

# PIZZA SALES DATA ANALYSIS



i have used **MYSQL** to  
analyse key performance  
indicators and trends and  
**POWER BI** for data  
visualisation

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RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

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

	total_orders
▶	21350

## CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

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

	total_revenue
▶	817860.05

## IDENTIFY THE HIGHEST-PRICED PIZZA.

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

	name	price
▶	The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

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

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

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

```
SELECT
    pt.name,
    COUNT(od.order_details_id) AS total_order,
    SUM(quantity) AS qty
FROM
    pizza_types pt
        JOIN
    pizzas p ON p.pizza_type_id = pt.pizza_type_id
        JOIN
    order_details od ON od.pizza_id = p.pizza_id
GROUP BY name
ORDER BY total_order DESC
LIMIT 5;
```

	name	total_order	qty
▶	The Classic Deluxe Pizza	2416	2453
	The Barbecue Chicken Pizza	2372	2432
	The Hawaiian Pizza	2370	2422
	The Pepperoni Pizza	2369	2418
	The Thai Chicken Pizza	2315	2371

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT pt.category, SUM(od.quantity) AS total_qty
FROM pizza_types pt
    JOIN pizzas p ON p.pizza_type_id = pt.pizza_type_id
    JOIN order_details od ON od.pizza_id = p.pizza_id
GROUP BY pt.category
ORDER BY total_qty DESC;
```

	category	total_qty
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT  
    HOUR(order_time) AS total_hrs,  
    COUNT(order_id) AS order_count  
FROM  
    orders  
GROUP BY HOUR(order_time)  
ORDER BY HOUR(order_time);
```

	total_hrs	order_count
▶	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

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

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

	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(total_orders), 0)  
FROM  
(SELECT  
    o.order_date, SUM(od.quantity) AS total_orders  
FROM  
    orders o  
JOIN order_details od ON od.order_id = o.order_id  
GROUP BY o.order_date) AS avg_orders;
```

ROUND(AVG(total\_orders), 0)

▶ 138

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

```
SELECT pt.name, ROUND(SUM(p.price * od.quantity), 2) AS revenue
FROM pizza_types pt
JOIN pizzas p ON p.pizza_type_id = pt.pizza_type_id
JOIN order_details od ON od.pizza_id = p.pizza_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

## CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
SELECT
    pt.category,
    ROUND(SUM(p.price * od.quantity) / (SELECT
                                            ROUND(SUM(p.price * od.quantity), 2) AS total_revenue
                                         FROM
                                            pizzas p
                                         JOIN
                                            order_details od ON od.pizza_id = p.pizza_id) * 100,
         2) AS per_cont
FROM
    pizza_types pt
    JOIN
        pizzas p ON p.pizza_type_id = pt.pizza_type_id
    JOIN
        order_details od ON od.pizza_id = p.pizza_id
GROUP BY pt.category
ORDER BY per_cont DESC;
```

	category	per_cont
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

## DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```
select category , name, revenue, rn
from
(select category, name , revenue,
rank() over (partition by category order by revenue desc) as rn
from
(select pt.category,pt.name,ROUND(SUM(p.price * od.quantity), 2) AS revenue
from pizza_types pt
join pizzas p on p.pizza_type_id=pt.pizza_type_id
join order_details od on od.pizza_id=p.pizza_id
group by pt.category,pt.name) as a) as b
where rn<=3;
```

category	name	revenue	rn
Chicken	The Thai Chicken Pizza	43434.25	1
Chicken	The Barbecue Chicken Pizza	42768	2
Chicken	The California Chicken Pizza	41409.5	3
Classic	The Classic Deluxe Pizza	38180.5	1
Classic	The Hawaiian Pizza	32273.25	2
Classic	The Pepperoni Pizza	30161.75	3
Supreme	The Spicy Italian Pizza	34831.25	1
Supreme	The Italian Supreme Pizza	33476.75	2
Supreme	The Sicilian Pizza	30940.5	3
Veggie	The Four Cheese Pizza	32265.7	1
Veggie	The Mexicana Pizza	26780.75	2
Veggie	The Five Cheese Pizza	26066.5	3

## ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
select order_date,  
sum(revenue) over (order by order_date) as cumulative_rev  
from  
(select orders.order_date,  
sum(orders_details.quantity * pizzas.price) as revenue  
from orders_details join pizzas  
on orders_details.pizz_id = pizzas.pizza_id  
join orders  
on orders.order_id = orders_details.order_id  
group by orders.order_date) as sales;
```

	order_date	cumulative_rev
▶	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

# Pizza Sales Dashboard

Category

All

size

All

...

Total Sales

**8,17,860**

Average Orders in a day

**60**

Average Pizza in a Order

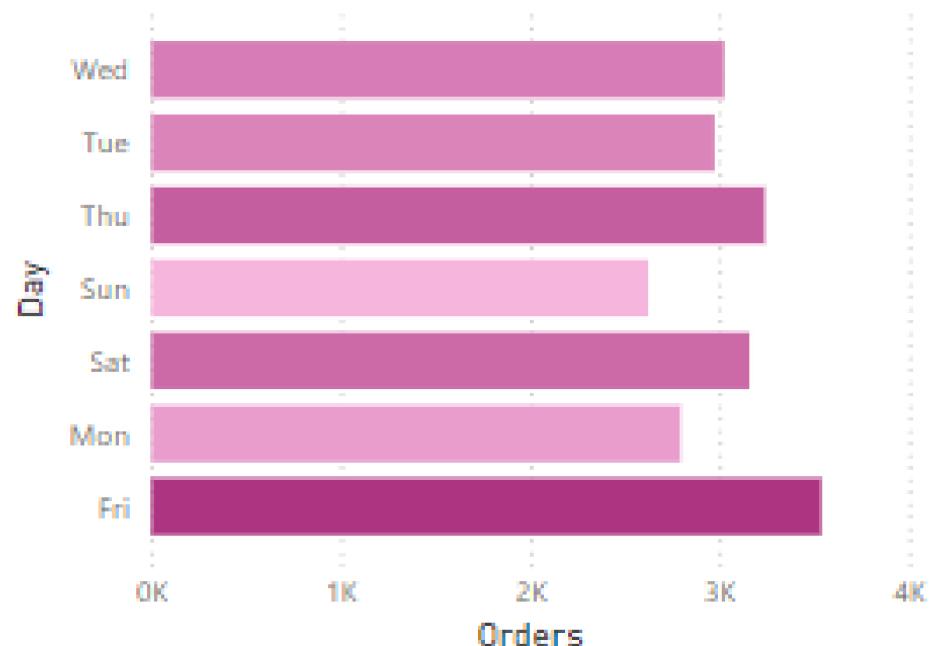
**2**

Total Order

**21350**

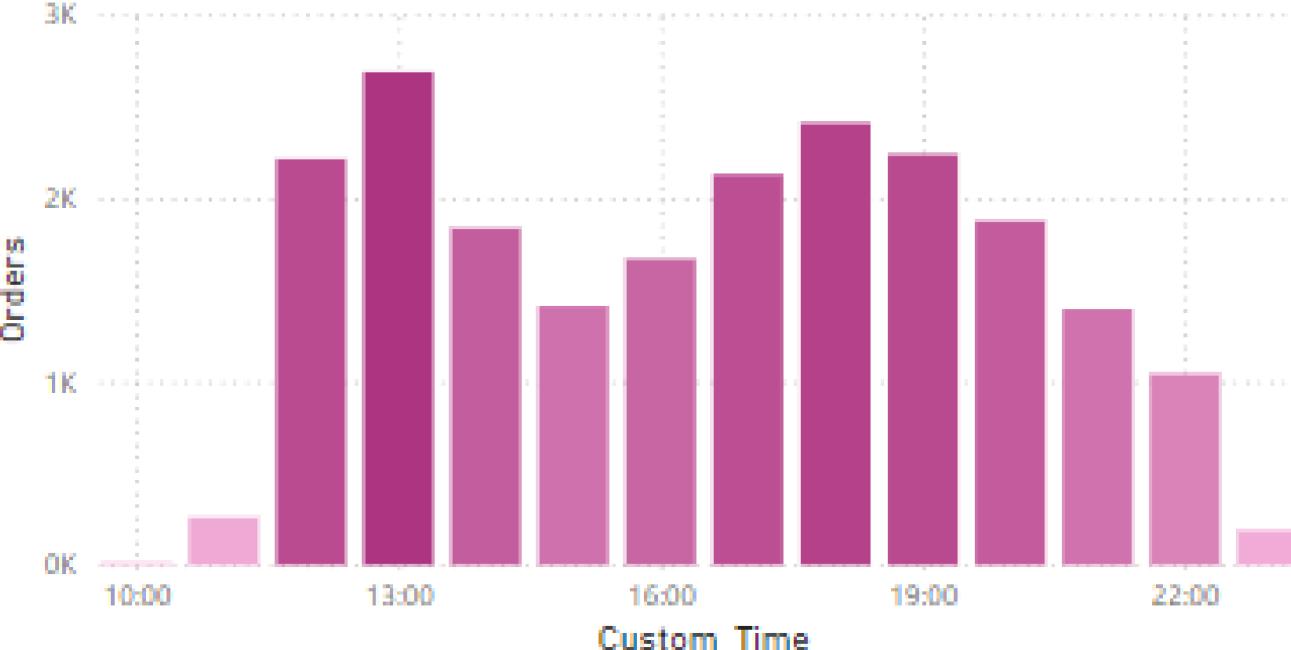
## Day | Orders

Orders 2.62K [3.54K]



## What are the peak Hours?

Orders 0K [2.69K]



## Month | Sales

Total Sales



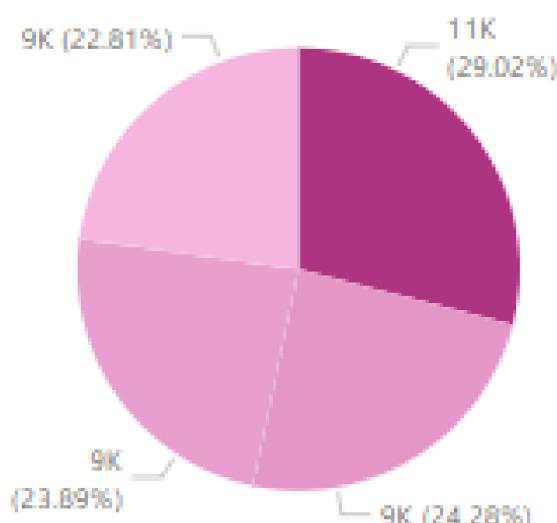
## Top 5 Pizza

Top 5

Bottom 5

category	name	Total Sales
Chicken	The Thai Chicken Pizza	43,434.25
Chicken	The Barbecue Chicken Pizza	42,768.00
Chicken	The California Chicken Pizza	41,409.50
Classic	The Classic Deluxe Pizza	38,180.50
Supreme	The Spicy Italian Pizza	34,831.25

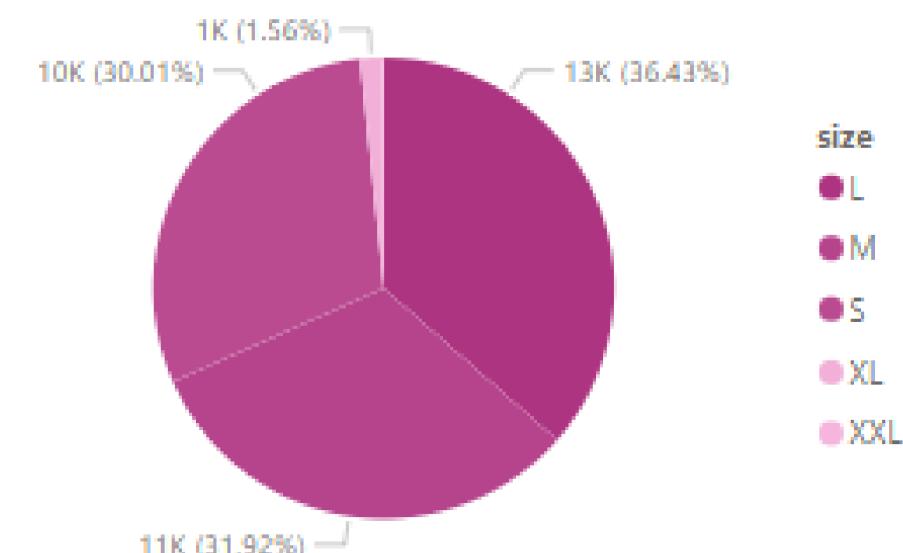
## Preferred Category



category

- Classic
- Supreme
- Veggie
- Chicken

## Preferred Size



# THANK YOU

COMBINING BOTH MYSQL AND POWER BI LED TO VALUABLE INSIGHTS FOR  
MAKING BETTER DECISIONS AND IMPROVE SALES STRATEGIES. PLEASE DO  
COMMENT FOR ANY IMPROVEMENTS.