

KPI Requirements:

1. Total Sales
2. Total Profit
3. No of Item sold
4. Profit margin
5. Avg discount rate
6. Avg delivery day

Visual Representation:

1. Sales by Category and Sub-Category
2. Sales by Region
3. Sales and Order per Segment
4. Order Volume by Region
5. Top and Bottom State by Order
6. Top shipping mode
7. Top and bottom Customer

Year segment

SQL Queries

KPI Requirements:

1. Total Sales

```
SELECT CAST(SUM(Sales) as decimal(10,2)) AS Total_Sales  
FROM Orders_csv
```

	Total_Sales
1	2297201.07

2. Total Profit

```
SELECT CAST(SUM(Profit) as decimal(10,2)) AS Total_Profit  
FROM Orders_csv
```

	Total_Profit
1	286397.79

3. No. of Item Sold

```
SELECT SUM(Quantity) AS No_of_Item_Sold  
FROM Orders_csv
```

	No_of_Item_Sold
1	37873

4. Profit Margin

SELECT

CAST((SUM(Profit) / NULLIF(SUM(Sales), 0)) * 100 AS decimal(10,2)) AS
Profit_Margin_Percentage

FROM Orders_csv

	Profit_Margin_Percentage
1	12.47

5. Avg discount rate

SELECT Cast(AVG(Discount)*100 as decimal(10,2)) AS Avg_Discount_Rate

FROM Orders_csv

	Avg_Discount_Rate
1	15.62

6. Avg Delivery Time

SELECT CAST(AVG(CAST(Delivery_Duration AS FLOAT)) AS DECIMAL(10,2)) AS
Avg_Delivery_Duration

FROM Orders_csv

	Avg_Delivery_Duration
1	3.96

Visual Representation:

1. Sales by Category/Sub-Category

SELECT

Category,

[Sub_Category],

Cast(Sum(Sales) as decimal(10,2)) as Total_Sales

FROM Orders_csv

GROUP BY Category, [Sub_Category]

ORDER BY Category DESC, [Sub_Category];

	Category	Sub_Category	Total_Sales
1	Technology	Accessories	167380.31
2	Technology	Copiers	149528.01
3	Technology	Machines	189238.68
4	Technology	Phones	330007.10
5	Office Supplies	Appliances	107532.14
6	Office Supplies	Art	27118.80
7	Office Supplies	Binders	203412.77
8	Office Supplies	Envelopes	16476.38
9	Office Supplies	Fasteners	3024.25
10	Office Supplies	Labels	12486.30
11	Office Supplies	Paper	78479.24
12	Office Supplies	Storage	223843.59
13	Office Supplies	Supplies	46673.52
14	Furniture	Bookcases	114880.05
15	Furniture	Chairs	328449.13
16	Furniture	Furnishings	91705.12
17	Furniture	Tables	206965.68

2. Order by Region/States

SELECT

Region,

Count(*) as Total_Order,

Concat(Cast(100*count(*)/Sum(count(*) Over()) as decimal (5,2)), '%') As Order_Percentage

FROM Orders_csv

GROUP BY Region

ORDER BY Total_Order DESC;

	Region	Total_Order	Order_Percentage
1	West	3203	32.00%
2	East	2848	28.00%
3	Central	2323	23.00%
4	South	1620	16.00%

SELECT

State,

Count(*) as Total_Order

FROM Orders_csv

GROUP BY State

ORDER BY Total_Order DESC;

3. Sales and Order per Segment

```
SELECT  
  
Segment,  
  
Count(*) As Order_Per_Segment,  
  
Cast(Sum(Sales) as decimal (10,2)) as Sales_per_Segment  
  
FROM Orders_csv  
  
GROUP BY Segment  
  
ORDER BY Order_Per_Segment DESC;
```

	Segment	Order_Per_Segment	Sales_per_Segment
1	Consumer	5191	1161401.34
2	Corporate	3020	706146.44
3	Home Office	1783	429653.29

4. Sales by Region

```
SELECT  
  
Region,  
  
Cast(Sum(Sales/ 1000000.0) as decimal(10,2)) as Total_Sales_Million  
  
FROM Orders_csv  
  
GROUP BY Region
```

	Region	Total_Sales_Million
1	East	0.68
2	South	0.39
3	West	0.73
4	Central	0.50

5. States by Orders

TOP 5:

```
SELECT TOP 5  
  
[State],  
  
Count(Sales) AS No_of_Orders  
  
FROM  
  
Orders_csv  
  
GROUP BY
```

[State]

ORDER BY

No_of_Orders DESC

Results Messages		
	State	No_of_Orders
1	California	2001
2	New York	1128
3	Texas	985
4	Pennsylvania	587
5	Washington	506

Bottom 5:

SELECT TOP 5

[State],

Count(Sales) AS No_of_Orders

FROM

Orders_csv

GROUP BY

[State]

ORDER BY

No_of_Orders ASC

	State	No_of_Orders
1	Wyoming	1
2	West Virginia	4
3	North Dakota	7
4	Maine	8
5	District of Columbia	10

6. Top shipping mode

SELECT

Ship_Mode,

Count(*) As Count_Ship_Mode

FROM Orders_csv

GROUP BY Ship_Mode

	Ship_Mode	Count_Ship_Mode
1	First Class	1538
2	Same Day	543
3	Standard Class	5968
4	Second Class	1945

7. Customer by Sales

TOP 5:

SELECT TOP 5

[Customer_ID],

cast(Sum(Sales) as decimal (10,2)) AS Total_Sales

FROM

Orders_csv

GROUP BY

[Customer_ID]

ORDER BY

Total_Sales DESC

	Customer_ID	Total_Sales
1	SM-20320	25043.07
2	TC-20980	19052.22
3	RB-19360	15117.35
4	TA-21385	14595.62
5	AB-10105	14473.57

Bottom 5:

SELECT TOP 5

[Customer_ID],

cast(Sum(Sales) as decimal (10,2)) AS Total_Sales

FROM

Orders_csv

GROUP BY

[Customer_ID]

ORDER BY

Total_Sales ASC

	Customer_ID	Total_Sales
1	TS-21085	4.84
2	LD-16855	5.30
3	CJ-11875	16.52
4	MG-18205	16.74
5	RS-19870	22.33