



WELCOME TO PIZZAHUT

PIZZA HUT DATA ANALYSIS: INSIGHTS FROM SQL

Key Questions Addressed

- Total number of orders
- Total revenue generated from pizza sales
- Highest-priced pizza
- Most common pizza size ordered
- Top 5 most ordered pizza types by quantity

Retrieve the total number of orders placed.

```
SELECT  
    COUNT(order_id) AS total_orders  
FROM  
    •  
    orders;
```

Result Grid

total_orders
21350



CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT  
    ROUND(SUM(order_details.quantity * pizzas.price),  
         2) AS total_revenue  
FROM  
    order_details  
    JOIN  
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

Result Grid	
	total_revenue
	817860.05

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 Row

name	price
The Greek Pizza	35.95

PIZZAHUT

Identify the most common pizza size ordered.

```
SELECT
    pizzas.size,
    COUNT(order_details.order_details_id) AS order_count
FROM
    pizzas
    JOIN
        order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

Result Grid |

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

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

```
SELECT
    pizza_types.name, SUM(order_details.quantity) AS 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 quantity DESC
LIMIT 5;
```

Result Grid | Filter Rows:

	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(order_details.quantity) AS 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
ORDER BY quantity DESC;
```

Result Grid |

	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 hour, COUNT(order_id) AS order_count  
FROM  
    orders  
GROUP BY HOUR(order_time);
```

	hour	order_count
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009

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

```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY category;
```

Result Grid | Filter Row

category	COUNT(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

```
SELECT
    ROUND(AVG(quantity), 0) AS avg_pizza_order_per_day
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 order_quantity;
```

Result Grid | Filter Row

	avg_pizza_order_per_day
▶	138

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 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	43434.25
	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,
    ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
        ROUND(SUM(order_details.quantity * pizzas.price),
        2) AS total_revenue
    )
    FROM
        order_details
        JOIN
            pizzas ON pizzas.pizza_id = order_details.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;
```

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time.

```
select order_date,  
       sum(revenue) over(order by order_date) 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	2713.8500000000004
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(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 Spicy Italian Pizza	34831.25
The Italian Supreme Pizza	33476.75
The Sicilian Pizza	30940.5
The Four Cheese Pizza	32265.70000000065



Data analysis key findings

- Total orders - 21,350
- Total revenue - 8,17,860
- Highest price pizza- The greek pizza- 35.95
- Most common pizza size- Large- 18,526
- The most ordered pizza type- The classic delux pizza-2,453
- Average number of pizza order per day- 138
- The most ordered pizza types based on revenue- The Thai chicken pizza- 43434.25
- The highest percentage contribution of pizza type- 26.91%

Thank you