

# PIZZA SALES ANALYSIS

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**BY -  
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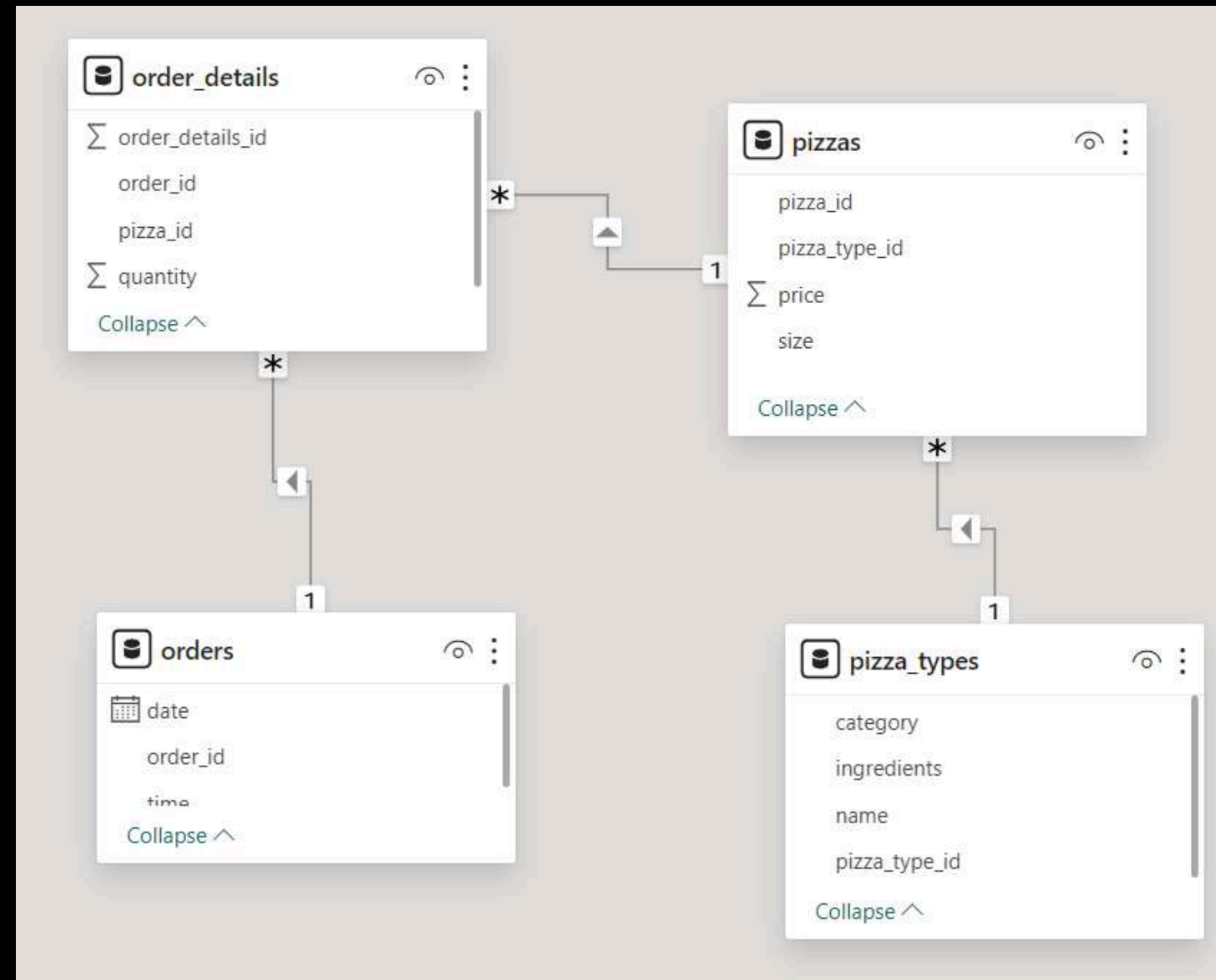




# PROJECT OVERVIEW

THE PIZZA SALES ANALYSIS PROJECT LEVERAGES SQL TO EXPLORE SALES PATTERNS, CUSTOMER PREFERENCES, AND BUSINESS PERFORMANCE OF A PIZZA RESTAURANT. BASIC ANALYSIS INCLUDES CALCULATING TOTAL ORDERS, REVENUE, IDENTIFYING THE HIGHEST-PRICED PIZZA, THE MOST COMMON PIZZA SIZE, AND THE TOP 5 MOST ORDERED PIZZA TYPES. INTERMEDIATE ANALYSIS INVOLVES JOINING TABLES TO FIND TOTAL QUANTITIES OF EACH PIZZA CATEGORY, DISTRIBUTION OF ORDERS BY HOUR, CATEGORY-WISE PIZZA DISTRIBUTION, DAILY AVERAGE ORDERS, AND TOP 3 PIZZA TYPES BY REVENUE. ADVANCED ANALYSIS CALCULATES EACH PIZZA TYPES REVENUE CONTRIBUTION, CUMULATIVE REVENUE OVER TIME, AND TOP 3 PIZZA TYPES BY REVENUE WITHIN EACH CATEGORY. THESE INSIGHTS GUIDE STRATEGIC DECISIONS TO OPTIMIZE OPERATIONS AND BOOST PROFITABILITY

# SCHEMA OF PIZZA SALES



# TOTAL NO. OF ORDERS PLACED

```
select COUNT(*) as Total_Orders  
from orders
```

	total_orders bigint 
1	21350

# TOTAL REVENUE GENERATED FROM PIZZA SALES

```
SELECT SUM(o_details.quantity * pizzas.price) as Total_Revenue  
from pizzas  
JOIN order_details o_details ON o_details.pizza_id = pizzas.pizza_id
```

total_revenue	🔒
numeric	

817860.05
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# HIGHEST PRICED PIZZAS

```
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
character varying	numeric
The Greek Pizza	35.95



# COMMON PIZZAS SIZE ORDERED

```
select pizzas.size,COUNT(order_details.order_details_id) as Order_Count
from pizzas
join order_details on order_details.pizza_id = pizzas.pizza_id
group by pizzas.size
order by Order_Count desc
```

	size character varying 🔒	order_count bigint 🔒
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

# TOP 5 MOST ORDERED PIZZAS WITH THEIR QUANTITY



```
select pizza_types.name, COUNT(order_details.quantity) as Total_Quantity
from pizza_types
join pizzas on pizzas.pizza_type_id = pizza_types.pizza_type_id
join order_details on pizzas.pizza_id=order_details.pizza_id
group by 1
order by Total_Quantity desc
limit 5;
```

	name character varying	total_quantity bigint
1	The Classic Deluxe Pizza	2416
2	The Barbecue Chicken Pizza	2372
3	The Hawaiian Pizza	2370
4	The Pepperoni Pizza	2369
5	The Thai Chicken Pizza	2315



# TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED

```
select pizza_types.category, SUM(order_details.quantity) as Total_Quantity
from pizza_types
join pizzas on pizzas.pizza_type_id = pizza_types.pizza_type_id
join order_details on pizzas.pizza_id=order_details.pizza_id
group by 1
order by Total_Quantity desc
```

	category character varying 	total_quantity numeric 
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

# DISTRIBUTION OF ORDERS AS PER HOUR OF THE DAY


```
select extract(HOUR from time) as hour, Count(order_id) as Order_Count
from orders
group by hour
order by Order_Count desc
limit 5
```

	hour numeric	order_count bigint
1	12	2520
2	13	2455
3	18	2399
4	17	2336
5	19	2009



# AVERAGE QUANTITY OF PIZZAS ORDERED ON PER DAY BASIS

```
select round(avg(quantity),0) as Avg_order_per_day
from
(select date,sum(order_details.quantity) as Quantity
from orders
join order_details on order_details.order_id=orders.order_id
group by date)
```

	avg_order_per_day 
1	138

# TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```
select pizza_types.name, pizza_types.category, SUM(order_details.quantity*pizzas.price) as Total_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 1,2
order by Total_Revenue Desc
limit 3;
```

	name character varying	category character varying	total_revenue numeric
1	The Thai Chicken Pizza	Chicken	43434.25
2	The Barbecue Chicken Pizza	Chicken	42768.00
3	The California Chicken Pizza	Chicken	41409.50





# PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE

```
with cte as(  
    select SUM(order_details.quantity*pizzas.price) as total_global_revenue from order_details  
join pizzas on pizzas.pizza_id=order_details.pizza_id  
)  
cte_2 as(select pizza_types.category, ROUND(sum(order_details.quantity*pizzas.price)/(total_global_revenue),2)* 100 as Percentage_1  
    from cte,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.category,total_global_revenue  
    order by Percentage_1 desc  
)  
select * from cte_2
```

	category character varying 	percentage_1 numeric 
1	Classic	27.00
2	Supreme	25.00
3	Chicken	24.00
4	Veggie	24.00

# CUMULATIVE REVENUE GENERATED OVER TIME

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

	date 	cumulative_sum 
	date	numeric
1	2015-01-01	2713.85
2	2015-01-02	5445.75
3	2015-01-03	8108.15
4	2015-01-04	9863.60
5	2015-01-05	11929.55



# TOP 3 MOST ORDERED PIZZA TYPES BASED ON EACH PIZZA CATEGORY

```
with cte as(
select pizza_types.pizza_type_id, name,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 1,category,name
),
cte_2 as(
select *,rank() over(partition by category order by Revenue desc) as rn
from cte )
select * from cte_2
where rn<=3
```

	pizza_type_id character varying	name character varying	category character varying	revenue numeric	rn bigint
1	thai_ckn	The Thai Chicken Pizza	Chicken	43434.25	1
2	bbq_ckn	The Barbecue Chicken Pizza	Chicken	42768.00	2
3	cali_ckn	The California Chicken Pizza	Chicken	41409.50	3
4	classic_dlx	The Classic Deluxe Pizza	Classic	38180.5	1
5	hawaiian	The Hawaiian Pizza	Classic	32273.25	2
6	pepperoni	The Pepperoni Pizza	Classic	30161.75	3
7	spicy_ital	The Spicy Italian Pizza	Supreme	34831.25	1
8	ital_supr	The Italian Supreme Pizza	Supreme	33476.75	2
9	sicilian	The Sicilian Pizza	Supreme	30940.50	3
10	four_cheese	The Four Cheese Pizza	Veggie	32265.70	1
11	mexicana	The Mexicana Pizza	Veggie	26780.75	2
12	five_cheese	The Five Cheese Pizza	Veggie	26066.5	3

# THANK YOU

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