SQL+ Excel Project

Context of dataset: Pizza Shop Data

Data Source: Pizza Data For SQL & Excel

KPI Requirement

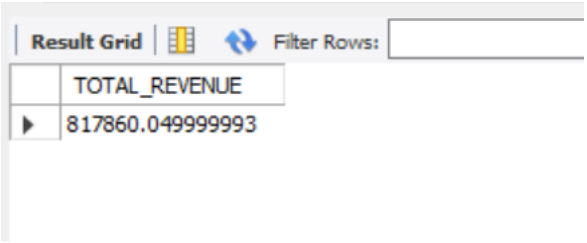
To analyze key indicators for pizza sales data to gain insights into the business.

Metrics to calculate:

1. Total Revenue: This is the sum of the total price of all pizza orders

Select SUM(total_price) AS TOTAL_REVENUE from pizza_sales

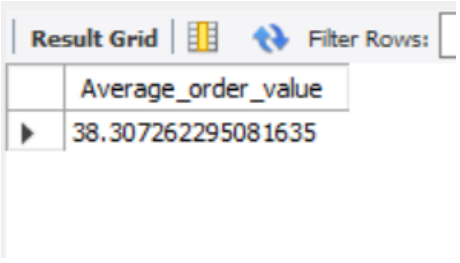
Output:



2. Average Order Value: This is the average amount spent per order.

Select * FROM pizza_sales;
Select SUM(total_price) /count(DISTINCT order_id) AS Average_order_value from pizza_sales

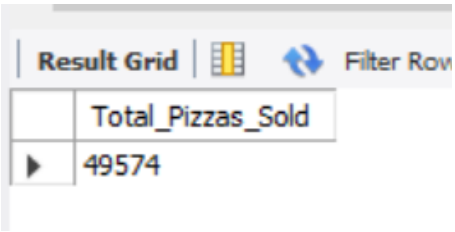
Output:



3. Total Pizzas sold

SELECT * FROM pizza_sales;
SELECT sum(quantity) AS Total_Pizzas_Sold from pizza_sales;

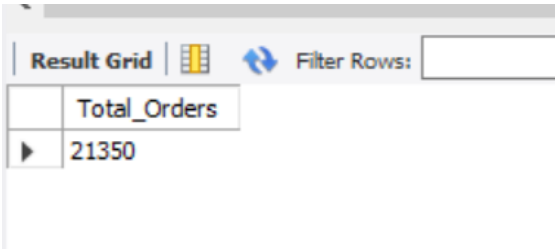
Output:



4. Total Orders

```
SELECT * FROM pizza_sales;
SELECT COUNT(DISTINCT order_id) AS Total_Orders from pizza_sales;
```

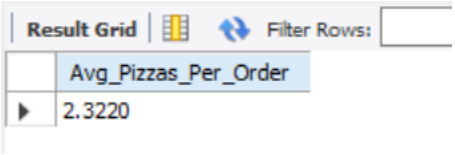
Output:



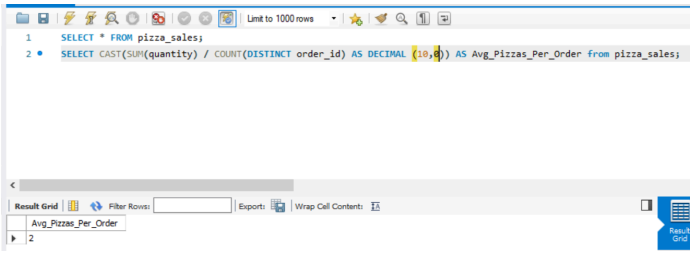
5. Total number of pizzas sold

```
SELECT * FROM pizza_sales;
SELECT SUM(quantity) / COUNT(DISTINCT order_id) AS Avg_Pizzas_Per_Order from pizza_sales;
```

Output:



Rounded up



Additionally, I want to create some charts with further insights into the data provided to answer the questions below.

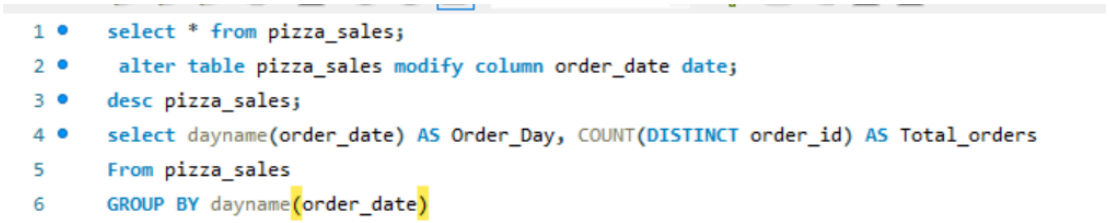
i) To identify any patterns in order volumes on a daily basis - Daily trend for total orders
ii) To identify peak hours or periods of high order activity- Hourly trend for total orders

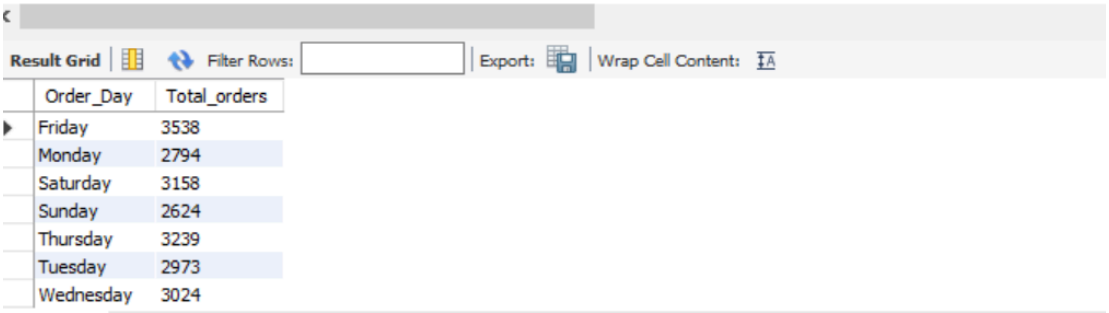
iii) To provide insight into the popularity of various pizza categories- Percentage of sales by pizza category
iv) Percentage of sales by pizza size
v) Total pizzas sold by pizza category
vi) Top 5 best sellers by total pizzas sold
vii) Bottom 5 sellers by total pizzas sold

1. Daily trend for total orders

```
select * from pizza_sales;
 alter table pizza_sales modify column order_date date;
desc pizza_sales;
select dayname(order_date) AS Order_Day, COUNT(DISTINCT order_id) AS Total_orders
From pizza_sales
GROUP BY dayname(order_date);
```

Output:





Order_Day	Total_orders
Friday	3538
Monday	2794
Saturday	3158
Sunday	2624
Thursday	3239
Tuesday	2973
Wednesday	3024

2. Hourly trend for total orders

```
select hour(order_time) as time_of_order,COUNT(DISTINCT order_id) AS Total_orders
from pizza_sales
GROUP BY hour(order_time)
ORDER BY hour(order_time);
```

Output:

```
8  select hour(order_time) as time_of_order,COUNT(DISTINCT order_id) AS Total_orders
9  from pizza_sales
10 GROUP BY hour(order_time)
11 ORDER BY hour(order_time);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

time_of_order	Total_orders
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

3. Percentage of sales by pizza category

```
select pizza_size, sum(total_price), sum(total_price) *100 /
(select sum(total_price) from pizza_sales) AS PCT
from pizza_sales
GROUP BY pizza_size
ORDER BY PCT;
```

Output:

```
13 •  select pizza_category, sum(total_price), sum(total_price) *100 / (select sum(total_price) from pizza_sales) AS PCT
14    from pizza_sales
15    GROUP BY pizza_category;
16
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pizza_category	sum(total_price)	PCT
Classic	220053.1000000001	26.9059602556699
Veggie	193690.45000000298	23.682590927384783
Supreme	208196.99999999822	25.45631126009884
Chicken	195919.5	23.955137556847493

Further to show the percentage of sales by pizza category by month;
Where 1 refers to Jan

```
12
13 •  select pizza_category, sum(total_price), sum(total_price) *100 /
14    (select sum(total_price) from pizza_sales WHERE month(order_date)= 1) AS PCT
15    from pizza_sales
16    WHERE month(order_date)= 1
17    GROUP BY pizza_category;
18
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pizza_category	sum(total_price)	PCT
Classic	18619.4	26.67791894064334
Veggie	17055.400000000027	24.437016160577095
Supreme	17929.749999999996	25.68978684200349
Chicken	16188.75	23.195278056776257

Result 31 ×

Output

Action Output

4. Percentage of sales by pizza size

```
select pizza_size, sum(total_price), sum(total_price) *100 /
(select sum(total_price) from pizza_sales) AS PCT
from pizza_sales
GROUP BY pizza_size
ORDER BY PCT;
```

Output:

```
13 •  select pizza_size, sum(total_price), sum(total_price) *100 /
14    (select sum(total_price) from pizza_sales) AS PCT
15    from pizza_sales
16    GROUP BY pizza_size
17    ORDER BY PCT;
18
19 •  select pizza_category, sum(quantity) as Pizza_Sold
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pizza_size	sum(total_price)	PCT
XXL	1006.6000000000005	0.12307729176892906
XL	14076	1.7210768517181052
S	178076.49999999843	21.773468455880682
M	249382.25	30.492044451859723
L	375318.7000000087	45.8903329487743

5.Total pizzas sold by pizza category

```
select pizza_category, sum(quantity) as Pizza_Sold
from pizza_sales
GROUP BY pizza_category;
```

Output:

```
19 •  select pizza_category, sum(quantity) as Pizza_Sold
20    from pizza_sales
21    GROUP BY pizza_category;
22
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pizza_category	Pizza_Sold
Classic	14888
Veggie	11649
Supreme	11987
Chicken	11050

6. Top best sellers by total pizzas sold

```
select pizza_name, sum(quantity) as numbers_sold
from pizza_sales
GROUP BY pizza_name
ORDER BY numbers_sold DESC;
```

Output:

```
23 •  select pizza_name, sum(quantity) as numbers_sold
24    from pizza_sales
25    GROUP BY pizza_name
26    ORDER BY numbers_sold DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pizza_name	numbers_sold
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371
The California Chicken Pizza	2370

7. Bottom 5 worst sellers by total pizzas sold

```
select  pizza_name, sum(quantity) as numbers_sold
from pizza_sales
GROUP BY pizza_name
ORDER BY numbers_sold ASC
LIMIT 5;
```

Output:

```
28 •  select  pizza_name, sum(quantity) as numbers_sold
29    from pizza_sales
30    GROUP BY pizza_name
31    ORDER BY numbers_sold ASC
32    LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content

pizza_name	numbers_sold
The Brie Carre Pizza	490
The Mediterranean Pizza	934
The Calabrese Pizza	937
The Spinach Supreme Pizza	950
The Soppressata Pizza	961