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E-COMMERCE

SALES ANALYSIS CASE STUDY

PYTHON, SQL.

TURNING SALES DATA INTO SMARTER DECISIONS FOR FASHION RETAIL GROWTH.

OVERVIEW

- This project analyzes the sales performance of an Indian fashion retailer that sells mainly on Amazon.in.
- The company has recently experienced fluctuating sales and wants to understand the reasons behind these inconsistencies.
- By studying the sales data, we explore key problem areas such as high cancellations, fulfillment performance, product category trends, regional variations, and shipping service impact.
- The analysis aims to uncover meaningful patterns and highlight what is driving both positive and negative outcomes.
- The final goal is to provide clear insights and practical recommendations that can help the business improve sales, reduce losses, and make better decisions for the upcoming quarter.

*Data cleaning and transformation is carried out using **Python**, and **SQL** is used to analyze trends, performance metrics, and business patterns.*

DATASET

- ***Order ID*** *- Unique order identifier*
- ***Date*** *- Order date*
- ***Status*** *- Order status (Shipped, Cancelled, Shipped - Delivered to Buyer)*
- ***Fulfilment*** *- Who fulfills (Amazon or Merchant)*
- ***Sales Channel*** *- Platform (Amazon.in)*
- ***ship-service-level*** *- Shipping speed (Standard, Expedited)*
- ***Style*** *- Product style code*
- ***Category*** *- Product type (Set, kurta, Western Dress, Top)*
- ***Size*** *- Clothing size (XS to 6XL)*
- ***Courier Status*** *- Delivery status (Shipped, Cancelled)*
- ***Qty*** *- Quantity (0 for cancelled, 1 for others)*
- ***Amount*** *- Order value*
- ***ship-city*** *- Destination city*
- ***ship-state*** *- Destination state*

BUSINESS PROBLEM

The management team has raised several concerns:

- ***High Cancellation Rate****: There seems to be a significant number of cancelled orders, resulting in lost revenue, unable to understand reason behind it.*
- ***Fulfillment Strategy****: Unclear whether Amazon fulfillment or Merchant fulfillment performs better.*
- ***Regional Performance****: Need to identify high-performing and low-performing regions.*
- ***Product Performance****: Uncertainty about which product categories and styles are most profitable.*
- ***Shipping Service****: Questions about whether expedited shipping leads to better order completion rates.*

DATA CLEANING & PREPROCESSING

Importing Excel Data in Python using pandas.

```
[2]: import pandas as pd
     import numpy as np
     import matplotlib.pyplot as plt

[3]: df=pd.read_excel("C:/Users/OMKAR DHADAM/OneDrive/Desktop/OKK/EXCEL/SIR_VACATION_PRACTICE/DATA_CLEANING/SIR_VACATION_PRACTICE/PROJECT/E_Commerce_Sale_Dat

[4]: df.shape

[4]: (128975, 14)

[5]: df.head()
```

[5]:

	Order ID	Date	Status	Fulfilment	Sales Channel	ship-service-level	Style	Category	Size	Courier Status	Qty	Amount	ship-city	ship-state
0	405-8078784-5731545	2022-04-30	Cancelled	Merchant	Amazon.in	Standard	SET389	Set	S	Cancelled	0	647.62	MUMBAI	MAHARASHTRA
1	171-9198151-1101146	2022-04-30	Shipped - Delivered to Buyer	Merchant	Amazon.in	Standard	JNE3781	kurta	3XL	Shipped	1	406.00	BENGALURU	KARNATAKA
2	404-0687676-7273146	2022-04-30	Shipped	Amazon	Amazon.in	Expedited	JNE3371	kurta	XL	Shipped	1	329.00	NAVI MUMBAI	MAHARASHTRA
3	403-9615377-8133951	2022-04-30	Cancelled	Merchant	Amazon.in	Standard	J0341	Western Dress	L	Cancelled	0	753.33	PUDUCHERRY	PUDUCHERRY

Identifying inappropriate column Datatypes -->

```
df.info()
```

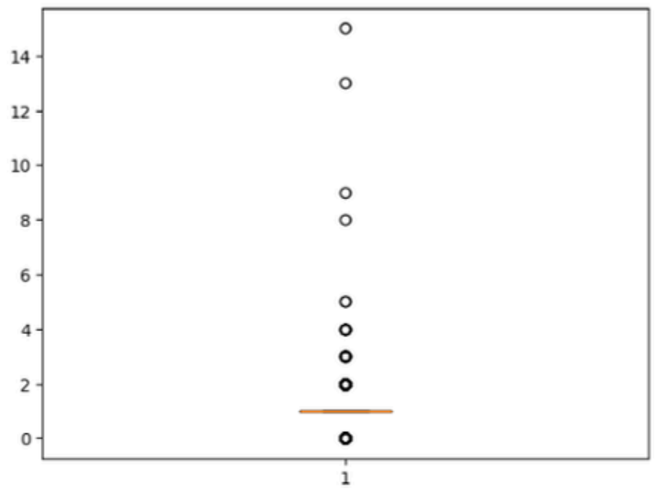
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 128975 entries, 0 to 128974
Data columns (total 14 columns):
 #   Column              Non-Null Count   Dtype
---  ------              --------------   -----
 0   Order ID            128975 non-null  object
 1   Date                128975 non-null  datetime64[ns]
 2   Status              128975 non-null  object
 3   Fulfilment          128975 non-null  object
 4   Sales Channel       128975 non-null  object
 5   ship-service-level  128975 non-null  object
 6   Style               128975 non-null  object
 7   Category            128975 non-null  object
 8   Size                128975 non-null  object
 9   Courier Status      128975 non-null  object
 10  Qty                 128975 non-null  int64
 11  Amount              128975 non-null  float64
 12  ship-city           128942 non-null  object
 13  ship-state          128942 non-null  object
dtypes: datetime64[ns](1), float64(1), int64(1), object(11)
memory usage: 13.8+ MB
```

DATA CLEANING & PREPROCESSING

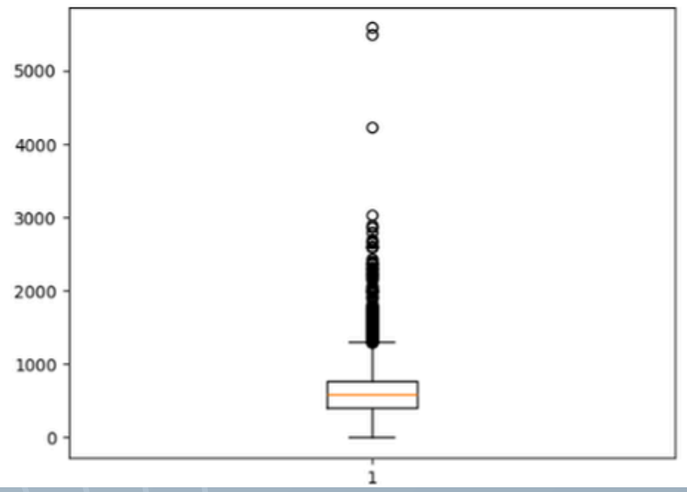
Detecting Outliers in Data using matplotlib Boxplot.

```
for i in df.columns:
    if (df[i].dtype=='int64') | (df[i].dtype=='float64'):
        print(i)
        plt.boxplot(df[i])
        plt.show()
```

Qty



Amount



Finding Null values in Dataset.

detecting Null Values

```
[9]: df.isnull().sum()
```

```
[9]: Order ID                0
     Date                    0
     Status                  0
     Fulfilment              0
     Sales Channel           0
     ship-service-level      0
     Style                   0
     Category                0
     Size                    0
     Courier Status          0
     Qty                     0
     Amount                  0
     ship-city              33
     ship-state             33
     dtype: int64
```

DATA CLEANING & PREPROCESSING

Detecting Duplicates in dataset.

Detecting Duplicates

```
[10]: df[df.duplicated()].shape

[10]: (7, 14)

[12]: for i in df.columns:
          print(df[i].value_counts())
          print("------------------------------")
```

```
502.86          1
796.20          1
523.81          1
Name: count, Length: 1410, dtype: int64
------------------------------
ship-city
BENGALURU               11217
HYDERABAD                8074
MUMBAI                   6126
NEW DELHI                5795
CHENNAI                  5421
                        ...
shimoga                     1
Bangluru                    1
Dombiwali                   1
Begumpet, Hyderabad         1
Badlapur , Thane            1
Name: count, Length: 8955, dtype: int64
```

Handling Null Values.

HANDLING NULL VALUES

```
[13]: df['ship-city']=df['ship-city'].fillna("Unknown")

[14]: df["ship-state"]=df["ship-state"].fillna("Unknown")

[15]: df.isnull().sum()

[15]: Order ID              0
      Date                  0
      Status                0
      Fulfilment            0
      Sales Channel         0
      ship-service-level    0
      Style                 0
      Category              0
      Size                  0
      Courier Status        0
      Qty                   0
      Amount                0
      ship-city             0
      ship-state            0
      dtype: int64
```

DATA CLEANING & PREPROCESSING

Correcting Inconsistent Formatting of Column values.

1 status

```
df['Status'].unique()
```

```
array(['Cancelled', 'Shipped - Delivered to Buyer', 'Shipped',
       'Shipped - Returned to Seller', 'Shipped - Rejected by Buyer',
       'Shipped - Lost in Transit', 'Shipped - Out for Delivery',
       'Shipped - Returning to Seller', 'Shipped - Picked Up', 'Pending',
       'Pending - Waiting for Pick Up', 'Shipped - Damaged', 'Shipping'],
      dtype=object)
```

```
status_mapping = {
    'Cancelled': 'Cancelled',
    'Shipped - Delivered to Buyer': 'Delivered',
    'Shipped': 'Shipped',
    'Shipped - Returned to Seller': 'Returned',
    'Shipped - Rejected by Buyer': 'Returned',
    'Shipped - Lost in Transit': 'Lost',
    'Shipped - Out for Delivery': 'Out for Delivery',
    'Shipped - Returning to Seller': 'Returning',
    'Shipped - Picked Up': 'Picked Up',
    'Pending': 'Pending',
    'Pending - Waiting for Pick Up': 'Pending',
    'Shipped - Damaged': 'Damaged',
    'Shipping': 'Shipped'
}

df['Status'] = df['Status'].replace(status_mapping)
```

2) QTY

```
df['Qty'].value_counts()
```

```
Qty
1     115780
0      12807
2        341
3         32
4          9
5          2
9          1
15         1
13         1
8          1
Name: count, dtype: int64
```

```
ok=[]
for i in df['Qty']:
    if i >= 1:
        ok.append(1)
    else:
        ok.append(0)
```

```
df['Qty']=ok
```

```
df['Qty'].value_counts()
```

```
Qty
1    116168
0     12807
Name: count, dtype: int64
```

```
df['ship-state']=df['ship-state'].replace("RAJSHTHAN","RAJASTHAN")
```

```
df['ship-state']=df['ship-state'].replace("ORISSA","ODISHA")
```

```
df['ship-state']=df['ship-state'].replace("PB","PUNJAB")
```

```
df['ship-state']=df['ship-state'].replace("RAJSTHAN","RAJASTHAN")
```

```
df['ship-state']=df['ship-state'].replace("RJ","RAJASTHAN")
```

```
df['ship-state']=df['ship-state'].replace("PONDICHERRY","PUDUCHERRY")
```

```
df['ship-state']=df['ship-state'].replace("AR","ARUNACHAL PRADESH")
```

```
df['ship-state']=df['ship-state'].replace("NL","NAGALAND")
```

```
df['ship-state'].value_counts()
```

DATA CLEANING & PREPROCESSING

Handling Duplicate Rows.

HANDLING DUPLICATES

```
df[df.duplicated()].shape
```

```
(7, 14)
```

```
df.drop_duplicates(inplace=True)
```

```
df[df.duplicated()].shape
```

```
(0, 14)
```

PUSHING DATA TO MYSQL WORKBENCH

Pushing Data to MySQL WorkBench

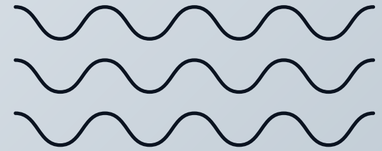
[43]:
```
#pip install sqlalchemy pymysql
```

[57]:
```
import pandas as pd
from sqlalchemy import create_engine

# Read your cleaned CSV
# creating Connection

engine = create_engine("mysql+pymysql://root:root@localhost:3306/sales_project")

print("MySQL connection created!")
```

```
MySQL connection created!
```

[58]:
```
df.to_sql('cleaned_data', con=engine, if_exists='replace', index=False)
print("Data imported successfully into MySQL!")
```

```
Data imported successfully into MySQL!
```

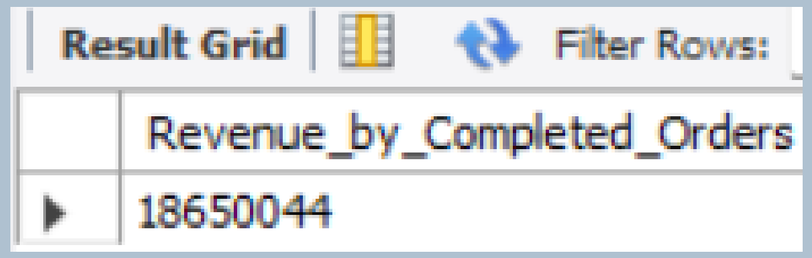


BUSINESS ANALYSIS USING SQL

- ***Sales Overview Analysis :-***

1. Calculate the total revenue generated from successfully completed orders (exclude cancelled orders).

```
select sum(Amount) as Revenue_by_Completed_Orders from sales
where Status="Delivered";
```

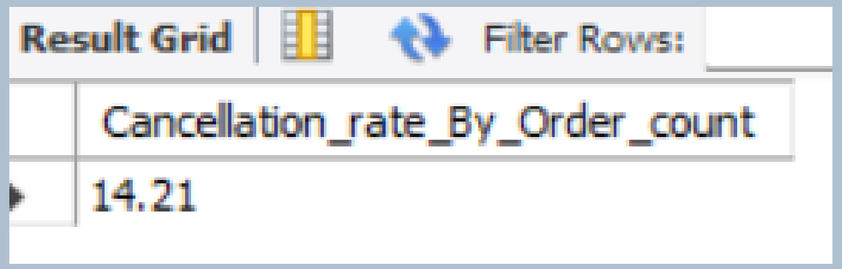


Result Grid | Filter Rows:

	Revenue_by_Completed_Orders
▶	18650044

2. What is the overall cancellation rate? Calculate both by order count and by revenue value.

```
select round(count(Order_ID)/(select count(Order_ID) from sales)*100,2) as Cancellation_rate_By_Order_count from sales
where Status="Cancelled";
```



Result Grid | Filter Rows:

	Cancellation_rate_By_Order_count
▶	14.21

- ***Sales Overview Analysis :-***

```
# Cancelation rate by Revenue:-
select round(sum(Amount)/(select sum(Amount) from sales)*100,2) as Cancellation_rate_By_Revenue from sales
where Status="cancelled";
```

Cancellation_rate_By_Revenue
8.8

3. What is the average order value (AOV) for completed orders?

```
select round(avg(Amount),2) as Completed_Order_Average_Value from sales
where Status="Delivered";
```

Result Grid | Filter Rows:

Completed_Order_Average_Value
648.29

- ***Sales Overview Analysis :-***

4. Create a summary showing total orders, completed orders, cancelled orders, and total revenue.

```
select count(Order_ID) as Total_Orders,
(select count(Order_ID) from sales where Status="Delivered") as Completed_Orders,
(select count(Order_ID) from sales where Status="Cancelled") as Cancelled_Orders,
(select round(sum(Amount),2) from sales where status="Delivered") as Total_Revenue
from sales;
```

Total_Orders	Completed_Orders	Cancelled_Orders	Total_Revenue
128967	28768	18328	18650044

- ***Fulfillment Analysis :-***

1. Compare the cancellation rates between Amazon fulfillment and Merchant fulfillment. Which performs better?

```
with
cancel_orders as(
select Fulfilment,count(Order_ID) as cancel_count from sales
where status="Cancelled"
group by Fulfilment
),
total_orders as(
select Fulfilment,count(Order_ID) as total_count from sales
group by Fulfilment
)
select c.Fulfilment,t.total_count,c.cancel_count,round((c.cancel_count/t.total_count)*100,2) as Cancellation_Rate from cancel_orders c
join total_orders t on t.Fulfilment=c.Fulfilment;
```

Fulfilment	total_count	cancel_count	Cancellation_Rate
Merchant	39276	6861	17.47
Amazon	89691	11467	12.79

- ***Fulfillment Analysis :-***

2. Calculate the total revenue generated by each fulfillment method.

```
select Fulfilment,round(sum(Amount),2) as Revenue from sales
where Status="Delivered"
group by Fulfilment;
```

Fulfilment	Revenue
Merchant	18650044

3. What is the average order value for each fulfillment type?

```
select fulfilment,round(avg(Amount),2) as Average_Order_Value from sales
group by fulfilment;
```

fulfilment	Average_Order_Value
Merchant	617.93
Amazon	605.63

- ***Fulfillment Analysis :-***

4. Based on your analysis, which fulfillment method would you recommend and why?

→ Merchant Fulfillment is the better choice at present, but Amazon Fulfillment has the capacity to overtake it with improvements in delivery efficiency.

- ***Product Performance Analysis :-***

1. Which product category generates the highest revenue? Rank all categories.

```
select Category,sum(Amount) as Revenue from sales
where Status="Delivered"
group by Category
order by Revenue desc;
```

Category	Revenue
Set	8800562
kurta	4715208
Western Dress	3867845
Top	948734
Ethnic Dress	165465
Blouse	85444
Bottom	48615
Saree	18171

2. Which category has the highest cancellation rate?

```
select c.Category,t.total_count,c.Cancell_count,round((c.Cancell_count/t.total_count)*100,2) as Cancellation_Rate from
(
select Category,count(Order_ID) as Cancell_count from sales
where Status="Cancelled"
group by Category
) c
join
(
select Category,count(Order_ID) as total_count from sales t
group by Category
) t
on c.Category=t.Category
order by Cancellation_Rate desc;
```

Category	total_count	Cancell_count	Cancellation_Rate
Set	50280	7335	14.59

- ***Product Performance Analysis :-***

3. Identify the top 5 best-selling styles (by quantity sold, excluding cancelled orders).

```
select Style,count(Order_ID) as Quantity_Sold from sales
where Status="Delivered"
group by Style
order by Quantity_Sold desc
limit 5;
```

Style	Quantity_Sold
JNE3797	1936
J0003	592
J0341	436
JNE3798	393
JNE3800	356

4. What is the average selling price for each product category?

```
select Category,round(avg(Amount),2) as Average_Selling_Price from sales
group by category;
```

Category	Average_Selling_Price
Set	779.67
kurta	427.06
Western Dress	723.61
Top	503.46
Ethnic Dress	682.67
Bottom	342.43
Saree	755.69
Blouse	495.04
Dupatta	305

- ***Product Performance Analysis :-***

5. Which size is most frequently ordered? Create a size distribution analysis.

```
select Size,count(Order_ID) as Order_Count from sales
group by Size
order by Order_Count desc;
```

Size	Order_Count
M	22709
L	22129
XL	20875
XXL	18096
S	17089
3XL	14815
XS	11161
6XL	738
5XL	550
4XL	427
Free	378

- ***Regional Analysis :-***

1. Identify the top 10 cities by revenue generation.

```
select ship_city,round(sum(Amount),2) as Revenue_by_City from sales
group by ship_city
order by Revenue_by_City desc
limit 10;
```

ship_city	Revenue_by_City
BENGALURU	7257748.8
HYDERABAD	5599822.35
MUMBAI	4293210.16
NEW DELHI	3952690.2
CHENNAI	3606917.94
pune	2794036.79
KOLKATA	1682046.99
GURUGRAM	1280854.78
THANE	1111506.35
LUCKNOW	1049983.1

2. Which state generates the highest revenue? Create a state-wise revenue report.

```
select ship_state,round(sum(Amount),2) as Revenue_by_State from sales
where status="delivered"
group by ship_state
order by Revenue_by_State desc
limit 1;
```

ship_state	Revenue_by_State
MAHARASHTRA	3135062

- ***Regional Analysis :-***

3. Calculate the cancellation rate by state. Which states have the highest cancellation rates?

```
with
s_cancel as (
select ship_state,count(Order_ID) as cancel_orders from sales
where Status="Cancelled"
group by ship_state
),
s_total as(
select ship_state,count(Order_ID) as total_orders from sales
group by ship_state
)
select c.ship_state,round((c.cancel_orders/t.total_orders)*100,2) as Cancellation_Rate from s_cancel c
join s_total t on t.ship_state=c.ship_state
order by Cancellation_Rate desc
limit 1;
```

ship_state	Cancellation_Rate
LAKSHADWEEP	25.00

4. Identify the top 5 city-category combinations by revenue.

```
select concat(ship_city,"-",Category),sum(Amount) as Revenue from sales
where Status="Delivered"
group by Ship_city,category
order by Revenue desc
limit 5;
```

concat(ship_city,"-",Category)	Revenue
BENGALURU-Set	627154
NEW DELHI-Set	546638
HYDERABAD-Set	469093
MUMBAI-Set	419832
BENGALURU-kurta	417616

- ***Shipping Service Level Analysis :-***

1. Compare the cancellation rates between Standard and Expedited shipping.

```
with
cancel as(
select ship_service_level,count(Order_ID) as cancelled_orders_count from sales
where Status="cancelled"
group by ship_service_level
),
total as(
select ship_service_level,count(Order_ID) as total_orders_count from sales
group by ship_service_level
)

select c.ship_service_level,round((c.cancelled_orders_count/t.total_orders_count)*100,2) as Cancellation_rate from cancel c
join total t on t.ship_service_level=c.ship_service_level;
```

ship_service_level	Cancellation_rate
Standard	17.12
Expedited	12.89

2. What is the revenue contribution of each shipping service level?

```
select ship_service_level,round(sum(Amount),2) as Revenue from sales
where status="Delivered"
group by ship_service_level
order by Revenue desc;
```

ship_service_level	Revenue
Standard	18650044

There are **NO orders** Delivered by **Expedited ship-service-level**.
All of its Orders are either in **Shipped/Transit** state.

- ***Shipping Service Level Analysis :-***

3. Calculate the average order value for Standard vs Expedited shipping.

```
select ship_service_level,round(avg(Amount),2) as Average_Order_value from sales
group by ship_service_level;
```

ship_service_level	Average_Order_value
Standard	602.26
Expedited	612.61

4. Does expedited shipping have better order completion rates? Provide evidence.

ship_service_level	total_orders_count	Delivered_orders_count	order_completion_rate
Standard	40359	28768	71.28

```
with
cancel as(
select ship_service_level,count(Order_ID) as Delivered_orders_count from sales
where Status="Delivered"
group by ship_service_level
),
total as(
select ship_service_level,count(Order_ID) as total_orders_count from sales
group by ship_service_level
)
select c.ship_service_level,t.total_orders_count,c.Delivered_orders_count,round((c.Delivered_orders_count/t.total_orders_count)*100,2) as order_completion_rate from cancel
join total t on t.ship_service_level=c.ship_service_level;
```

No. Expedited shipping-service-level **haven't Delivered** any Order Yet..

So for current Time We should consider that Expedited shipping-service-level **do not have Better completion rate**.

- ***Advanced Analysis :-***

1. Create a pivot table showing revenue by Category and Fulfillment type.

```
# Category-Fulfilment......
select Category,Fulfilment,sum(Amount) as revenue from sales
where Status="Delivered"
group by Category,Fulfilment
order by revenue desc;
```

Category	Fulfilment	revenue
Set	Merchant	8800562
kurta	Merchant	4715208
Western Dress	Merchant	3867845
Top	Merchant	948734
Ethnic Dress	Merchant	165465
Blouse	Merchant	85444
Bottom	Merchant	48615
Saree	Merchant	18171

2. Identify any patterns: Do certain categories perform better with specific fulfillment methods?

All the Categories are perfoming well but only with Merchent.. Because Amazon fulfilment **have not yet Delivered** any Product Successfully..

If we sepcifically talk about **Merchent Fulfilment** then,

Set - 88,00,562/- --- 47 %

kurta - 47,15,208/- --- 25.3 %

Western Dress - 38,67,845/- --- 20.7 %

These Are **top-3** well Performing Categories in Merchant Fulfilment that are contributing about **93 %** in Total revenue.

- ***Advanced Analysis :-***

3. Calculate the revenue loss from cancelled orders by state.

```
with
cancel_revenue as(
select ship_state,round(sum(Amount),2) as revenue_loss from sales
where status="Cancelled"
group by ship_state
),
total_revenue as(
select ship_state,round(sum(Amount),2) as revenue_total from sales
group by ship_state
)
select c.ship_state,t.revenue_total,c.revenue_loss,round((c.revenue_loss/t.revenue_total)*100,2) as Loss_Percentage from cancel_revenue c
join total_revenue t on t.Ship_state=c.ship_state
order by Loss_Percentage desc;
```

ship_state	revenue_total	revenue_loss	Loss_Percentage
LAKSHADWEEP	3175.29	734.29	23.13
MIZORAM	41948.71	6308.71	15.04
MEGHALAYA	119871.81	15684.81	13.08
ANDAMAN & NICOBAR	158723.62	19323.62	12.17
KERALA	3830227.58	452906.58	11.82
HIMACHAL PRADESH	503364.51	57088.51	11.34
DADRA AND NAGAR	42138.92	4605.92	10.93
UNKNOWN	18671	2030	10.87
ANDHRA PRADESH	3219831.72	337625.72	10.49
LADAKH	38388.43	4002.43	10.43
ODISHA	1386372.39	143912.39	10.38

4. Which combination of fulfillment type and shipping service level has the lowest cancellation rate?

```
with
cancel_count as(
select Fulfilment,ship_service_level,count(Order_ID) as cancel_count from sales
where status="Cancelled"
group by Fulfilment,ship_service_level
),
total_count as(
select Fulfilment,ship_service_level,count(Order_ID) as total_count from sales
group by Fulfilment,ship_service_level
)

select c.fulfilment,c.ship_service_level,round((c.cancel_count/t.total_count)*100,2) as Cancellation_Rate from cancel_count c
join total_count t on t.fulfilment=c.fulfilment and t.ship_service_level=c.ship_service_level
order by Cancellation_Rate asc;
```

fulfilment	ship_service_level	Cancellation_Rate
Amazon	Standard	4.43
Amazon	Expedited	12.89
Merchant	Standard	17.47

- ***Business Recommendations :-***

1. Should the company focus more on Amazon fulfillment or Merchant fulfillment? Why?

- Company Should focus more on **Amazon fullfilment**.
- As people have more Trust on Amazon so Amazon Fulfillment has Almost Double the No. of Merchant Fulfilment Orders.
- But in this given Data all the Amazon fulfilment Orders are in Transit/Shipped/Pending State.
- This may Break people trust and lead to Orders Cancellations as well as Decrease in No. of Orders.
- If attention is given and issues are resolved. Amazon Fulfillment has Higher potential of Revenue Generation.

- ***Business Recommendations :-***

2. Which 3 cities should receive increased marketing investment?

```
select ship_state,count(Order_ID) as Number_Of_Orders  from sales
group by ship_state
order by Number_Of_Orders desc
limit 3;
```

ship_state	Number_Of_Orders
MAHARASHTRA	22259
KARNATAKA	17325
TAMIL NADU	11483

- **Maharashtra - 22,259 Orders.**
  Karnataka - 17,325 Orders.
  TamilNadu - 11,483 Orders.
- These are the **Top-3** States having Highest No.of Orders.
- This indicated that there are **more Active Buyers** in these States.
- So Increasing Marketing Investment in these States can **boost Orders Count**.
- This idea may Increase Company Sales and Generate **More Profit**.

- ***Business Recommendations :-***

3. Which product categories should be prioritized for inventory expansion?

```
select Category,count(Order_ID) as Orders_Count from sales
group by Category
order by Orders_Count desc;
```

Category	Orders_Count
Set	50280
kurta	49874
Western Dress	15499
Top	10622
Ethnic Dress	1159
Blouse	926
Bottom	440
Saree	164
Dupatta	3

- **Set - 50,280 Orders.**
  Kurta - 49,874 Orders.
- These are the **Top-2** categories having Highest No.of Orders.
- These 2 Categories Inventory Expansion should be Prioritized.
- So that the orders will not be in pending state for longer time.

- ***Business Recommendations :-***

4. What strategies would you suggest to reduce the cancellation rate?

- The Main reason behind Order cancellation is, Order pending for longertime and taking more time in delivering the product to customer.
- In this data Amazon Fulfillment has not delivered any of the orders. All of its orders are in Shipped/Pending/Transit State.
- This may increase the cancellation rate.

suggestion :-

- Focus should be given on processing the orders fast.
  so that it stays in Pending state for **Minimum-Time**.
- Ensuring **Timely delivery** of Products will surely **Decrease the Cancellation Rate**.

THANKYOU !

Omkar Dhadam