	XXL	56

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

```
select pizza_type.name, sum(order_details.quantity) as quantity from pizza_type join pizzas on pizza_type.pizza_type_id = pizzas.pizza_type_id join order_details on order_details.pizza_id = pizzas.pizza_id group by pizza_type.name order by quantity desc limit 5;
```

*	name	quantity
1	The Classic Deluxe Pizza	9812
2	The Barbecue Chicken Pizza	9728
3	The Hawaiian Pizza	9688
4	The Pepperoni Pizza	9672
5	The Thai Chicken Pizza	9484

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

```
select pizza_type.category, sum(order_details.quantity) as quantity from pizza_type
join pizzas on pizza_type.pizza_type_id = pizzas.pizza_type_id join order_details on
order_details.pizza_id = pizzas.pizza_id group by pizza_type.category order by
quantity desc;
```

*	category	quantity
1	Classic	59552
2	Supreme	47948
3	Veggie	46596
4	Chicken	44200

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

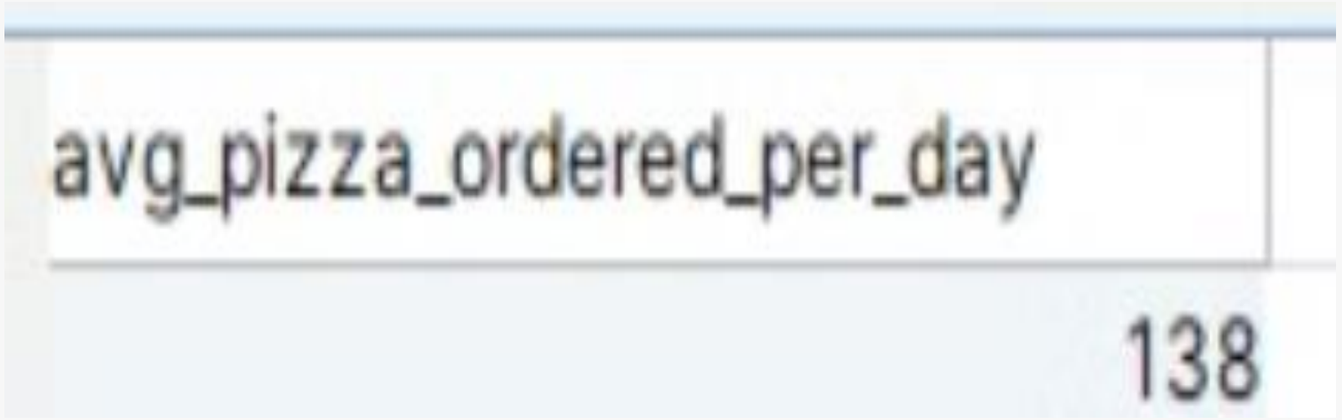
```
select category, count(name) from pizza_type

group by category;
```

*	category	count
1	Supreme	18
2	Veggie	18
3	Chicken	12
4	Classic	16

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.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;
```



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

```
select pizza_type.name, sum(order_details.quantity * pizzas.price) as revenue from pizza_type join pizzas on pizzas.pizza_type_id = pizza_type.pizza_type_id join order_details on order_details.pizza_id = pizzas.pizza_id group by pizza_type.name order by revenue desc limit 3;
```

*	name	revenue
1	The Thai Chicken Pizza	173737.00
2	The Barbecue Chicken Pizza	171072.00
3	The California Chicken Pizza	165638.00

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

```
select pizza_type.category, round(sum(order_details.quantity*pizzas.price)/ (select round(sum(order_details.quantity*pizzas.price),2) as total_sales from order_details join pizzas on pizzas.pizza_id = order_details.pizza_id)*100,2) as revenue from pizza_type join pizzas on pizza_type.pizza_type_id = pizzas.pizza_type_id join order_details on order_details.pizza_id = pizzas.pizza_id group by pizza_type.category order by revenue desc;
```

*	name	revenue
1	The Thai Chicken Pizza	173737.00
2	The Barbecue Chicken Pizza	171072.00
3	The California Chicken Pizza	165638.00

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
1	2015-01-01	5427.70
2	2015-01-02	10891.50
3	2015-01-03	16216.30
4	2015-01-04	19727.20
5	2015-01-05	23859.10
6	2015-01-06	28717.00

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_type.category, pizza_type.name, sum((order_details.quantity)*pizzas.price) as revenue from pizza_type join pizzas on pizza_type.pizza_type_id = pizzas.pizza_type_id join order_details on order_details.pizza_id = pizzas.pizza_id group by pizza_type.category, pizza_type.name) as a) as b where rn <= 3;
```

*	name	revenue
1	The Thai Chicken Pizza	173737.00
2	The Barbecue Chicken Pizza	171072.00
3	The California Chicken Pizza	165638.00
4	The Classic Deluxe Pizza	152722.00
5	The Hawaiian Pizza	129093.00
6	The Pepperoni Pizza	120647.00

CONCLUSION

The pizza sales data provides valuable insights into customer preferences and buying behavior. By analyzing this data, we can uncover important trends and make informed decisions to drive business growth.

One key aspect to examine is the total revenue generated from pizza sales. This metric gives us a high-level understanding of the overall performance and profitability of the pizza business. Additionally, identifying the highest-priced pizza and most common pizza size ordered can help us optimize our product offerings and pricing strategies.

Digging deeper, we can look at the most popular pizza types and their relative contribution to total revenue. This information can guide us in refining our menu, marketing efforts, and inventory management. Analyzing the category-wise distribution of pizzas and the average number of pizzas ordered per day can further illuminate consumption patterns and seasonal trends.

Finally, understanding the cumulative revenue generated over time and the top revenue-driving pizza types for each category will allow us to make data-driven decisions, forecast future performance, and develop targeted strategies to maximize profitability.

THANK YOU