



# PIZZA SALES SQL PROJECT



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# Objective

- The client wants to know about his pizza shop sales more and he have many questions (which is given as KPI) on sales to develop his shop.
- To solve the client problems, we have create a proper ppt which has all the solution and provides insights.
- This will help the client to develop the sales of pizza and his business.
- we will be differentiate the questions as basic , intermediate, advance as per the complexity of each problem

# The KPI

Basic:

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.

## Intermediate:

- Join the necessary tables to find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day.
- Join relevant tables to find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.

## Advanced:

- Calculate the percentage contribution of each pizza type to total revenue.
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza category.

## DATA:

- The data is sourced from github:  
<https://github.com/Ayushi0214/pizza-sales---SQL>

Retrieve the total number of orders placed.

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

	total_order
▶	21350

Calculate the total revenue generated from pizza sales.

```
select  
count(orders_detail.quantity*pizzas.pizza_id) as total_revenue  
from orders_detail join pizzas  
on orders_detail.pizza_id=pizzas.pizza_id;
```

	total_revenue
▶	48620

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

# Identify the most common pizza size ordered.

```
select pizza_types.name , sum(orders_detail.quantity) as quantity
from pizza_types join pizzas
on pizza_types.pizza_type_id=pizzas.pizza_type_id
join orders_detail
on orders_detail.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

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

```
select pizza_types.name ,sum(orders_detail.qunatity) as quantity
from pizza_types join pizzas
on pizza_types.pizza_type_id=pizzas.pizza_type_id
join orders_detail
on orders_detail.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(orders_detail.quantity) as quantity
from pizza_types join pizzas
on pizza_types.pizza_type_id=pizzas.pizza_type_id
join orders_detail
on orders_detail.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_time) as hours , count(order_id) as count  
from orders  
group by hours;
```

	hours	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

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

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

	category	counts
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

```
select avg(quantity) as avg_orders from
(select orders.order_date as date,sum(orders_detail.quantity) as quantity
from orders join orders_detail
on orders.order_id=orders_detail.order_id
group by orders.order_date) as order_quantity
```

	avg_orders
▶	138.4749

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

```
select pizza_types.name,  
sum(orders_detail.quantity*pizzas.price) as revenue  
from pizza_types join pizzas  
on pizza_types.pizza_type_id=pizzas.pizza_type_id  
join orders_detail  
on orders_detail.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 percentage contribution of each pizza type to total revenue.

```
select pizza_types.category,  
count(orders_detail.quantity*pizzas.price) / (select  
round(count(orders_detail.quantity*pizzas.pizza_id),2) as total_revenue  
from orders_detail join pizzas  
on orders_detail.pizza_id=pizzas.pizza_id)*100 as revenue  
from pizza_types join pizzas  
on pizza_types.pizza_type_id=pizzas.pizza_type_id  
join orders_detail  
on orders_detail.pizza_id=pizzas.pizza_id  
group by pizza_types.category  
order by revenue desc  
limit 5
```

	category	revenue
▶	Classic	29.9856
	Supreme	24.2225
	Veggie	23.5479
	Chicken	22.2439

# Analyze the cumulative revenue generated over time.

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

	date	cumul_reven
▶	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

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(orders_detail.quantity* pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id= pizzas.pizza_type_id
join orders_detail
on orders_detail.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

**THANK  
YOU**