

Pizza sales Analysis



Today, I'll be presenting our Pizza Sales Analysis, powered by SQL queries to uncover key trends in sales, customer preferences, and operational performance.

By leveraging data effectively, we've identified actionable insights that have optimized our strategies and driven significant growth for the company.

This analysis not only highlights what's working but also sheds light on areas for improvement, helping us align our efforts with customer needs. Let's dive into the findings and explore the data-driven story behind our success!"

1.Retrieve The Total Numbers 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_sales  
from order_details  
join pizzas on  
order_details.pizza_id=pizzas.pizza_id
```

Result Grid	
	total_sales
▶	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
```

Result Grid | Filter Rows:

	name	price
▶	The Greek Pizza	35.95

4. Identify the most common pizza size ordered.

```
select pizzas.size, count(order_details.quantity) as total_quantity
from pizzas
join order_details on
pizzas.pizza_id=order_details.pizza_id
group by pizzas.size
order by total_quantity desc
limit 1
```

Result Grid | Filter Rows

	size	total_quantity
▶	L	18526

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

```
select pizza_types.name, count(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
```

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

6.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 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
```

	category	total_quantity
▶	Classic	14888
	Veggie	11649
	Supreme	11987
	Chicken	11050

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

```
select hour(order_time) as Hour, count(order_id) as order_count  
from orders  
group by hour(order_time)  
order by hour(order_time);
```

	Hour	order_count
▶	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

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

```
select category, count(name) as name_count from pizza_types  
group by category;
```

Result Grid | Filter Rows

	category	name_count
▶	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 quantity_ordered 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 quantity_order
```

Result Grid |

	quantity_ordered
▶	138

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

```
select pizza_types.name,round(sum(order_details.quantity*pizzas.price),0) 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;
```

Result Grid | Filter Rows:

	name	revenue
▶	The Thai Chicken Pizza	43434
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41410

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

```
select pizza_types.category,  
       concat(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  
order_details.pizza_id=pizzas.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 | Filter F

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

12.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

13. 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 Veggie Pizza	28884.05