



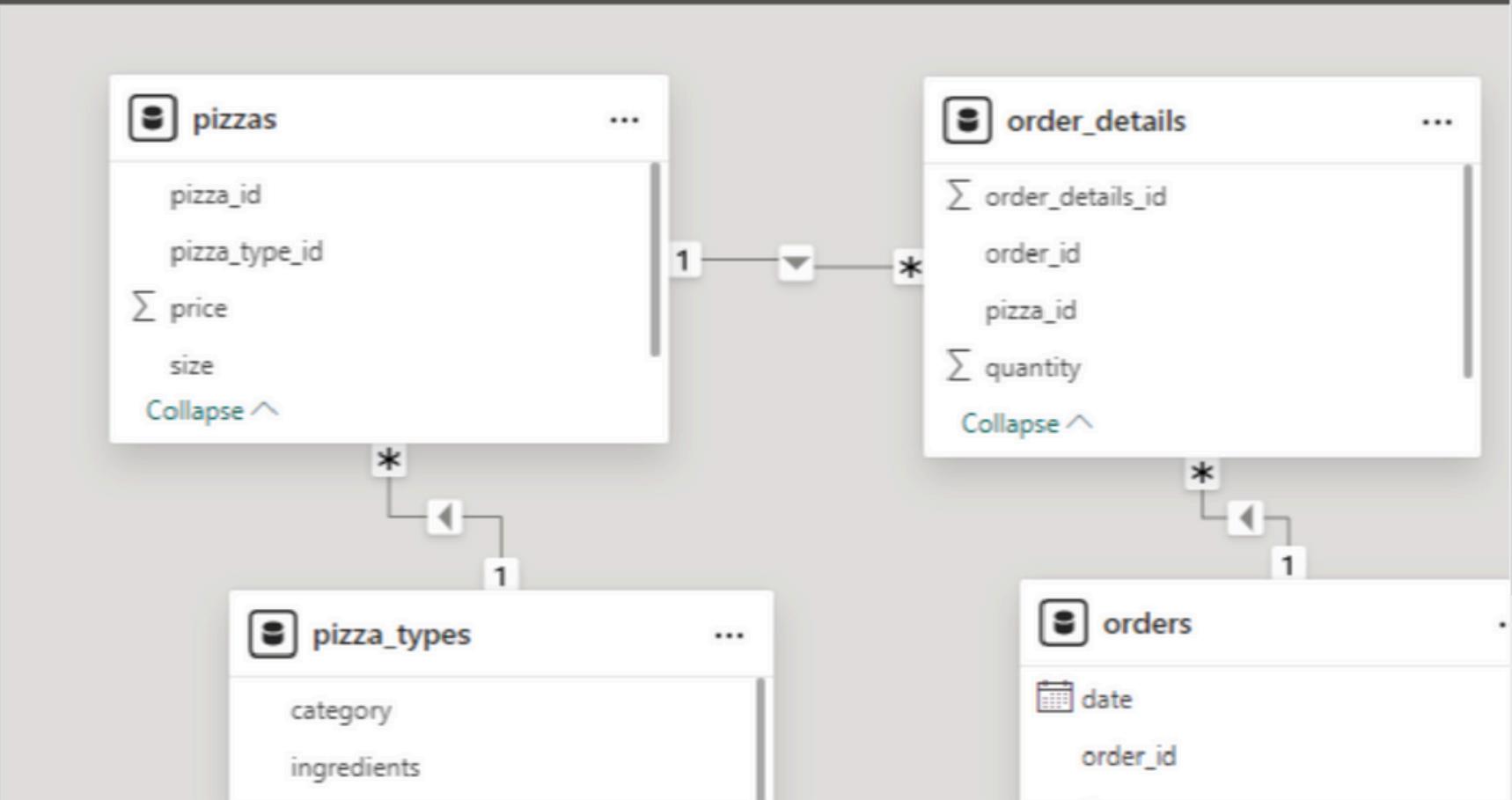
PIZZA SALES



objective

The objective of this project is to analyse pizza sales data to identify trends and provide actionable insights that can help to increase sales and aim to uncover key metrics and patterns within the sales data by leveraging SQL queries in MySQL.

Model View: Representing Relationships Between Tables



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(orders_details.quantity*pizzas.price)) as total_revenue  
from `orders_details` join pizzas  
on pizzas.pizza_id = orders_details.pizza_id;
```

Result Grid	
	total_revenue
▶	817860

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 price desc limit 1 ;
```

Result Grid | Filter R

	name	price
▶	The Greek Pizza	35.95



4) Identify the most common pizza size ordered.

```
select pizzas.size, count(`orders_details`.order_details_id) as order_count
from `pizzasales`.`pizzas` join `pizzasales`.`orders_details`
on pizzas.pizza_id = orders_details.pizza_id
group by pizzas.size order by order_count desc;
```

Result Grid | Filter Rows:

	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(`orders_details`.quantity) as quantity
from `pizzasales`.`pizza_types` join `pizzasales`.`pizzas`
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join `pizzasales`.`orders_details`
on `orders_details`.pizza_id = pizzas.pizza_id
group by pizza_types.name
order by quantity desc limit 5;
```

	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(orders_details.quantity) as quantity
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join orders_details
on orders_details.pizza_id = pizzas.pizza_id
group by pizza_types.category order by quantity desc;
```

Result Grid | Filter Rows:

	category	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 hour,count(order_id) as order_count from orders  
group by hour(order_time);
```

Result Grid | Filter Rows:

	hour	order_count
▶	11	1231
:	12	2520
:	13	2455
:	14	1472
:	15	1468
:	16	1920
:	17	2336

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_pizzas_ordered_per_day from  
(select orders.order_date,sum(`pizzasales`.`orders_details`.quantity) as quantity  
from `pizzasales`.`orders` join `pizzasales`.`orders_details`  
on `pizzasales`.`orders`.order_id = `pizzasales`.`orders_details`.order_id  
group by orders.order_date)as order_quantity;
```

	avg_pizzas_ordered_per_day
▶	138



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

```
select pizza_types.name,  
sum(orders_details.quantity*pizzas.price) as revenue  
from `pizzsales`.`pizza_types` join pizzas  
on `pizzsales`.`pizzas`.pizza_type_id = `pizzsales`.`pizza_types`.pizza_type_id  
join orders_details  
on orders_details.pizza_id = pizzas.pizza_id  
group by `pizzsales`.`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.

```
select pizza_types.category,
round(sum(orders_details.quantity*pizzas.price)/(select round(sum(orders_details.quantity*pizzas.price),2)as total_sales
from orders_details
join pizzas on pizzas.pizza_id = orders_details.pizza_id)*100,2) as revenue
from pizza_types join pizzas
on pizzas.pizza_type_id = pizza_types.pizza_type_id
join orders_details
on orders_details.pizza_id = pizzas.pizza_id
group by pizza_types.category
order by revenue desc;
```

Result Grid | Filter Rows:

	category	revenue
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

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(orders_details.quantity*pizzas.price) as revenue  
from orders_details join pizzas  
on orders_details.pizza_id = pizzas.pizza_id  
join orders  
on orders.Order_id = orders_details.Order_id  
group by 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



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 desc ) as rn
from
(select pizza_types.category,pizza_types.name,
sum((orders_details.quantity)*pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join orders_details
on orders_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

Insights

- 1) The analysis revealed that a Large size pizza is most commonly used.
- 2)The Thai chicken pizza ,Barbecue chicken pizza and califonia chicken pizza generate the highest revenue.
- 3)The most ordered pizza type based on quantites are the classic delux pizza, the barbecue chicken pizza and the Hawaiian pizza
- 4)The average number of pizzas ordered per day is 138.
- 5)Cumulative revenue trends provide a long -term view of performance.
- 6)understanding the percentage contribution of each pizza type to total revenue helps in identifying customer preference.

Conclusion

In MySQL queries we've identified total orders and revenue, as well as customer preference and temporal patterns in ordering behaviour. These findings inform actionable recommendations for menu optimization etc. Continuous monitoring and adaptation based on data-driven insights will be crucial for sustaining competitive advantage and achieving long-term success.

THANK YOU

