Report Airline Passenger Satisfaction

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26 3 2021

This is the report of Kilian Sennrich for the first assignment of the class "Machine Learning" held by Prof. Dr. Dietmar Maringer. The task is to perform a complete analysis for one of the 10 datasets provided in the lecture. I chose the "Airline Passenger Satisfaction" dataset from kaggle: https://www.kaggle.com/teejmahal20/airline-passenger-satisfaction

From the Website:

What factors lead to customer satisfaction for an Airline?

This dataset contains an airline passenger satisfaction survey. What factors are highly correlated to a satisfied (or dissatisfied) passenger? Can you predict passenger satisfaction?

Note that this dataset was modified from another dataset by John D on Kaggle. It has been cleaned up for the purposes of classification.

- 1. Gender: Gender of the passengers (Female, Male)
- 2. Customer Type: The customer type (Loyal customer, disloyal customer)
- 3. Age: The actual age of the passengers
- 4. Type of Travel: Purpose of the flight of the passengers (Personal Travel, Business Travel)
- 5. Class: Travel class in the plane of the passengers (Business, Eco, Eco Plus)
- 6. Flight distance: The flight distance of this journey
- 7. Inflight wifi service: Satisfaction level of the inflight wifi service (0:Not Applicable;1-5)
- 8. Departure/Arrival time convenient: Satisfaction level of Departure/Arrival time convenient
- 9. Ease of Online booking: Satisfaction level of online booking
- 10. Gate location: Satisfaction level of Gate location
- 11. Food and drink: Satisfaction level of Food and drink
- 12. Online boarding: Satisfaction level of online boarding
- 13. Seat comfort: Satisfaction level of Seat comfort
- 14. Inflight entertainment: Satisfaction level of inflight entertainment
- 15. On-board service: Satisfaction level of On-board service
- 16. Leg room service: Satisfaction level of Leg room service
- 17. Baggage handling: Satisfaction level of baggage handling
- 18. Check-in service: Satisfaction level of Check-in service
- 19. Inflight service: Satisfaction level of inflight service
- 20. Cleanliness: Satisfaction level of Cleanliness
- 21. Departure Delay in Minutes: Minutes delayed when departure
- 22. Arrival Delay in Minutes: Minutes delayed when Arrival
- 23. Satisfaction: Airline satisfaction level(Satisfaction, neutral or dissatisfaction)