



Airline Passenger Satisfaction

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Agenda



- Abstract

- Data Description

- EDA

- Re-Processing

- Model Evaluation

Abstract



Airlines strive to satisfy the passengers in all respects .



Through Technology and Advanced science, Airline companies can predict the satisfaction of the traveler.

Data Description



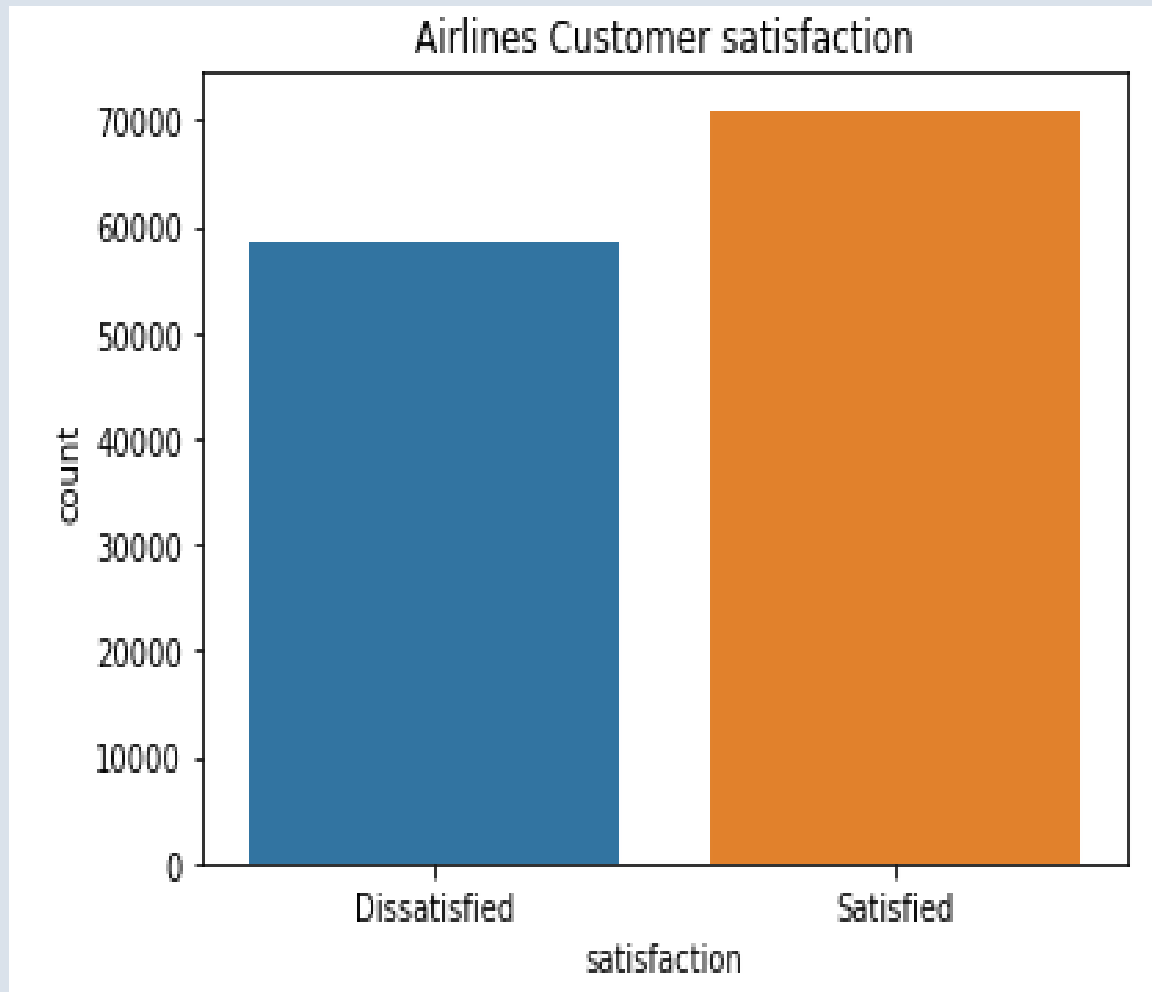
Around **130,000** survey entries.

23 feature columns and the passengers rate the flight experience on a scale of 1 to 5.



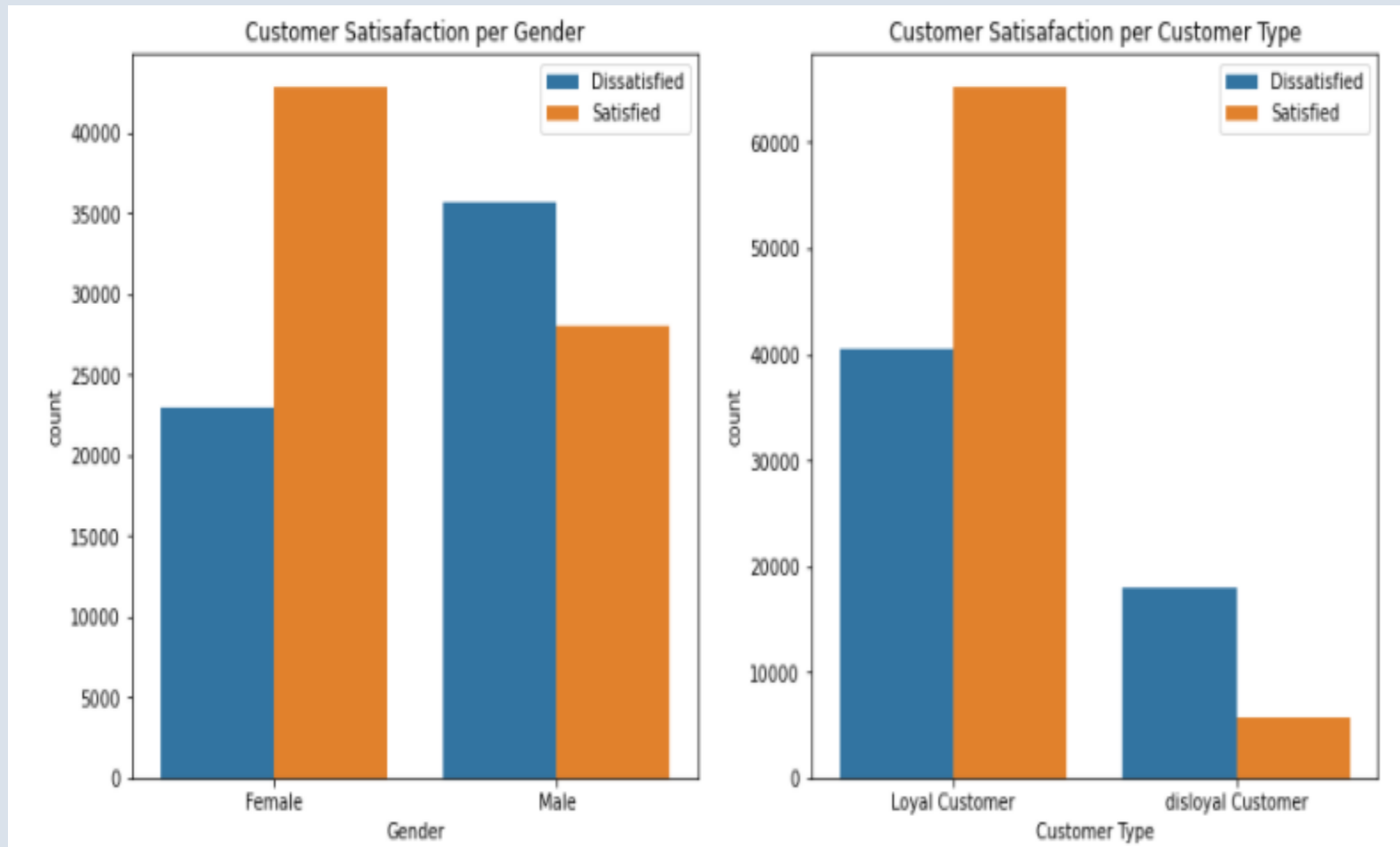
Target -> **Satisfied**

Exploratory Data Analysis (EDA)

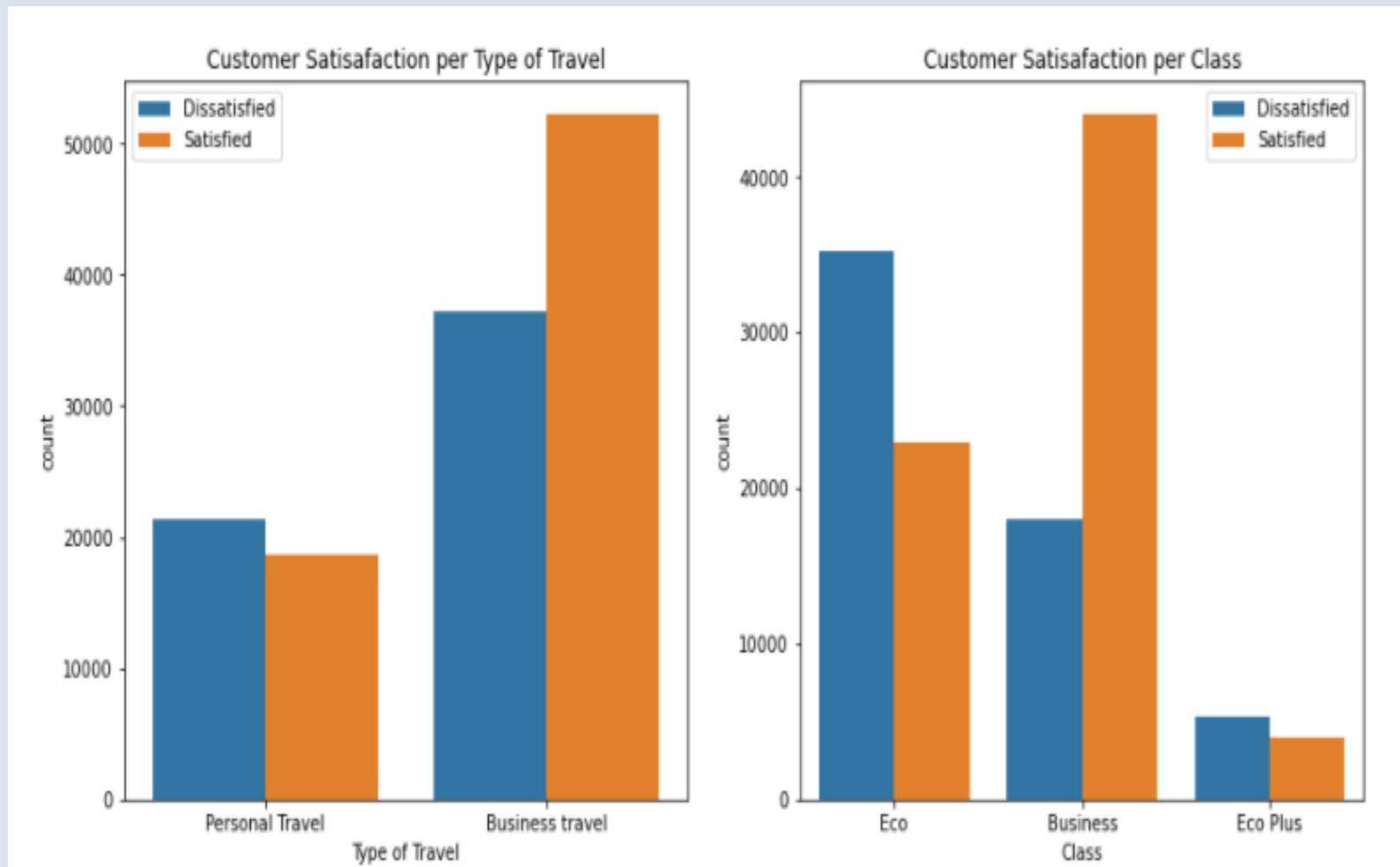


**Balanced
Dataset**

Exploratory Data Analysis (EDA)



Exploratory Data Analysis (EDA)



Re-Processing

- Cleansing

There is a NULL value in of the columns .

```
In [4]: #check null values
da.isna().sum()

Out[4]: satisfaction      0
Gender                  0
Customer Type           0
Age                    0
Type of Travel          0
Class                  0
Flight Distance         0
Seat comfort            0
Departure/Arrival time convenient 0
Food and drink          0
Gate location           0
Inflight wifi service   0
Inflight entertainment  0
Online support          0
Ease of Online booking  0
On-board service        0
Leg room service        0
Baggage handling        0
Checkin service         0
Cleanliness             0
Online boarding         0
Departure Delay in Minutes 0
Arrival Delay in Minutes 393
dtype: int64
```



```
In [7]: #check null values
da.isna().sum()

Out[7]: satisfaction      0
Gender                  0
Customer Type           0
Age                    0
Type of Travel          0
Class                  0
Flight Distance         0
Seat comfort            0
Departure/Arrival time convenient 0
Food and drink          0
Gate location           0
Inflight wifi service   0
Inflight entertainment  0
Online support          0
Ease of Online booking  0
On-board service        0
Leg room service        0
Baggage handling        0
Checkin service         0
Cleanliness             0
Online boarding         0
Departure Delay in Minutes 0
Arrival Delay in Minutes 0
dtype: int64
```


Re-Processing

- **Split :**

The data has been split to Train data & Test Data

Model Evaluation

1) Logistic Regression

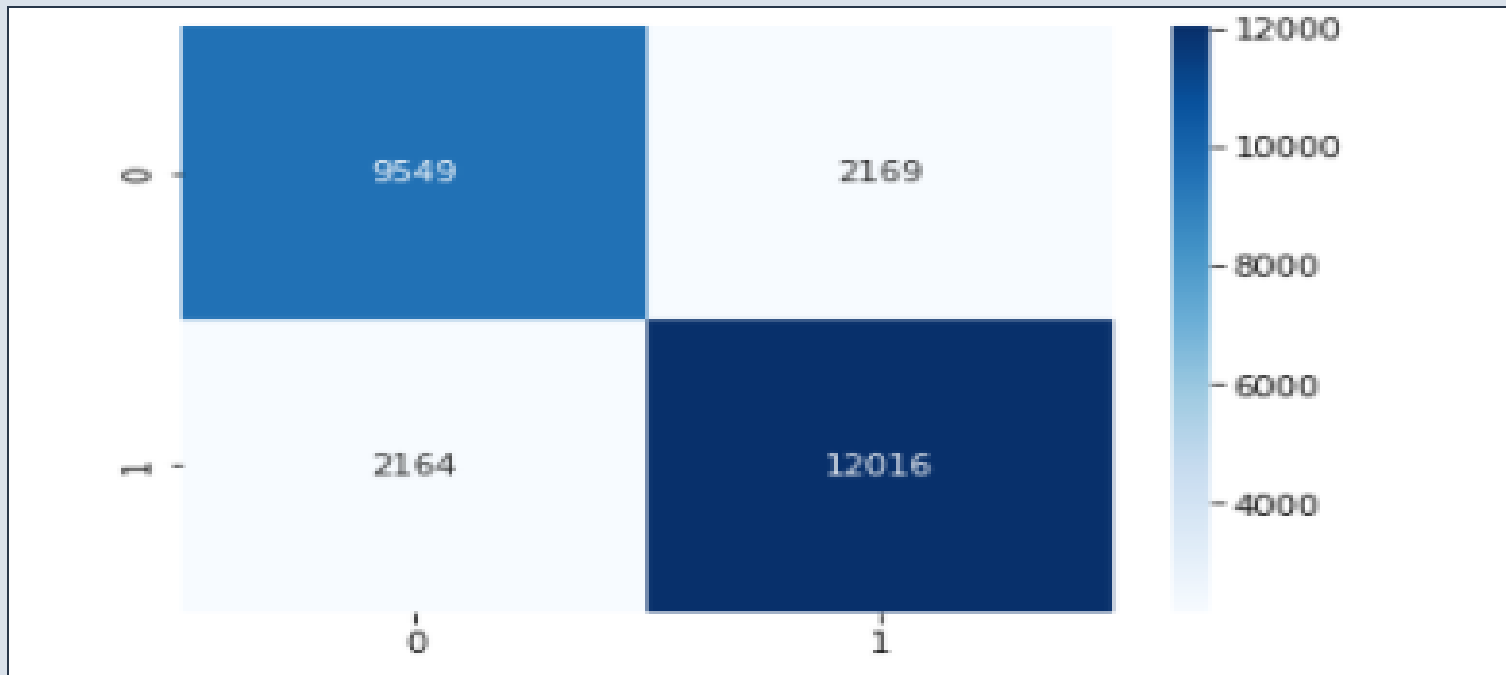
Training Accuracy: % 83.62

Test Accuracy: % 83.27

Model Evaluation

2) Confusion Matrix

Precision = 84.7% & Recall = 85.7%



Thank You ..

