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Executive Summary

Purpose:

To analyze twitter data of Southwest Airlines after the plane wing incident. This analysis was to show how Southwest Airlines reacted to their customers after the incident on their twitter page. About 500 tweets were mined from their page for analysis. This data was read into python and then analyzed through sentimental analysis.

Data:

The data used was from the Southwest Airlines twitter page and took a random sample of 500 tweets to analyze. This data was read into python from the written code and then cleaned in python as well. The cleaning included taking out the unnecessary periods and punctuation in the twitter data. After this the data was read into R. In R, a sentimental analysis was performed by separating out the positive and negative words and counting them. This shows overall how southwest reacted to their accident. A sample of the tweets collected is shown below

['@lilia_lerma Of course! You will have that option once you check-in for your flight 24 hours before the flight departure. -Victoria', "@mommateah We've got your back! It was a pleasure having you onboard today. Have a good night! -Victoria", '@Schmariella Any information you have will be helpful! We appreciate you taking the time to reach out. Just send it… https://t.co/bPiN2M17cH', '@wedwards91 Our apologies for the trouble! We truly appreciate your patience tonight. Be sure to keep an eye on you… https://t.co/cgVtGR7b06', '@Schmariella Our apologies for any disappointment, Ariella. Mind DMing us your confirmation number so we can be sur… https://t.co/y2aVisgPRY', "@wedwards91 Hi, Will! Thanks for taking the time to give our Team a shout out. We're glad to hear they were able to… https://t.co/GUTMDnWacs", '@OfdProductions Thanks for your patience this evening. We look forward to our next opportunity to serve you. -Emilia', '@cali_kate727 Thanks for sharing your kind words with us, Kate. We have some of the best Pilots in the industry, an… https://t.co/bL3UABVive', '@CharlesAguillon Oh no! Please DM us so we can take a closer look, Charles. -Victoria', '@scottusmc33 Hi, Scott. While delays will inevitably occur from time to time, we know our Customers depend on us to… https://t.co/vsoKlQmwO2', '@TiffATLtoNYC We apologize for any disappointment.

Conclusion:

After analyzing the data, it was found that there was more positive words than negative words. The initial hypothesis testing stated that the counts of the negative and positive words in the twitter data would be equal. The alternate hypothesis states that the number of positive words and negative words are not equal. Since I am testing for sentiment and not a numerical value, I did not know how to perform a calculated hypothesis test using numerical data to find the mean and standard deviation. With this being said, after looking at the sentimental test, it can be concluded that Southwest Airlines responded positively to its customers after the plane incident.