

Python Analysis

1. "survery data" has more size.
2. On average, the attribute has average satisfaction below 3 are;
 - i. Inflight wifi service
 - ii. Ease of Online booking
 - iii. Gate location
3. Column "Arrival Delay in Minutes" have the highest missing values.
4. Total duplicate records = 1454
5. Majority of the passengers belongs to:
 - i. Females
 - ii. Loyal customers
 - iii. Not satisfied
 - iv. Took Business travel
 - v. Had business class
6. Age column, we can see that the youngest passenger is 7 years old and the oldest passenger is 85 years old. Average age is 39.
7. On studying distributions with respect to "Gender";
 - a. Females do more business travel as compared to males.
 - b. Females booked more flights in each "Class" as compared to males
8. For Rating 5, Majority of passengers were satisfied when analysing Inflight Wifi Service and Satisfaction.
9. For Rating 0, Majority of passengers were satisfied, when analysing Ease Of Online Booking and Satisfaction review
10. For Rating 5, Majority of passengers were satisfied, when analysing Gate Location and Satisfaction review
11. For Rating 5, Majority of passengers were satisfied, Which one answers Best when analysing Food and Drinks and Satisfaction review
12. For Rating 5, Majority of passengers were satisfied, when analysing Online Boarding and Satisfaction review

13. For Rating 5, Majority of passengers were satisfied, when analysing Seat Comfort and Satisfaction review
14. For Rating 5, Majority of passengers were satisfied, when analysing Inflight Entertainment and Satisfaction review
15. For Rating 5, Majority of passengers were satisfied, when analysing Leg Room Service and Satisfaction review
16. For Rating 5, Majority of passengers were satisfied, when analysing Baggage Handling and Satisfaction review
17. For Rating 5, Majority of passengers were satisfied, when analysing Checkin Service and Satisfaction review
18. The total records loyal female customers who have given 5 star to Ease of Online booking = 7043.
19. The approx. total records where 5 star is given to Baggage handling, Cleanliness, Food and drink and Inflight entertainment = 4945.
20. The total records which gave 5 star rating for attributes ['Inflight Wifi Service', 'Departure/Arrival Time Convenient', 'Ease Of Online Booking', 'Gate Location', 'Food And Drink', 'Online Boarding', 'Seat Comfort', 'Inflight Entertainment', 'On-Board Service', 'Leg Room Service', 'Baggage Handling', 'Checkin Service', 'Inflight Service', 'Cleanliness'] = 7
21. The total records which gave 5 star rating for attributes ['Inflight Wifi Service', 'Departure/Arrival Time Convenient', 'Ease Of Online Booking', 'Gate Location', 'Food And Drink', 'Online Boarding', 'Seat Comfort', 'Inflight Entertainment', 'On-Board Service', 'Leg Room Service', 'Baggage Handling', 'Checkin Service', 'Inflight Service', 'Cleanliness'] = 0
22. %age of records where "Departure Delay In Minutes" is more than 1 hour = 7.21%.
23. %age of records where "Arrival Delay In Minutes" is more than 1 hour = 7.37%
24. %age of records where "Flight Distance" is less than 100 km = 0.83%
25. %age of records where "Flight Distance" is more than 1000 km = 41.73%
26. %age of records where "Flight Distance" is more than 1000 km and its done for "Business travel" = 33.72%
27. %age of records where "Flight Distance" is more than 1000 km and its done for "Personal Travel" = 8.02%
28. %age of People Given 5 stars to Wifi Service and were Satisfied = 10.97%

29. Based on correlation chart, Factors that had high impact on the satisfaction rate were:

- a. Top 3 factors:
 - i. Online Boarding
 - ii. Inflight Entertainment
 - iii. Seat comfort
- b. More insights:
 - i. Inflight service had huge impact from Ease of Online booking
 - ii. Inflight Wifi Service also was impacted from Online Boarding
 - iii. Business Class had longer flight distance based on average

30. On analysing the gender group with the customer type;

- a. Majority passengers are loyal females
- b. Highest average flight distance is covered by loyal females
- c. Highest average age is of loyal males

31. On analysing the gender group with the type of travel;

- a. Majority of females passengers took business travel
- b. Highest average flight distance is covered by males for business travel
- c. Highest average age is of business travel males

32. On analysing the gender group with the Class;

- a. Majority of female passengers took Business Class
- b. Highest average flight distance is covered by male passengers for business class.
- c. Highest average age is of males in business class

33. On analysing the gender group with the Satisfaction attribute;

- a. Majority of passengers are females who are not satisfied.
- b. Highest average flight distance is covered by males who are satisfied.
- c. Highest average age is of satisfied males

On creating the new column "AgeGroup" with logic;

- i. Below 18 : Teens
- ii. 18 - 39 : Adults
- iii. 40 - 60 : Middle Age Adults
- iv. 61 Above : Senior

1. On analysing the newgender group with the type of travel;
 - a. Majority of passengers are middle age adults who took business travel.
 - b. Highest average flight distance is covered by middle age adults who took business travel.
 - c. Highest average age is of seniors taking business travel
2. On analysing the newgender group with the type of travel;
 - a. Majority of passengers are loyal middle age adults.
 - b. Highest average flight distance is covered by loyal middle age adults.
 - c. Highest average age is of senior disloyal customers.
3. On analysing the newgender group with the Satisfaction attributes;
 - a. Majority of passengers are dissatisfied adults.
 - b. Highest average flight distance is covered by unsatisfied middle age adults.
 - c. Highest average age is of unsatisfied seniors.