



PIZZA SALES ANALYSIS

# PIZZA HUT





# INTRODUCTION

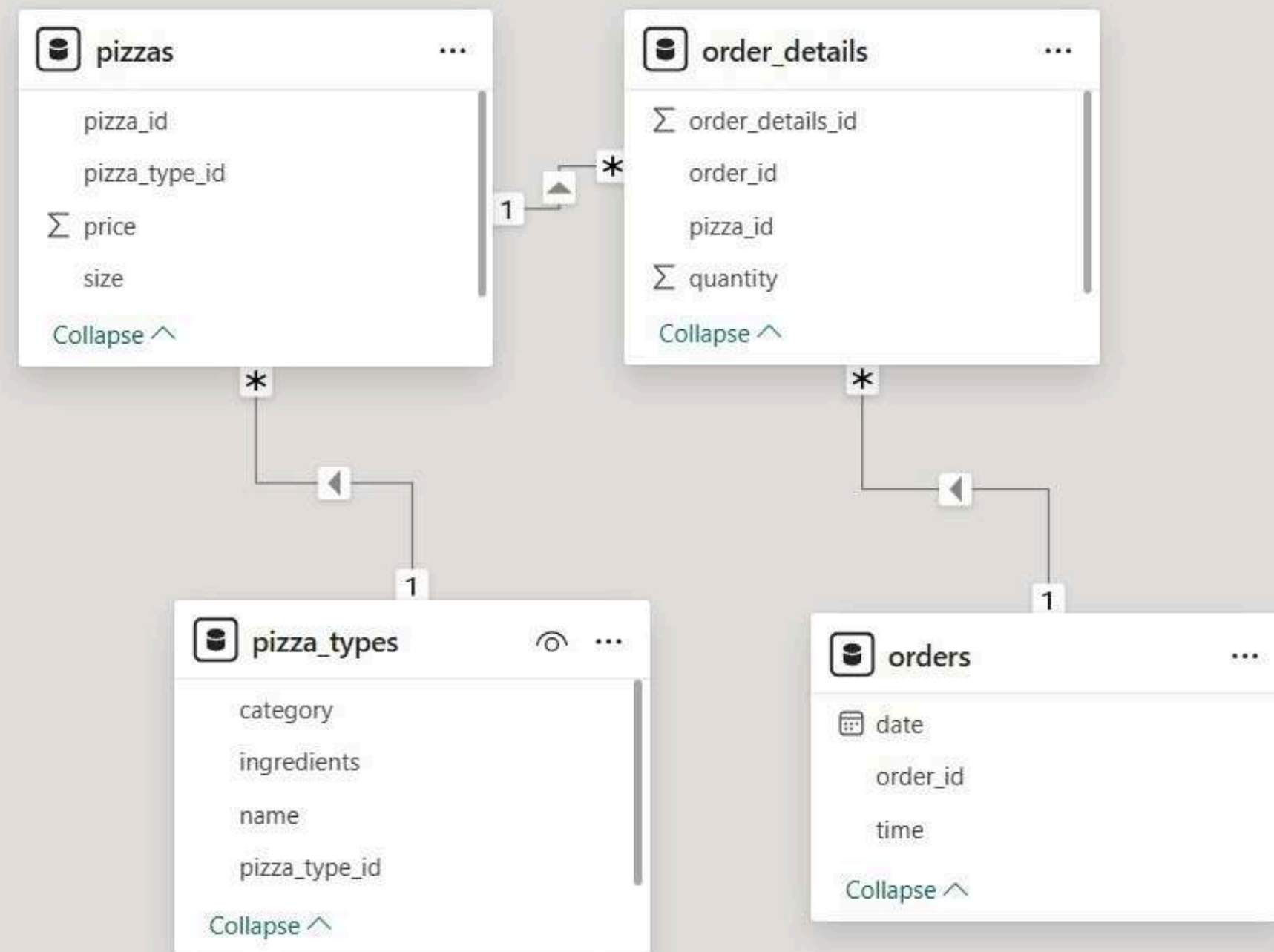
# HELLO!

**MY NAME IS SHITAL,  
IN THIS PROJECT I HAVE UTILIZED SQL QUERIES AND  
POWER BI TO SOLVE QUESTIONS THAT WERE RELATED  
TO PIZZA SALES.**





# DATA MODLING







# 1. RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

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

Result Grid	
	total_orders
▶	21350



## 2. Calculate the total revenue generated from pizza sales.

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



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Result Grid	
	total_sales
▶	817860.05



### 3. 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
```



Result Grid     Filter Rows: <input type="text"/>		
	name	price
▶	The Greek Pizza	35.95
	The Greek Pizza	25.5
	The Brie Carre Pizza	23.65
	The Italian Vegetables Pizza	21
	The Spinach Supreme Pizza	20.75
	The Barbecue Chicken Pizza	20.75
	The California Chicken Pizza	20.75
	The Spicy Italian Pizza	20.75
	The Chicken Alfredo Pizza	20.75
	The Chicken Pesto Pizza	20.75
	The Italian Supreme Pizza	20.75
	The Southwest Chicken Pizza	20.75
	The Prosciutto and Arugula...	20.75
	The Pepper Salami Pizza	20.75
	The Thai Chicken Pizza	20.75
	The Soppressata Pizza	20.75
	The Spinach Pesto Pizza	20.75
	The Classic Deluxe Pizza	20.5
	The Napolitana Pizza	20.5
	The Greek Pizza	20.5
	The Italian Capocollo Pizza	20.5
	The Big Meat Pizza	20.5
	The Mexican Pizza	20.25



## 4. IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
3 • SELECT
4     pizzas.size,
5     COUNT(order_details.order_details_id) AS order_count
6 FROM
7     pizzas
8     JOIN
9     order_details ON pizzas.pizza_id = order_details.pizza_id
10 GROUP BY pizzas.size
11 ORDER BY order_count DESC;
```

Result Grid			Filter R
	size	order_count	
▶	L	18526	
	M	15385	
	S	14137	
	XL	544	
	XXL	28	



## 5. LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT
    pizza_types.name, SUM(order_details.quantity) 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	



6. 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			Filter
	category	quantity	
▶	Classic	14888	
	Supreme	11987	
	Veggie	11649	
	Chicken	11050	



## 7. DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
2
3 SELECT
4     HOUR(order_time) AS hour, COUNT(order_id) order_count
5 FROM
6     orders
7 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
	20	1642
	21	1198
	22	663
	23	28
	10	8
	9	1





## 8. JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
select  
category, count(name) from pizza_types  
group by category;
```

Result Grid			Filter Rows
	category	count(name)	
▶	Chicken	6	
	Classic	8	
	Supreme	9	
	Veggie	9	



## 9. GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT  
    ROUND(AVG(quantity), 0) AS avg_pizza_ordered_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 Rows

	avg_pizza_ordered_per_day
--	---------------------------

	138
--	-----



## 10. DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```
SELECT
  pizza_types.name,
  ROUND(SUM(order_details.quantity * pizzas.price),
        0) 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	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41410	





## 11. 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_sales
    FROM
      order_details
      JOIN
        pizzas ON order_details.pizza_id = pizzas.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;
  
```

Result Grid			Filter
	category	revenue	
▶	Veggie	23.68	
	Chicken	23.96	
	Supreme	25.46	
	Classic	26.91	





## 12. 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;
```

Result Grid	Filter Rows:
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
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.500000000001
2015-01-16	36937.650000000001
2015-01-17	39001.750000000001
2015-01-18	40978.600000000006
2015-01-19	43365.750000000001
2015-01-20	45763.650000000001
2015-01-21	47804.200000000001
2015-01-22	50300.900000000001
2015-01-23	52724.600000000006
2015-01-24	55013.850000000006
2015-01-25	56631.400000000001





# 13. 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) 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 ;
```

Result Grid			Filter Rows:	Export:
	name	revenue		
▶	The Chicken Pesto Pizza	16701.75		
	The Chicken Alfredo Pizza	16900.25		
	The Southwest Chicken Pizza	34705.75		
	The Pepperoni, Mushroom, and Peppers Pizza	18834.5		
	The Big Meat Pizza	22968		
	The Napolitana Pizza	24087		
	The Brie Carre Pizza	11588.499999999999		
	The Spinach Supreme Pizza	15277.75		
	The Calabrese Pizza	15934.25		
	The Green Garden Pizza	13955.75		
	The Mediterranean Pizza	15360.5		
	The Spinach Pesto Pizza	15596		





# THANK YOU!

