KPI's Requirement

We need to analyze key indicators for our pizza sales data to gain insights into our business performance. Specifically, we want to calculate the following metrics:

1- Total revenue : The sum of the total price of all pizza orders :

```sql
select SUM (total_price) as total_Revenue from pizza_sales_excel_file;
```

	total_Revenue
1	817860,049999993

2- Average order : the average amount spent per order , calculated by dividing the total revenue by the total number of orders :

```sql
select SUM(total_price) / COUNT(distinct order_id) as Average_order from pizza_sales_excel_file;
```

	Average_order
1	38,3072622950816

3- Total Pizzas : the sum of the quantity of all pizzas :

```sql
select SUM(quantity) as total_pizza from pizza_sales_excel_file;
```

	total_pizza
1	49574

4- Total Orders : the total number of orders :

```sql
select COUNT(distinct order_id) as Total_orders from pizza_sales_excel_file;
```

	Total_orders
1	21350

5- Average pizza per orders : calculated by dividing the total of number of pizzas by the total number of orders:

```sql
select  cast(cast(SUM (quantity) as decimal (10,2)) / cast( COUNT(distinct order_id) as decimal (10,2)) as decimal (10,2)) as average_pizza_orders  from pizza_sales_excel_file;
```

	average_pizza_orders
1	2.32

Charts Requirement

We would like to visualize various aspects of our pizza sales data to gain insights and understand

Key trends. We have identified the following requirements for creating charts:

1- Daily Trend for total orders :

```sql
select DATENAME (DW , order_date)as order_day , COUNT( distinct order_id) as
total_orders from pizza_sales_excel_file
Group by DATENAME (DW , order_date) ;
```

NB : DW => Day of week

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

2- Monthly trend for total orders :

```sql
select  DATENAME(Month,  order_date)as  month_name  ,COUNT(distinct  order_id)  as
total_orders from pizza_sales_excel_file
Group By DATENAME(Month, order_date)
Order by total_orders DESC ;
```

	month_name	total_orders
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

3- Percentage of sales by pizza category :

```
select pizza_category,SUM(total_price) as total_sales, SUM(total_price)* 100 / (select
SUM (total_price) from pizza_sales_excel_file) as PCT from pizza_sales_excel_file
Group by pizza_category ;
```

NB : PCT => Percentage of sales

	pizza_category	total_sales	PCT
1	Chicken	195919,5	23,9551375568475
2	Supreme	208196,999999998	25,4563112600988
3	Classic	220053,1	26,9059602556699
4	Veggie	193690,450000003	23,6825909273848

NB: if want to filter by month can be used "where MONTH(order_date)"

```
select pizza_category,SUM(total_price) as total_sales, SUM(total_price)* 100 / (select
SUM (total_price) from pizza_sales_excel_file) as PCT from pizza_sales_excel_file
where MONTH(order_date)=1
Group by pizza_category ;
```

	pizza_category	total_sales	PCT
1	Chicken	16188,75	1,97940344439127
2	Supreme	17929,75	2,19227605016288
3	Classic	18619,4	2,27659976789429
4	Veggie	17055,4	2,08536900659229

4- Percentage of sales by size :

```
select pizza_size, cast (SUM(total_price) as decimal (10,2) )as total_sales  ,  cast
(SUM(total_price)* 100 / (select SUM (total_price) from pizza_sales_excel_file)  as
decimal (10,2)) as PCT from pizza_sales_excel_file
Group by pizza_size
Order by PCT DESC;
```

	pizza_size	total_sales	PCT
1	L	375318.70	45.89
2	M	249382.25	30.49
3	S	178076.50	21.77
4	XL	14076.00	1.72
5	XXL	1006.60	0.12

```sql
select pizza_size, cast (SUM(total_price) as decimal (10,2) )as total_sales  ,  cast
(SUM(total_price)* 100 / (select SUM (total_price) from pizza_sales_excel_file)  as
decimal (10,2)) as PCT from pizza_sales_excel_file
where DATEPART(quarter , order_date)=1
Group by pizza_size
Order by PCT DESC;
```

	pizza_size	total_sales	PCT
1	L	95229.65	11.64
2	M	61159.00	7.48
3	S	45384.25	5.55
4	XL	3289.50	0.40
5	XXL	287.60	0.04

5- Top 5 best seller by revenue , Total Quantity and total orders :

- **by revenue :**

```sql
select  top 5 pizza_name , SUM (total_price) as total_revenue from
pizza_sales_excel_file
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

- **by Quantity:**

```sql
select  top 5 pizza_name , SUM (quantity) as total_quantity from
pizza_sales_excel_file
Group by pizza_name
order by total_quantity DESC;
```

	pizza_name	total_quantity
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

- **by orders:**

```sql
select  top 5 pizza_name , count (distinct order_id ) as total_orders from
pizza_sales_excel_file
Group by pizza_name
order by total_orders DESC;
```

	pizza_name	total_orders
1	The Classic Deluxe Pizza	2329
2	The Hawaiian Pizza	2280
3	The Pepperoni Pizza	2278
4	The Barbecue Chicken Pizza	2273
5	The Thai Chicken Pizza	2225