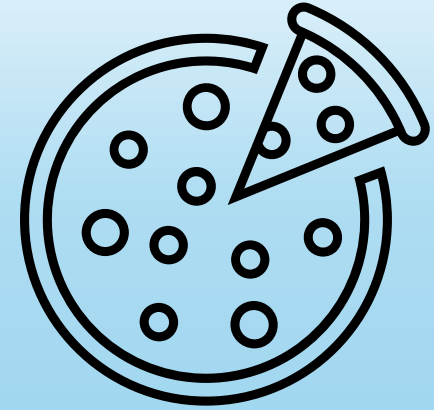


# PIZZA SALES ANALYSIS



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For this project, I sourced pizza sales data from Kaggle which contains four csv files:

1. Order details.csv
2. orders.csv
3. pizza\_types.csv
4. pizzas.csv

which I subsequently imported into MySQL Workbench.

- orders.csv has columns : order\_id, date, time
- order\_details.csv has columns : order\_details\_id, order\_id, pizza\_id, quantity
- pizza\_types.csv has columns : pizza\_type\_id, name, category, ingredients
- pizzas.csv has columns : pizza\_id, pizza\_type\_id, size, price

# Key Queries Addressed:

1. Total number of orders placed.
2. Total revenue generated from pizza sales.
3. The highest-priced pizza.
4. The most common pizza size ordered.
5. Top 5 most ordered pizza types and their quantities.
6. Distribution of orders by hours of the day.
7. Category-wise distribution of pizzas.
8. Average number of pizzas ordered per day.
9. Top 3 most ordered pizza types based on revenue.
10. Percentage contribution of each pizza type to revenue.

## 1. Total number of orders placed

```
-- Retrieve the total number of orders placed.  
Select count(*) from orders;
```

	count(*)
▶	21350

The **Total** number of orders placed stands at 21350

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

```
select round(sum(od.quantity*p.price),2) from  
order_details od  
join pizzas p  
using(pizza_id)
```

	round(sum(od.quantity*p.price),2)
▶	817860.05

Total Revenue generated from Pizza Sales is  
817860

### 3. Calculate the highest price pizza

```
select pt.name, p.price from  
pizzas p join pizza_types pt  
on pt.pizza_type_id=p.pizza_type_id  
order by p.price desc  
limit 1;
```

	name	price
▶	The Greek Pizza	35.95

The highest-priced pizza is the Greek XXL pizza with a price of 35.950

#### 4. The most common pizza size ordered.

```
select p.size, count(distinct od.order_id) orders from
pizzas p join order_details od
using(pizza_id)
group by p.size
order by orders desc;
```

	size	orders
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

The most common pizza size ordered is a “Large” sized pizza with an order size of 18526.

## 5. List of top 5 most ordered pizza types

```
select od.pizza_id,pizzas.pizza_type_id,pizza_types.name,sum(od.quantity) total_quantity
from order_details od join pizzas
using(pizza_id)
join pizza_types using(pizza_type_id)
group by od.pizza_id,pizzas.pizza_type_id,pizza_types.name
order by total_quantity desc
limit 5;
```

	pizza_id	pizza_type_id	name	total_quantity
▶	big_meat_s	big_meat	The Big Meat Pizza	1914
	thai_chn_l	thai_chn	The Thai Chicken Pizza	1410
	five_cheese_l	five_cheese	The Five Cheese Pizza	1409
	four_cheese_l	four_cheese	The Four Cheese Pizza	1316
	classic_dlx_m	classic_dlx	The Classic Deluxe Pizza	1181

The Top 5 most ordered pizza types are

1. CLASSIC DLX
2. BBQ\_CKN
3. HAWAIIAN
4. PEPPERONI
5. THAI\_CKN



## 6. Determine the distribution of orders by hour of the day

```
Select Hour(orders.time),count(orders.order_id) as dist
from orders
group by Hour(orders.time)
order by Hour(orders.time);
```

12 pm -1pm and 5pm – 7pm are the peak  
timeframes

	Hour(orders.time)	dist
▶	9	1
	10	8
	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

## 7. Category-wise distribution of pizzas.

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

	category	count( distinct name)
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

## 8. Average number of pizzas ordered per day

```
select round(avg(total_quant),0) from (select o.date,sum(od.quantity) as total_quant  
from orders o join order_details od  
on o.order_id=od.order_id  
group by o.date  
order by o.date) d
```

	round(avg(total_quant),0)
▶	138

On average 1378 pizzas are ordered per day.

## 9. Total quantity of pizza ordered by each category

```
select pizza_types.category, sum(od.quantity) total_quantity
from order_details od join pizzas
using(pizza_id)
join pizza_types using(pizza_type_id)
group by pizza_types.category
order by total_quantity desc;
```

	category	total_quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

## 10. Top 3 most ordered pizza types based on revenue

```
select pt.name, sum(od.quantity*p.price) as revenue
from order_details od join pizzas p using(pizza_id)
join pizza_types pt using(pizza_type_id)
group by pt.name
order by revenue desc
limit 3
```

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

The Thai Chicken Pizza, the Barbeque Chicken Pizza, and the California Pizza are the highest revenue-generating pizzas.

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

```
with cte1 as (select pt.category, round(sum(od.quantity*p.price), 2) tot_rev
from order_details od join pizzas p
on od.pizza_id=p.pizza_id
join pizza_types pt on
p.pizza_type_id=pt.pizza_type_id
group by pt.category
order by tot_rev desc)
select category, round(100*(tot_rev/( select round(sum(od.quantity*p.price), 2)
from order_details od join pizzas p
on od.pizza_id=p.pizza_id
join pizza_types pt on
p.pizza_type_id=pt.pizza_type_id))), 2) category_contribution from cte1
```

	category	category_contribution
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

# Key Suggestions

- To further enhance the business growth the company may put prime focus on the Classic Pizza category as it is the most ordered pizzas.
- The company may further offer some bonus points to its regular customers.
- The company may offer coupons to encourage customers to purchase pizzas other than the top-selling pizzas.
- Some special offers or Discounts could be provided during the non-peak Hours of purchasing.
- Additionally, a small price cut could be granted on the top-selling pizzas during the non-peak hours.

The slide features a light blue background with decorative geometric elements in the corners. In the top right corner, there is a large light blue triangle pointing downwards and to the left, with a smaller, darker blue triangle overlapping its bottom edge. In the bottom left corner, there is a large light blue triangle pointing upwards and to the right, with a smaller, darker blue triangle overlapping its top edge.

Thank you