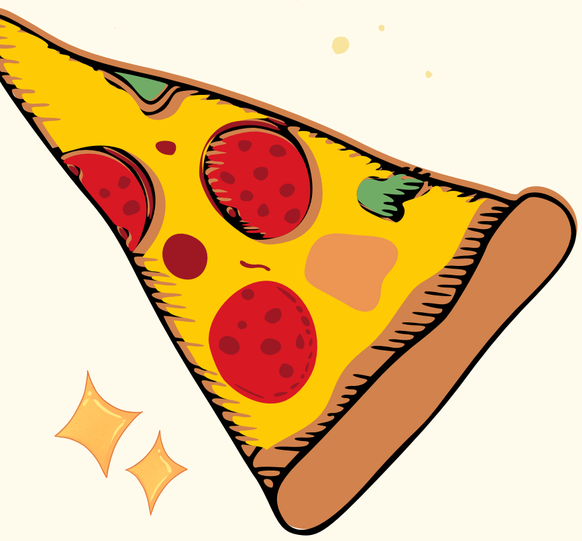
Pizza Hut Sales Data Analysis



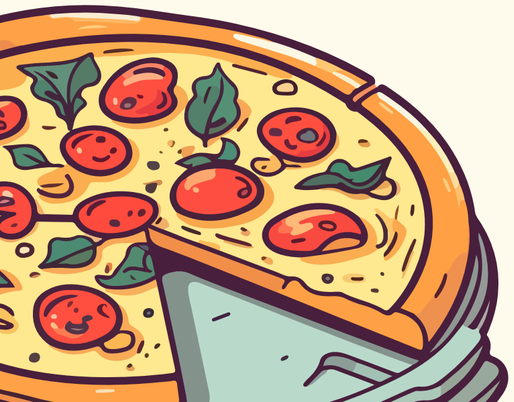
SQL

Buisness Problem

The store needs to boost revenue and efficiency by identifying top-selling pizzas, peak sales times, and optimizing inventory to avoid missed opportunities and potential revenue loss.

AIM

To analyze pizza sales data, focusing on revenue, order trends and make business decisions.



1. Retrieve the total number of orders placed.

```sql
SELECT COUNT(order_id) AS Total_Orders FROM orders;
```

Result Grid

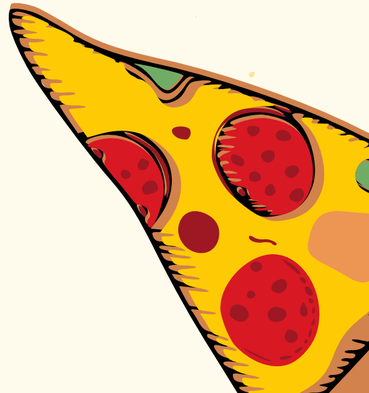
	Total_Orders
▶	21350

2. Calculate the total revenue generated from pizza sales.

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

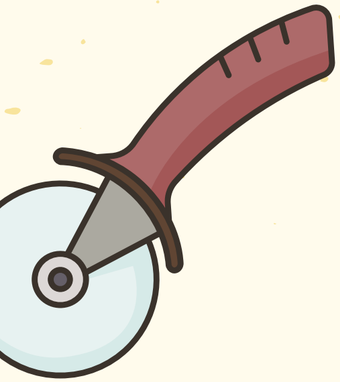
Result Grid

	Total_Sale
▶	817860.05



3. Identify the highest priced pizza.

```sql
SELECT pizza_types.name, pizzas.price
FROM pizza_types
INNER JOIN pizzas
ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC LIMIT 1;
```



Result Grid | Filter Rows

	name	price
▶	The Greek Pizza	35.95

4. Identify the most common pizza size ordered.

```sql
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 LIMIT 1;
```

Result Grid | Filter Rows:

size	Order_COUNT
L	18526

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

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

Result Grid | Filter Rows:

name	Count
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

6. Find the total quantity of each pizza category ordered.

```sql
SELECT pizza_types.category, sum(order_details.quantity)
AS Total_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 Total_Quantity DESC;
```

Result Grid | Filter Rows:

category	Total_Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

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

```
SELECT hour(order_time) AS Hours,
count(order_id) AS No_of_orders
FROM orders
GROUP BY hours;
```

Result Grid | Filter Rows

Hours	No_of_orders
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399

8. Find the category wise distribution of pizzas.

```sql
SELECT pizza_types.category AS Category,
count(pizza_types.name) AS Number_of_pizzas
FROM pizza_types
GROUP BY Category;
```

Category	Number_of_pizzas
Chicken	6
Classic	8
Supreme	9
Veggie	9

9. Calculate the average number of pizzas ordered per day.

```sql
SELECT round(avg(Total_orders),0) AS Avg_orders_per_day
FROM
(SELECT orders.order_date, sum(order_details.quantity) AS Total_orders
FROM order_details
JOIN orders
ON orders.order_id = order_details.order_id
GROUP BY orders.order_date) AS Orders_qunatity;
```

Result Grid | Filter

	Avg_orders_per_day
▶	138

9. Calculate the average number of pizzas ordered per day.

```sql
SELECT round(avg(Total_orders),0) AS Avg_orders_per_day
FROM
(SELECT orders.order_date, sum(order_details.quantity)
AS Total_orders
FROM order_details
JOIN orders
ON orders.order_id = order_details.order_id
GROUP BY orders.order_date) AS Orders_qunatity;
```

Result Grid | Filter

	Avg_orders_per_day
▶	138

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

```sql
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
SELECT pizza_types.category,
ROUND(SUM(order_details.quantity * pizzas.price)/ (SELECT
ROUND(SUM(order_details.quantity * pizzas.price),2) AS Total_Sale
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 LIMIT 3;
```

Result Grid | Filter

category	Revenue
Classic	26.91
Supreme	25.46
Chicken	23.96

12. Analyze the cumulative revenue generated over time.

```sql
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;
```

Result Grid | Filter Rows:

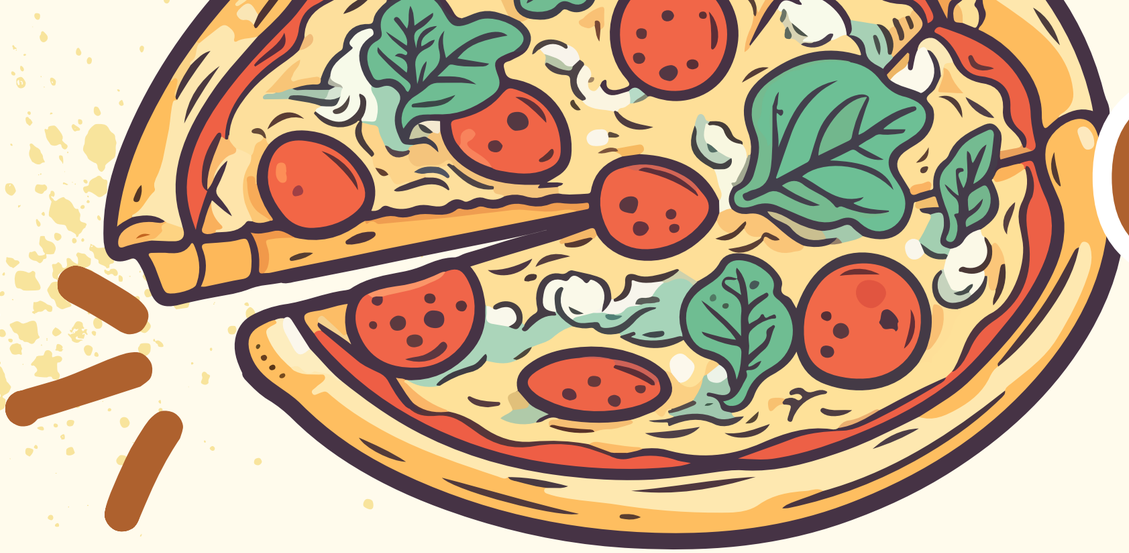
order_date	Cum_revenue
2015-01-01	2713.850000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4

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

```sql
SELECT name,category, revenue FROM
(SELECT category,name, revenue,
rank() over(partition by category order by revenue) as rn
FROM
(SELECT pizza_types.category, 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.category, pizza_types.name) as A) as B
WHERE rn<=3;
```

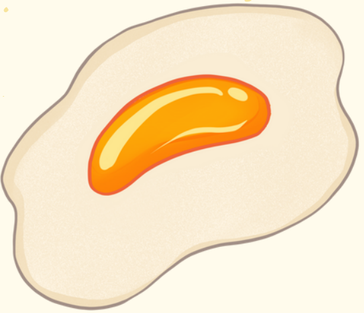
Result Grid | Filter Rows: | Export: | Wrap Cell Conte

name	category	revenue
The Chicken Pesto Pizza	Chicken	16701.75
The Chicken Alfredo Pizza	Chicken	16900.25
The Southwest Chicken Pizza	Chicken	34705.75
The Pepperoni, Mushroom, and Peppers Pizza	Classic	18834.5
The Big Meat Pizza	Classic	22968
The Napolitana Pizza	Classic	24087
The Brie Carre Pizza	Supreme	11588.4999999999
The Spinach Supreme Pizza	Supreme	15277.75
The Calabrese Pizza	Supreme	15934.25
The Green Garden Pizza	Veggie	13955.75
The Mediterranean Pizza	Veggie	15360.5
The Spinach Pesto Pizza	Veggie	15596



Conslusion

- Classic pizzas generate the most revenue, followed by Supreme and Chicken.
- Top-selling pizza: "The Thai Chicken Pizza."
- Peak order time: 12–1 PM.
- Large pizzas are the most popular size.
- Focus marketing on bestsellers and adjust inventory for peak times.



Thank you for your attention