

PLATO's PIZZERIA SALES ANALYSIS using SQL AND POWER BI

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INTRODUCTION

PLATO's PIZZERIA SALES ANALYSIS

Plato's Pizza is a Greek-inspired pizza place in New Jersey. The challenge was to leverage Transactional Data accumulated over the past year to uncover insights and devise actionable strategies for boosting sales and operational efficiency.



TO FIND INSIGHTS
WE WILL USE SQL
AND POWER BI



Q.1 What Is the Total Revenue?

```
select sum(total_price) as Total_Revenue  
from pizza_sales
```

Results Messages

	Total_Revenue
1	817860.05083847



Q.2 What Is the Avg Order Value?

```
select sum(total_price) / count(distinct order_id)
as Average_Order_Value
from pizza_sales
```

Results Messages

	Average_Order_Value
1	38.3072623343546



Q.3 Quantity of Total Pizzas Sold?

```
select sum(quantity) as Total_Pizzas_Sold  
from pizza_sales
```

Results		Messages	
	Total_Pizzas_Sold		
1	49574		



Q.4 Total No. of Orders Placed?

```
select count(distinct order_id) as Total_Orders_Placed  
from pizza_sales
```

Results		Messages	
		Total_Orders_Placed	
1		21350	



Q.5 Avg Pizzas ordered Per Order?

```
select cast(cast(sum(quantity) as decimal(10,2)) /  
cast(count(distinct order_id) as decimal (10,2)) as decimal (10,2))  
as 'Avg. Pizza per Order'  
from pizza_sales
```

Results Messages

	Avg. Pizza per Order
1	2.32



Q.6 Daily Order Trends?

```
select datename(dw,order_date) as Order_day,  
count(distinct order_id) as Total_Orders  
from pizza_sales  
group by datename(dw,order_date)  
order by Total_Orders
```

Results Messages

	Order_day	Total_Orders
1	Sunday	2624
2	Monday	2794
3	Tuesday	2973
4	Wednesday	3024
5	Saturday	3158
6	Thursday	3239
7	Friday	3538



Q.7 Monthly Order Trends?

```
select datename(month, order_date) as Month,  
count(distinct order_id) as Total_Orders  
from pizza_sales  
group by datename(month, order_date)  
order by Total_Orders desc
```

Results Messages		
	Month	Total_Orders
1	July	1935
2	May	1853
3	January	1845
4	August	1841
5	March	1840
6	April	1799
7	November	1792
8	June	1773
9	February	1685
10	December	1680
11	September	1661
12	October	1646



Q.8 Total % of Pizza Sales by Category?

```
select pizza_category, sum(total_price) /  
(select sum(total_price) from pizza_sales)*100  
as 'PCT by Categories'  
from pizza_sales  
group by pizza_category
```

Results Messages		
	pizza_category	PCT by Categories
1	Classic	26.9059602306976
2	Chicken	23.9551375322885
3	Veggie	23.6825910258677
4	Supreme	25.4563112111462



Q.9 Total % of Pizza Sales by Size?

```
select pizza_size, sum(total_price) as Total_sales,  
cast(sum(total_price) * 100/  
(select sum (total_price) from pizza_sales) as decimal (10,2))  
as 'PCT by Pizza Size'  
from pizza_sales  
group by pizza_size  
order by 'PCT by Pizza Size' desc
```

Results Messages

	pizza_size	Total_sales	PCT by Pizza Size
1	L	375318.701004028	45.89
2	M	249382.25	30.49
3	S	178076.49981308	21.77
4	XL	14076	1.72
5	XXL	1006.6000213623	0.12



Q.10 Top 5 Pizza Names by Total Revenue?

```
select top 5 pizza_name, sum(total_price)
as Total_revenue
from pizza_sales
group by pizza_name
order by Total_revenue desc
```

	pizza_name	Total_revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5
4	The Classic Deluxe Pizza	38180.5
5	The Spicy Italian Pizza	34831.25



Q.11 Bottom 5 Pizza Names by Total Revenue?

```
select top 5 pizza_name, sum(total_price)
as Total_revenue
from pizza_sales
group by pizza_name
order by Total_revenue asc
```

Results Messages		
	pizza_name	Total_revenue
1	The Brie Carre Pizza	11588.4998130798
2	The Green Garden Pizza	13955.75
3	The Spinach Supreme Pizza	15277.75
4	The Mediterranean Pizza	15360.5
5	The Spinach Pesto Pizza	15596



Q.12 Top 5 Pizza by Total Quantities Sold?

```
SELECT Top 5 pizza_name, SUM(quantity) AS Total_Pizza_Sold
FROM pizza_sales
GROUP BY pizza_name
ORDER BY Total_Pizza_Sold DESC
```

Results Messages

	pizza_name	Total_Pizza_Sold
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371



Q.13 Bottom 5 Pizza by Total Quantities Sold?

```
SELECT Top 5 pizza_name, SUM(quantity) AS Total_Pizza_Sold
FROM pizza_sales
GROUP BY pizza_name
ORDER BY Total_Pizza_Sold asc
```

	pizza_name	Total_Pizza_Sold
1	The Brie Carre Pizza	490
2	The Mediterranean Pizza	934
3	The Calabrese Pizza	937
4	The Spinach Supreme Pizza	950
5	The Soppressata Pizza	961



RECOMMENDATION TO PLATO'S PIZZERIA

1. REMOVE the PIZZA of sizes XL & XXL from the MENU as they account for only 1.8% OF TOTAL REVENUE.
THIS CAN HELP TO STREAMLINE THE MENU BETTER AND SIMPLIFY THE OPERATIONS REQUIRED.
2. PIZZA SALES SHOW TWO DISTINCT PEAKED PERIODS I.E. 11:00 TO 13:00 WHICH IS LUNCHTIME AND DINNER TIME,
ADDITIONAL STAFF ARE RECOMMENDED DURING PEAK HOURS TO HANDLE CUSTOMERS.
3. CHANGE THE OPERATING TIME FROM 11:00 TO 23:00, THIS CAN HELP TO MINIMISE THE OPERATING COST BY 20%.





THANK
YOU



PLATO'S PIZZERIA

PIZZA CATEGORIES

All



RECOMMENDATIONS

● REMOVE the PIZZA of sizes XL & XXL from the MENU as they account only 1.8% of TOTAL REVENUE.

● THIS CAN HELP TO STREAMLINE THE MENU BETTER AND SIMPLIFY THE OPERATIONS REQUIRED

Total Revenue

817.86K

Total Pizzas Sold

49.57K

Total Orders

21.35K

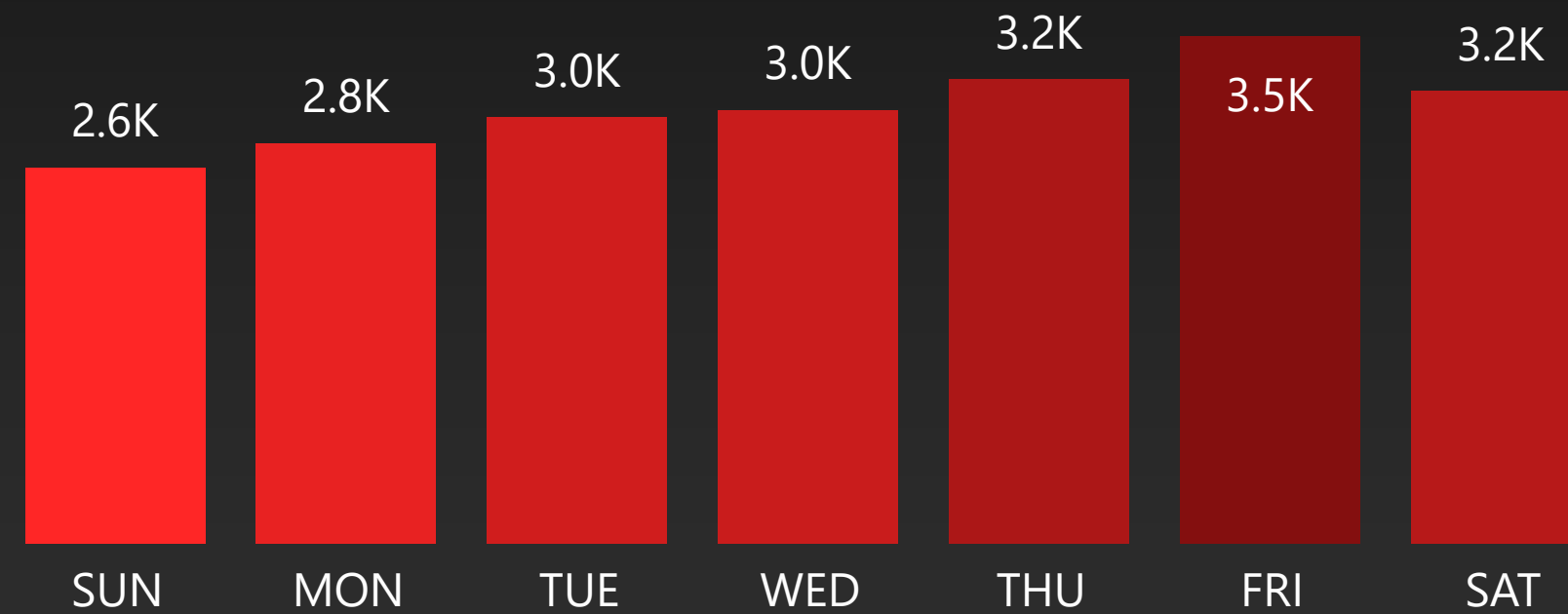
Avg Order Value

38.31

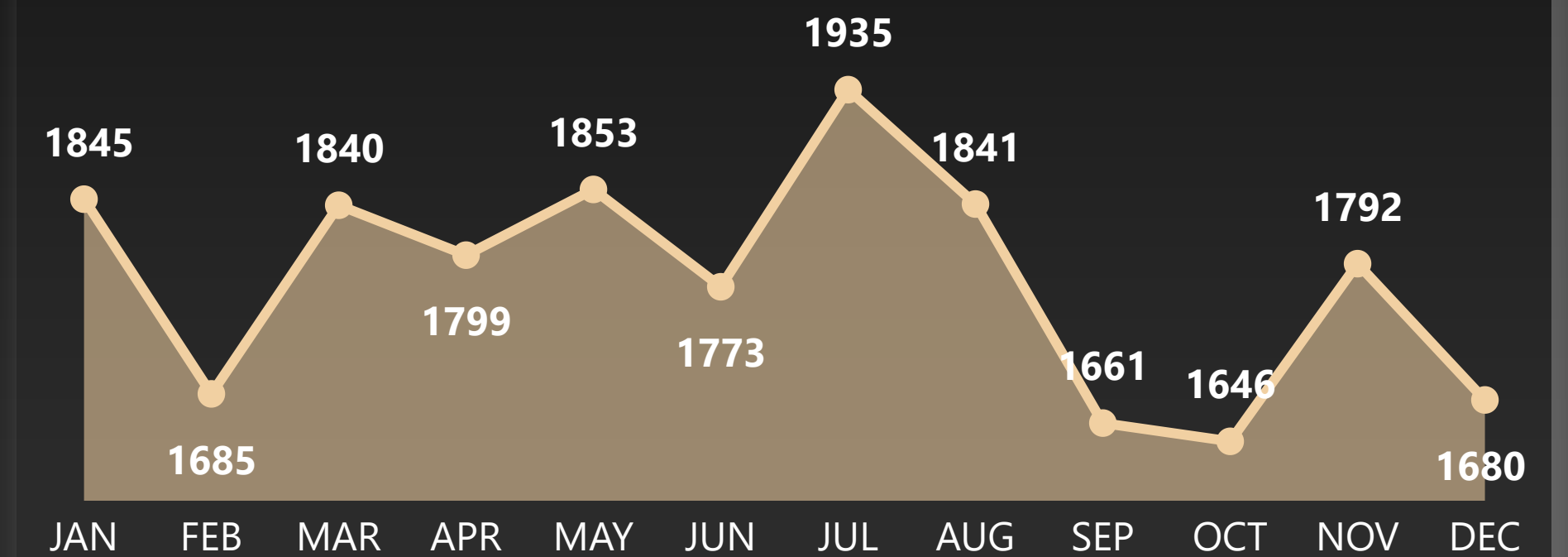
Average Pizzas Sold

2.32

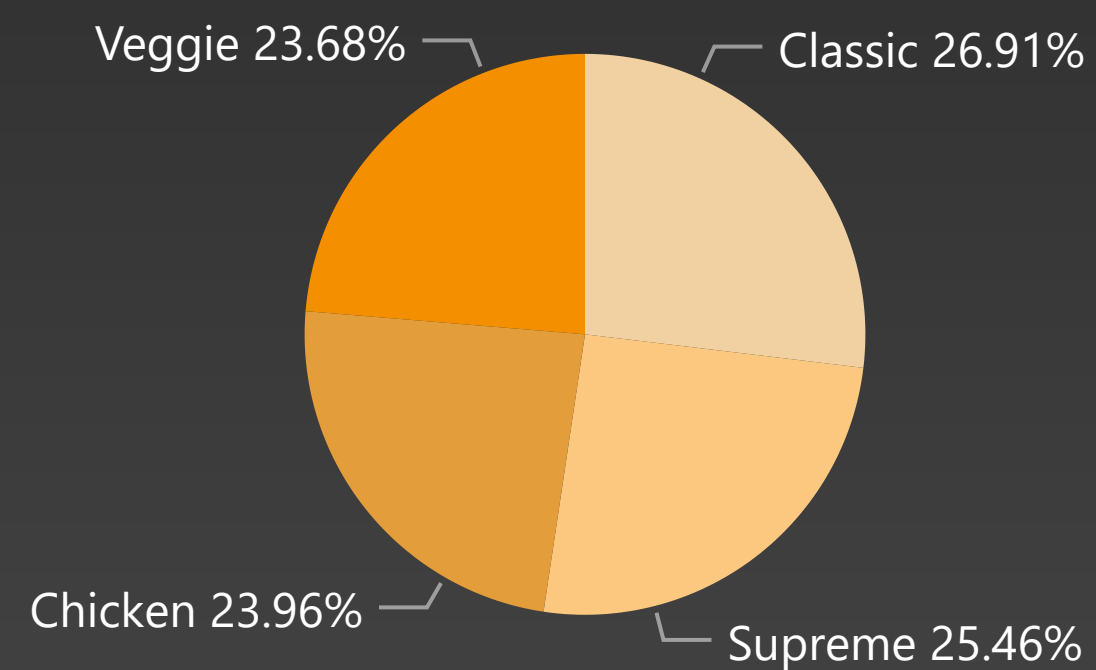
Total Orders by Day



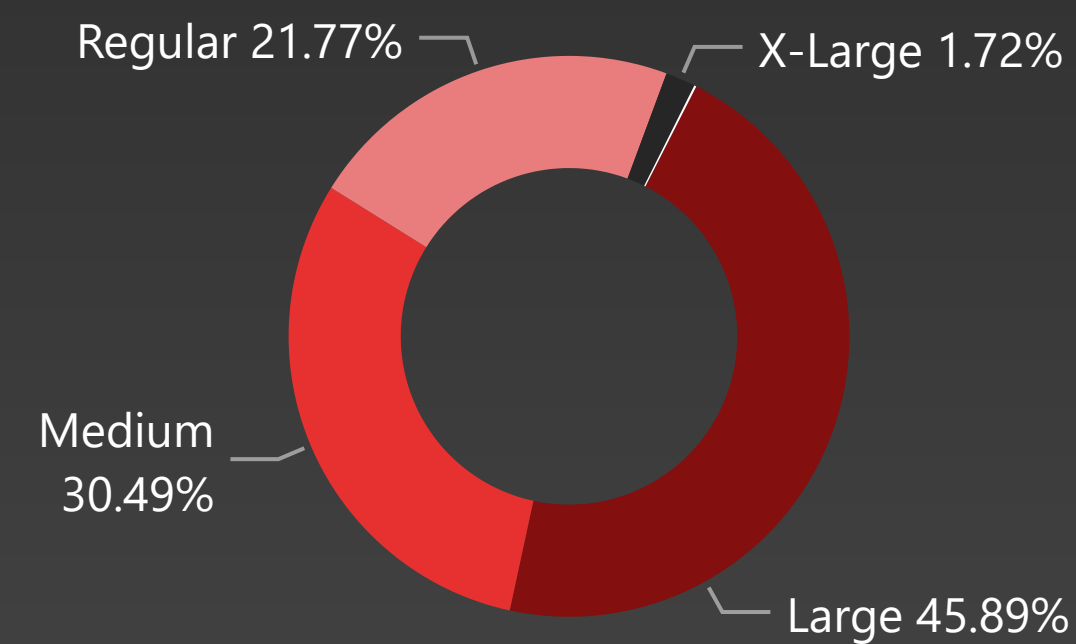
Monthly Order's Trend



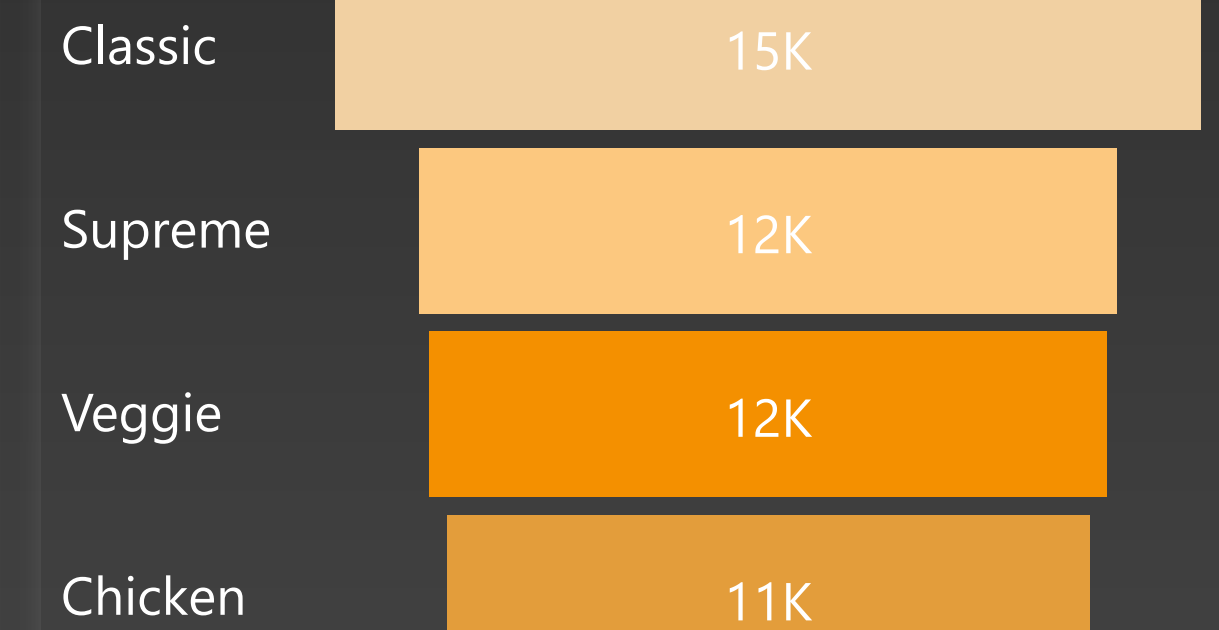
Total Revenue by pizza_category



Total Revenue by pizza_size



Total Pizzas Sold by Categories





All



**CHANGE THE
OPERATING TIME
FROM 11:00 -23:00**

817.86K

49.57K

21.35K

38.31

2.32

Age Group	Percentage
10	0.00%
11	0.04%
12	5.77%
13	11.80%
14	11.50%
15	6.89%
16	6.88%
17	8.99%
18	10.94%
19	11.24%
20	7.69%
21	5.61%
22	3.11%
23	0.13%

[illegible]



PLATO'S PIZZERIA

PIZZA CATEGORIES

All



INSIGHTS

CHICKEN AND CLASSIC PIZZAS ARE TOP SELLING PIZZAS

SUPREME AND VEGGIE PIZZAS ARE LEAST POPULAR PIZZAS.

BRIE CARRE IS BY FAR LEAST POPULAR PIZZA

Total Revenue

817.86K

Total Pizzas Sold

49.57K

Total Orders

21.35K

Avg Order Value

38.31

Average Pizzas Sold

2.32

Top 5 Pizza's By Revenue

The Thai Chicken P...

43K

The Barbecue Chic...

43K

The California Chic...

41K

Bottom 5 Pizza's By Revenue

The Brie Carre Piz...

11.6K

The Green Garde...

14.0K

The Spinach Supr...

15.3K

Top 5 Pizza's By Revenue

The Classic Deluxe...

2.5K

The Barbecue Chic...

2.4K

The Hawaiian Pizza

2.4K

Bottom 5 Pizza's By Revenue

The Brie Carre Piz...

490

The Mediterranea...

934

The Calabrese Piz...

937