

PIZZA SALES ANALYSIS WITH SQL



WELCOME TO ANALYSIS REPORT

In this project data driven analysis has been performed on the pizzahut sales data.

Further key insights are gathered using various concepts of SQL.

Hi my name is Sudhanshu Pandey , a young data professional.

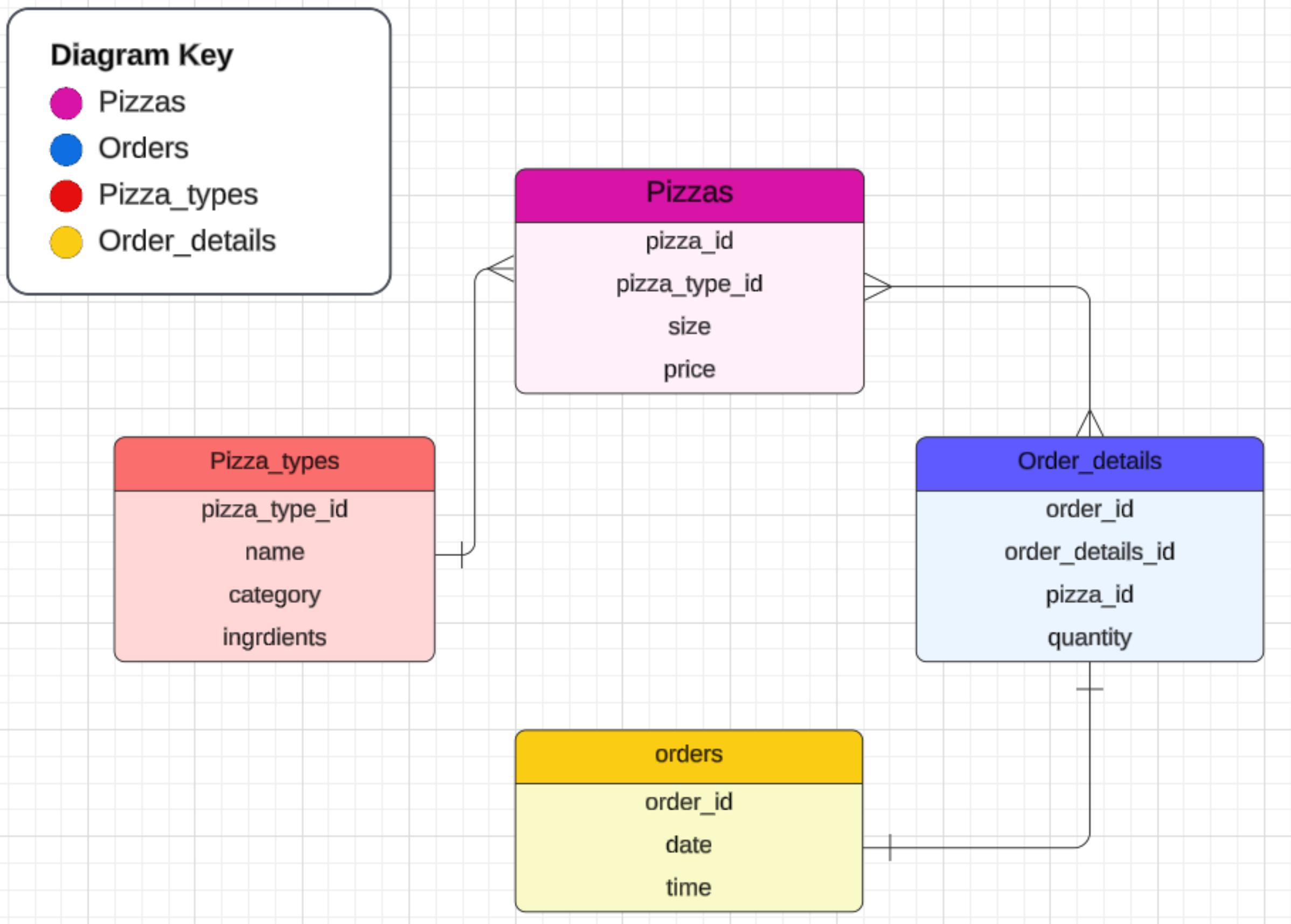


TARGETS

1. ANALYSE THE REVENUE AND ITS DISTRIBUTION OVER THE DIFFERENT CATEGORIES OF PIZZA
2. PIVOT THE OPERATIONS OF PIZZA SHOP ON THE KPI'S TO ENSURE ENHANCED PROFITABILITY



DATA SCHEMA



CHALLENGE STATEMENT 1

--Q1. Find total no of order placed

```
select count(*) as total_orders  
from pizza.orders
```

RESULT

Row #	total_orders
1	21350

CHALLENGE STATEMENT 2

```
--Q2. Calculate the total revenue generated from pizza sales.  
select round(sum(quantity*price),2) as total_revenue  
from pizza.order_details as ord  
join pizza.pizzas as piz  
on ord.pizza_id = piz.pizza_id
```

RESULT

Row	total_revenue
1	817860.05

CHALLENGE STATEMENT 3

```
--Q3. Find the highest priced pizza
select *
from pizza.pizzas
where price =
(select max(price) from pizza.pizzas)
```

RESULT

Row	pizza_id	pizza_type_id	size	price
1	the_greek_xxL	the_greek	XXL	35.95

CHALLENGE STATEMENT 4

--Q4. Find the rank of each size of pizza sold

```
select size, count(*) as no_of_pizzas, row_number()over(order by count(*)desc) as rank_pizza  
from pizza.pizzas as piz  
join pizza.order_details as ord on  
piz.pizza_id = ord.pizza_id  
group by size  
order by no_of_pizzas desc
```

RESULT

Row	size	no_of_pizzas	rank_pizza
1	L	18526	1
2	M	15385	2
3	S	14137	3
4	XL	544	4
5	XXL	28	5

CHALLENGE STATEMENT 5

```
--Q5. top 5 most common pizza types ordered
select * from (select pizza_type_id,sum(quantity) as no_of_pizza, row_number()over(order by sum(quantity) desc ) as rank_pizza
from pizza.pizzas as piz
join pizza.order_details as ord
on piz.pizza_id =ord.pizza_id
group by pizza_type_id
order by no_of_pizza desc)t
where rank_pizza<6|
```

RESULT

Row	pizza_type_id	no_of_pizza	rank_pizza
1	classic_dlx	2453	1
2	bbq_ckn	2432	2
3	hawaiian	2422	3
4	pepperoni	2418	4
5	thai_ckn	2371	5

CHALLENGE STATEMENT 6

--Q6. Distribution of orders by hour in a day

```
select extract(hour from time) as hr , count(*) as no_of_orders  
from pizza.orders  
group by hr
```

Row	hr	no_of_orders
1	11	1231
2	12	2520
3	13	2455
4	14	1472
5	15	1468
6	16	1920
7	17	2336
8	18	2399
9	19	2009
10	20	1642
11	21	1198
12	22	663
13	23	28
14	10	8
15	9	1

RESULT

CHALLENGE STATEMENT 7

```
--Q7. group orders by date and find avg no of pizzas ordered per day
select date ,sum(quantity)no_of_pizza,avg(sum(quantity)) over() as avg_no_of_pizza
from pizza.orders as ordr
join pizza.order_details as ordr_det
on ordr.order_id = ordr_det.order_id
group by date
```

Row	date	no_of_pizza	avg_no_of_pizza
1	2015-01-11	116	138.4748603351...
2	2015-05-08	181	138.4748603351...
3	2015-09-11	167	138.4748603351...
4	2015-09-19	141	138.4748603351...
5	2015-11-06	190	138.4748603351...
6	2015-11-26	266	138.4748603351...
7	2015-03-23	135	138.4748603351...
8	2015-07-08	142	138.4748603351...
9	2015-07-21	119	138.4748603351...
10	2015-09-12	156	138.4748603351...

RESULT

CHALLENGE STATEMENT 8

--Q8. top 3 most ordered pizza types based on revenue

```
select * from (select pizza_type_id,price,sum(quantity) num,price*(sum(quantity)) revenue ,rank()over(order by price*(sum(quantity)) desc) as rank_pizza  
from pizza.pizzas as piz  
join pizza.order_details as ord  
on piz.pizza_id = ord.pizza_id  
group by pizza_type_id,price  
order by revenue desc) t  
where t.rank_pizza<4
```

RESULT

Row	pizza_type_id	price	num	revenue	rank_pizza
1	thai_ckn	20.75	1410	29257.5	1
2	five_cheese	18.5	1409	26066.5	2
3	four_cheese	17.95	1316	23622.2	3

CHALLENGE STATEMENT S

```
--Q9.% dist of each type of pizza
select * , from (select pizza_type_id,price,sum(quantity) num,price*(sum(quantity)) revenue ,rank()over(order by price*(sum(quantity)) desc) as rank_pizza,
from pizza.pizzas as piz
join pizza.order_details as ord
on piz.pizza_id = ord.pizza_id
group by pizza_type_id,price
order by revenue desc) t
|
```

RESULT

Row	pizza_type_id	price	num	revenue	rank_pizza
1	thai_ckn	20.75	1410	29257.5	1
2	five_cheese	18.5	1409	26066.5	2
3	four_cheese	17.95	1316	23622.2	3
4	spicy_ital	20.75	1109	23011.75	4

CHALLENGE STATEMENT 10

--Q10. Find the percentage share of each type of pizza

```
select *,round(rev/(sum(rev)over()) *100,2) as percent_share from (select piz.pizza_type_id ,round(sum(price*quantity),2) as rev  
from pizza.pizzas as piz  
join pizza.order_details as ord  
on piz.pizza_id = ord.pizza_id  
group by pizza_type_id) t
```

RESULT

Row	pizza_type_id	rev	percent_share
1	brie_carre	11588.5	1.42
2	bbq_ckn	42768.0	5.23
3	calabrese	15934.25	1.95
4	pep_msh_pep	18834.5	2.3

CHALLENGE STATEMENT 11

```
--Q11. find cumulative rev by date
select date, round(sum(price*quantity),2) as rev, round(sum(sum(price*quantity)) over(rows between unbounded preceding and current row),2) as cum_rev
from pizza.orders as ord
join pizza.order_details as ord_det
on ord.order_id = ord_det.order_id
join pizza.pizzas as piz
on piz.pizza_id = ord_det.pizza_id
group by date
order by date
```

RESULT

Row	date	rev	cum_rev
1	2015-01-01	2713.85	2713.85
2	2015-01-02	2731.9	5445.75
3	2015-01-03	2662.4	8108.15
4	2015-01-04	1755.45	9863.6

CHALLENGE STATEMENT 12

```
--Q12. Top 3 most selling pizza based on revenue in each category
select * from (select category ,name ,round(sum(quantity*price)) as rev,rank() over(partition by category order by round(sum(quantity*price)) desc)
ran_pizza_in_cat
from pizza.pizzas as piz
join pizza.order_details as ord_det
on piz.pizza_id = ord_det.pizza_id
join pizza.pizza_types as typ
on piz.pizza_type_id = typ.pizza_type_id
group by category,name
order by category) t
where t.ran_pizza_in_cat<4
```

RESULT

Row	category	name	rev	ran_pizza_in_cat
1	Chicken	The Thai Chicken Pizza	43434.0	1
2	Chicken	The Barbecue Chicken Pizza	42768.0	2
3	Chicken	The California Chicken Pizza	41410.0	3
4	Classic	The Classic Deluxe Pizza	38181.0	1
5	Classic	The Hawaiian Pizza	32273.0	2
6	Classic	The Pepperoni Pizza	30162.0	3
7	Supreme	The Spicy Italian Pizza	34831.0	1
8	Supreme	The Italian Supreme Pizza	33477.0	2
9	Supreme	The Sicilian Pizza	30941.0	3
10	Veggie	The Four Cheese Pizza	32266.0	1
11	Veggie	The Mexicana Pizza	26781.0	2
12	Veggie	The Five Cheese Pizza	26067.0	3

KEY INSIGHTS

MOSTLY "L" SIZED PIZZAS
ARE SOLD . HENCE
COMPANY SHOULD FOCUS
MORE ON THIS SIZE
VARIETIES

KEY INSIGHTS

CLASSIC DELUXE IS THE
MOST POPULAR PIZZA AS IT
IS ORDERED THE HIGHEST

KEY INSIGHTS

12 PM AND 6 PM ARE THE PEAK HOURS OF THE SHOP. THE COMPANY SHOULD ENSURE SURPLUS INVENTORY AND EMPLOYEES IN THESE HOURS.

KEY INSIGHTS

LEADER PIZZA IN REVENUE
GENERATION IS THAI
CHICKEN. THE COMPANY
CAN TAKE THE PLUNG TO
PROMOTE IT AGGRESSIVELY

KEY INSIGHTS

IN VEGGIE CATEGORY , FOUR
CHEESE PIZZA IS
LEADING. WHEREAS IN
SUPREME CATEGORY SPICY
ITALIAN IS ACEING



MY CONTACT



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THANK YOU!

