PIZZAHUT SALES ANALAYSIS USING SQL

Objective: To analyze PizzaHut's sales data using SQL to gain insights on performance, customer preferences, and revenue

Tools: SQL (MySQL), CSV files

Focus Areas: Order volume and timing

Best-selling pizzas

Revenue patterns

Pizza category breakdowns

Dataset Used

- orders.csv
- order_details.csv
- pizzas.csv
- pizza_types.csv

Tables Used in PizzaHut Database

```
1 • use pizzahut;
2 • show tables;
```

Result Grid | Filter Row

Tables_in_pizzahut
order_details
orders
pizza_types
pizzas

01. Retrieve the total number of orders placed

```sql
use pizzahut;
-- Retrieve the total number of orders placed
select * from orders;
select count(order_id) as total_orders
from orders;
```

Result Grid

	total_orders
▶	21350

02. Calculate the total revenue generated from pizza sales

```sql
--  Calculate the total revenue generated from pizza sales
select * from order_details;
select * from pizzas;

select ROUND(SUM(order_details.quantity * pizzas.price),2)as total_revenue
from order_details
join pizzas on order_details.pizza_id = pizzas.pizza_id;
```

Result Grid

	total_revenue
▶	817860.05

03. Identify the highest priced pizza

```sql
-- Identify the highest-priced pizza
select pizza_types.name, pizzas.price as highest_priced_pizza
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	highest_priced_pizza
The Greek Pizza	35.95

04. Identify the most common pizza size ordered

```sql
-- Identify the most common pizza size ordered
select pizzas.size as pizza_size, sum(order_details.quantity)as order_count
from pizzas
join order_details
on order_details.pizza_id = pizzas.pizza_id
group by pizzas.size
order by sum(order_details.quantity) desc;
```

Result Grid | Filter Rows:

pizza_size	order_count
L	18956
M	15635
S	14403
XL	552
XXL	28

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

```sql
-- List the top 5 most ordered pizza types along with their quantities
select pizza_types.name as Pizza_types, sum(order_details.quantity)as order_count
from order_details
join pizzas
on order_details.pizza_id = pizzas.pizza_id
join pizza_types on pizza_types.pizza_type_id = pizzas.pizza_type_id
group by pizza_types.name
order by sum(order_details.quantity) desc;
```

Result Grid | Filter Rows:

Pizza_types	order_count
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371
The California Chicken Pizza	2370

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

```
39    -- Join the necessary tables to find the total quantity of each pizza category ordered
40    select pizza_types.category as Pizza_category,sum(order_details.quantity)as order_count
41    from order_details
42    join pizzas
43    on order_details.pizza_id = pizzas.pizza_id
44    join pizza_types on pizza_types.pizza_type_id = pizzas.pizza_type_id
45    group by pizza_types.category
46    order by sum(order_details.quantity) desc;
```

Result Grid | Filter Rows:

Pizza_category	order_count
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

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

```
48    -- Determine the distribution of orders by hour of the day
49 •  select hour(order_time)as Order_Hour, count(order_id) as Total_order_placed
50    from orders
51    group by hour(order_time);
```

Result Grid | Filter Rows:

Order_Hour	Total_order_placed
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

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

```sql
-- Join relevant tables to find the category-wise distribution of pizzas
select category, count(name) as total_pizzas
from pizza_types
group by category;
```

Result Grid | Filter R

category	total_pizzas
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

```sql
-- Group the orders by date and calculate the average number of pizzas ordered per day.
with cte as(
select orders.order_date as 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)
select round(avg(quantity),0) as avg_pizza_ordered_per_day
from cte;
```

avg_pizza_ordered_per_day
138

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

```sql
-- Determine the top 3 most ordered pizza types based on revenue
select 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.name
order by revenue desc
limit 3;
```

Result Grid | Filter Rows:

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

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

```sql
-- Calculate the percentage contribution of each pizza type to total revenue
with cte as(
select pizza_types.category as pizza_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 pizza_types.category)

select pizza_category,round(revenue/sum(revenue)over()*100,2) as percent_revenue
from cte
group by pizza_category;
```

Result Grid | Filter Rows:

pizza_category	percent_revenue
Classic	26.91
Veggie	23.68
Supreme	25.46
Chicken	23.96

12. Analyze the cumulative revenue generated over time

```sql
-- Analyze the cumulative revenue generated over time
with cte as(
select orders.order_date as order_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.order_date)

select order_date, round(sum(revenue) over(order by order_date),2)as cumm_revenue
from cte;
```

Result Grid | Filter Rows:

order_date	cumm_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
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.35
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3
2015-01-14	32358.7
2015-01-15	34343.5
2015-01-16	36937.65
2015-01-17	39001.75
2015-01-18	40978.6

2015-01-18	40978.6
2015-01-19	43365.75
2015-01-20	45763.65
2015-01-21	47804.2
2015-01-22	50300.9
2015-01-23	52724.6
2015-01-24	55013.85
2015-01-25	56631.4
2015-01-26	58515.8
2015-01-27	61043.85
2015-01-28	63059.85
2015-01-29	65105.15
2015-01-30	67375.45
2015-01-31	69793.3
2015-02-01	72982.5
2015-02-02	75311.1
2015-02-03	77925.9
2015-02-04	80159.8

order_date	cumm_revenue
2015-12-14	785389.55
2015-12-15	787777
2015-12-16	790011.8
2015-12-17	791892.55
2015-12-18	794778.85
2015-12-19	797083.05
2015-12-20	799187.95
2015-12-21	801288.65
2015-12-22	803171.6
2015-12-23	805415.9
2015-12-24	807553.75
2015-12-26	809196.8
2015-12-27	810615.8
2015-12-28	812253
2015-12-29	813606.25
2015-12-30	814944.05
2015-12-31	817860.05

13. Determine the top 3 most ordered pizza types based on revenue for each pizza category

```sql
-- Determine the top 3 most ordered pizza types based on revenue for each pizza category
with cte as(
select 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.name)
select name, revenue,dense_rank() over(order by revenue desc) as rnk
from cte;
```

name	revenue	rnk
The Thai Chicken Pizza	43434.25	1
The Barbecue Chicken Pizza	42768	2
The California Chicken Pizza	41409.5	3
The Classic Deluxe Pizza	38180.5	4
The Spicy Italian Pizza	34831.25	5
The Southwest Chicken Pizza	34705.75	6
The Italian Supreme Pizza	33476.75	7
The Hawaiian Pizza	32273.25	8
The Four Cheese Pizza	32265.70000000065	9
The Sicilian Pizza	30940.5	10
The Pepperoni Pizza	30161.75	11
The Greek Pizza	28454.100000000013	12
The Mexicana Pizza	26780.75	13
The Five Cheese Pizza	26066.5	14
The Pepper Salami Pizza	25529	15
The Italian Capocollo Pizza	25094	16
The Vegetables + Vegetable...	24374.75	17
The Prosciutto and Arugula ...	24193.25	18