



DATA ANALYSIS DECK FOR TWEETS DATA

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Relevant Columns for Model Building

- Total Columns : 15
- Relevant Columns : 3 (20 %)
- Data Volume : 3.01 MB
- Column Names : Text (string) → Independent
Negative Reason (string) → Independent
Airline_Sentiment (string) → Dependent

	text	negativereason	airline_sentiment
0	@VirginAmerica What @dhepburn said.	NaN	neutral
1	@VirginAmerica plus you've added commercials t...	NaN	positive
2	@VirginAmerica I didn't today... Must mean I n...	NaN	neutral
3	@VirginAmerica it's really aggressive to blast...	Bad Flight	negative
4	@VirginAmerica and it's a really big bad thing...	Can't Tell	negative

Sentiment Count

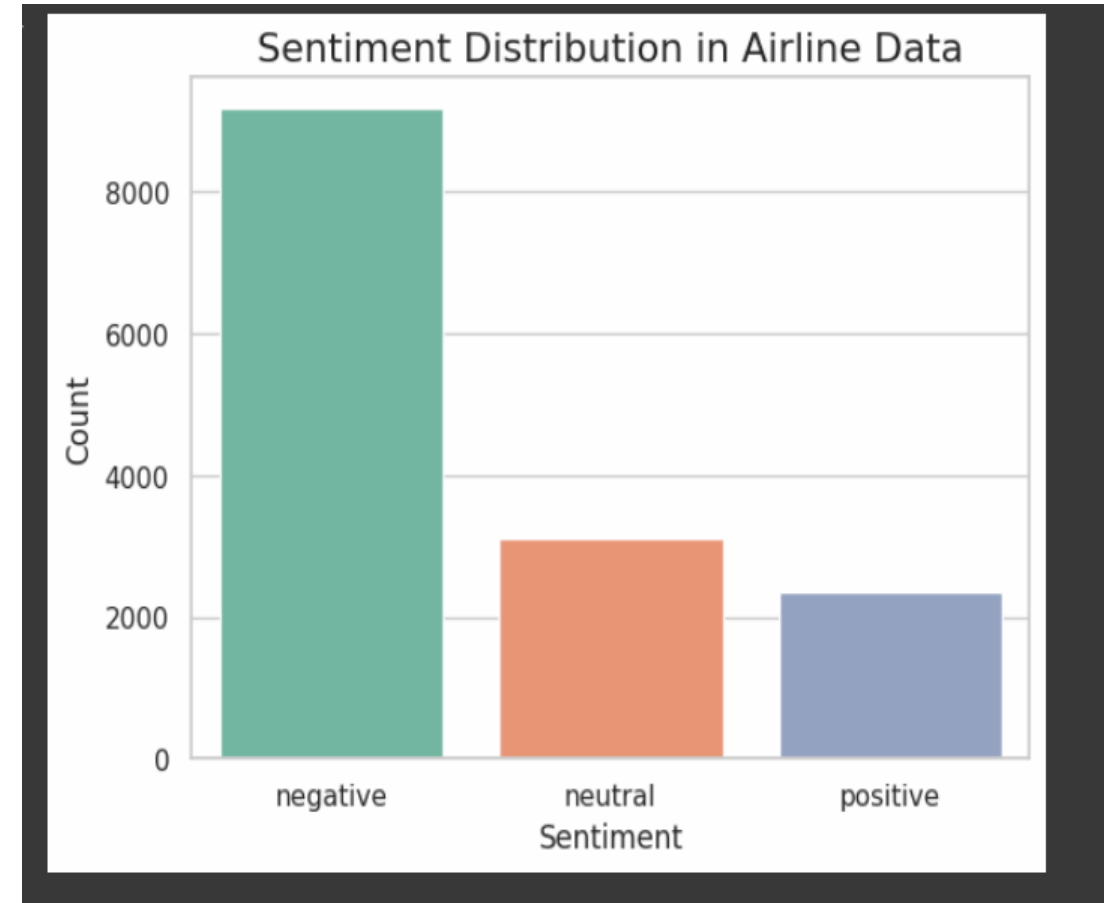
Negative : 9178

Positive: 2363

Neutral :3099

Comment:

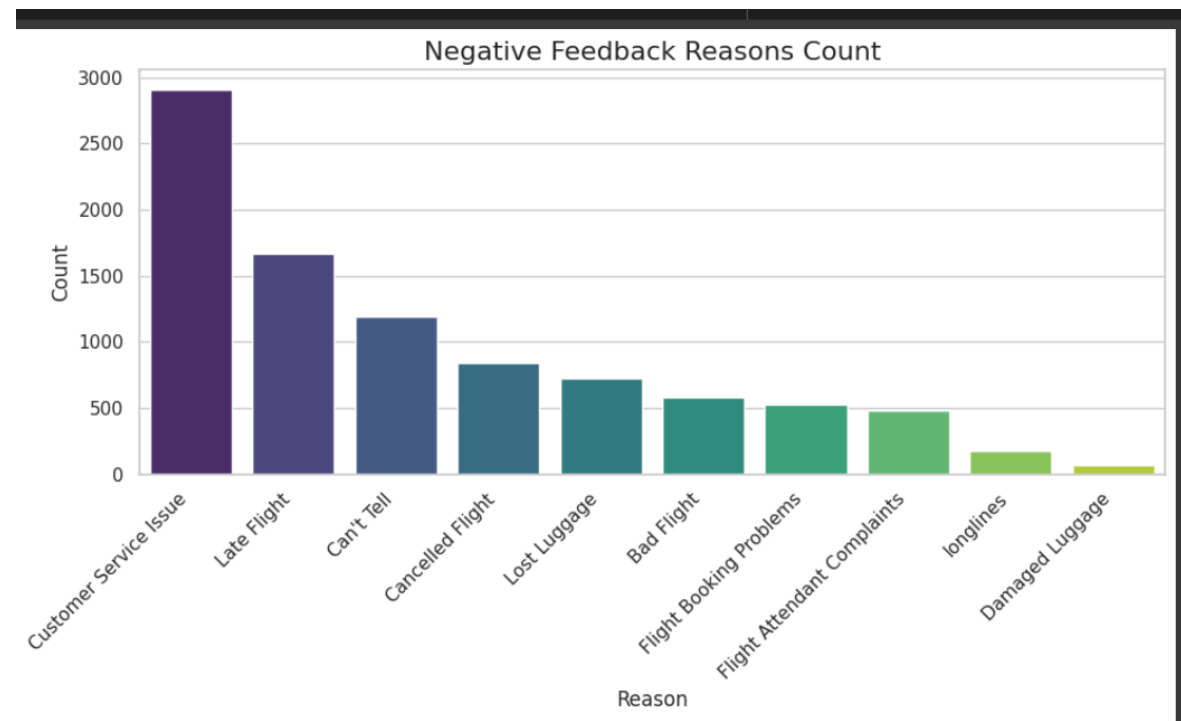
The data has a lot negative comments as compared to positive and neutral comment which shows that data is biased



The common negative feedbacks

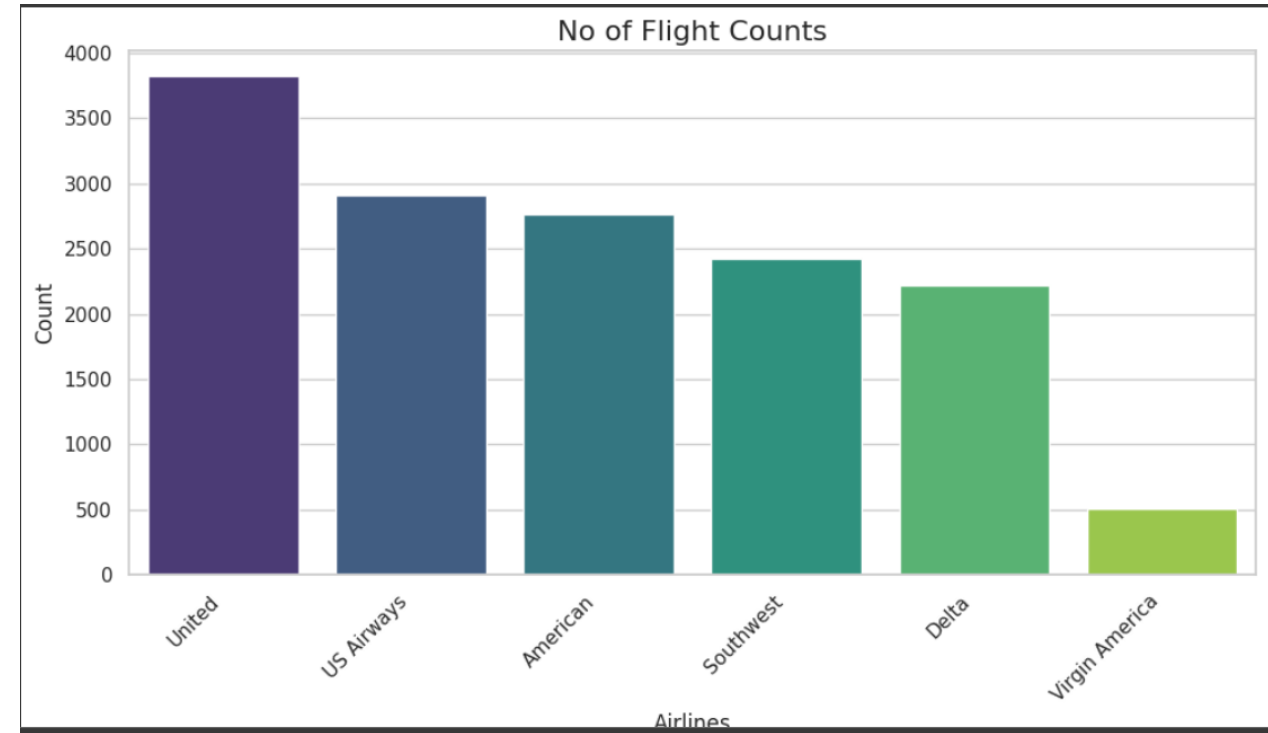
Customer Service Issue	2910
Late Flight	1665
Can't Tell	1190
Cancelled Flight	847
Lost Luggage	724
Bad Flight	580
Flight Booking Problems	529
Flight Attendant Complaints	481
longlines	178
Damaged Luggage	74

Comment:
The Customer Service Issue is the common negative feedbacks from the customers because of a lot of delayed flights customer service got hampered



Different airlines are present in the dataset

- **American Airlines**
- **Delta Airlines**
- **Southwest Airlines**
- **US Airlines**
- **Virgin America Airlines**
- **United Airlines**

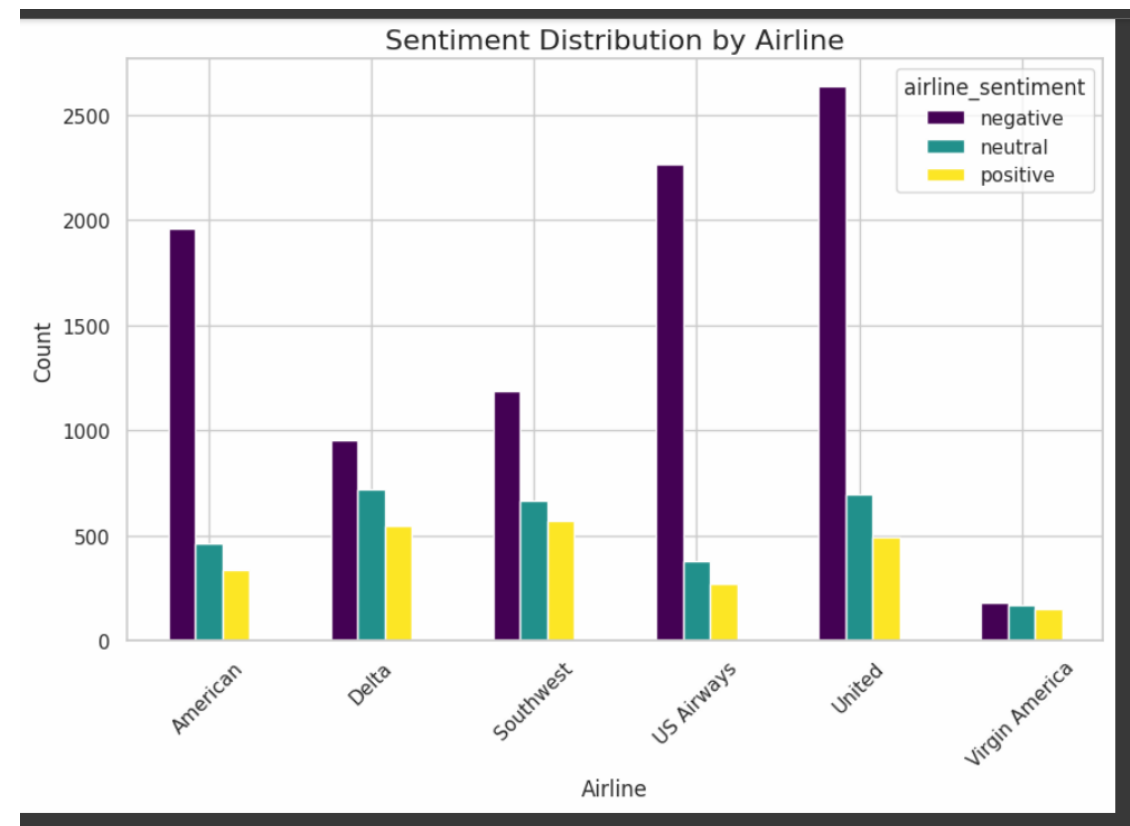


The no. of sentiments of each airline from the data

airline_sentiment	negative	neutral	positive
airline			
American	1960	463	336
Delta	955	723	544
Southwest	1186	664	570
US Airways	2263	381	269
United	2633	697	492
Virgin America	181	171	152

Comments:

- **The Maximum no of negative feedback is for United Airlines**
- **The Maximum no of neutral feedback is for Delta**
- **The maximum no of Positive feedback is for Southwest**



Specific day where a lot of negative feedbacks :

Feb 22, 2015

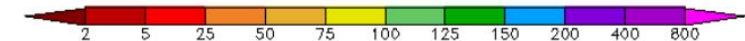
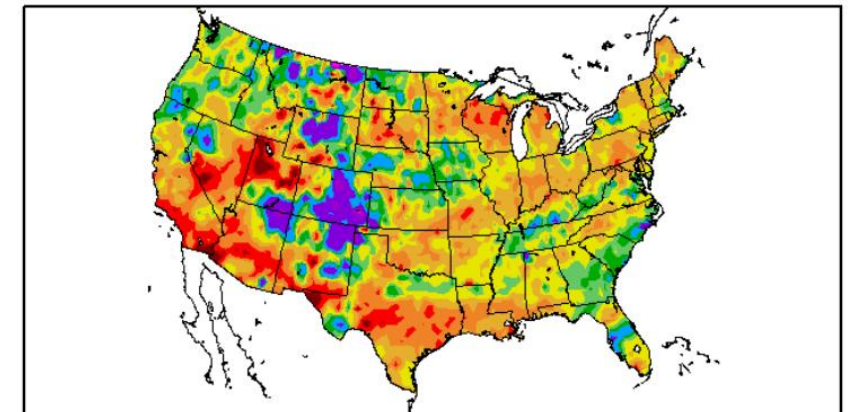
Comment

Sunday was another messy day for air travel. But Monday was already looking just as bad, especially for fliers scheduled to fly to or through Dallas

Sources:

<https://www.wusa9.com/article/news/nation/storms-more-than-1000-flights-already-grounded-for-monday/65-203527459>

Percent of Normal Precipitation (%)
2/1/2015 – 2/28/2015



Generated 3/1/2015 at HPRCC using provisional data.

Regional Climate Centers

From analysis, which airline do you feel is doing the best

The best Airline is Virgin America with Most Positive feedback i.e 30.16%

