Airwitter: The Future of Flying

Introduction

Sentiment analysis is the future of analysing consumer opinions and building brand reputation. This is the core to remaining competitive in the digital age, as it ensures you are listening to what customers think, want and need. Our service provides you with the tools to implement proactive changes, responding to customer desires in real time. Utilizing the analysis from our statisticians, customers are provided with clear, effective visualizations allowing airlines to make dynamic reactions and gain competitive advantage.

Drive Proactive Business Solutions

Understanding the motivations behind consumer opinions of your business is crucial to developing effective business decisions, strategies and objectives. For new products to positively impact market share they must align to customer tastes and desires. An industry specific Bubble Chart (Fig.1) provided by Airwitter allows easy recognition of the areas with the strongest negative impact on brand reputation. In this scenario, customer services, cancellations and delayed flights are the largest forces driving negative opinion. Further analysis on the elements of these issues is summarized using a word cloud (Fig.2). This which offers clear, effortless problem identification. By using these tools in conjunction, airlines can gain in-depth knowledge on consumer desires.

For example, the terms "Sunday" and "delay" are significantly correlated to negative tweets. To remain competitive,

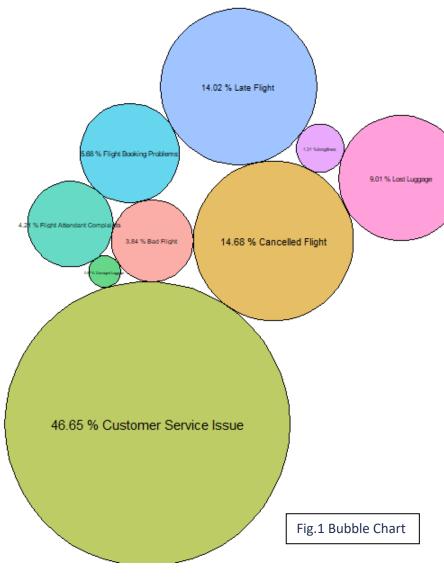
Fig.2 Word Cloud

airlines must examine the punctuality of their Sunday services, ensuring they align to consumer

expectations and standards.

Airwitter's automatic satisfaction reports, including word clouds and bubble charts, provide real time identification of specific problem areas, encouraging proactive, consumer focused solutions. These services allow airlines to place customer experience at the heart of their business, improve operations and gain

competitive advantage.

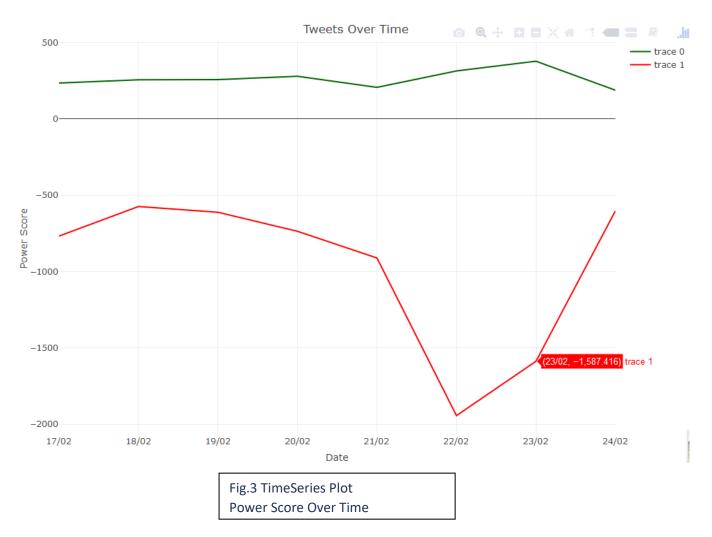




Real Time Audience Insight and Crisis Management

Comprehending audience reactions informs the curation of plans for future content and campaigns. Airwitter calculate a power score for each tweet combining the sentiment of a tweet (as positive or negative integer) and the number of retweets received by that tweet. This score essentially measures the impact of this tweet on the market. Extremely negative reviews with a high volume of retweets will have highly negative power scores.

Social media is crowded with information regarding consumer perception. Airwitter's timeseries plot allows airlines to examine the effect of new strategies, policies or products on the market in real time. Positive tweets are represented by the green line, and negative tweets by the red. By clicking the red line beside "trace 1" in the legend, users can extract a series for solely positive tweets.



It is also worth noting that the sharp dip on 22/02 in the above chart correlates to the information provided in Fig.2, that consumers are dissatisfied by Sunday services.

This tool is vital in identifying marketing strategies which have the potential to permanently tar brand reputation. Recent advertisements from companies such as H&M have missed the mark with consumers, leading to colossal backlash and permanent damage to brand reputation. Utilizing a timeseries plot at the time of campaign/product launch allows airlines to quickly and efficiently summarize market sentiment, identifying improper social media posts to mitigate negative impact.

ROI of Marketing Campaign

Positive discussions surrounding your business contributes to the success equation of your marketing campaign. Airlines utilizing social and content marketing must employ sentiment metrics to fully capture



their true ROI. Companies receiving a high volume of mentions on twitter may condone their marketing strategy a success, regardless of a possibility of negative sentiment behind said tweets. To combat this, we provide a clear, concise breakdown of retweets and sentiments for each airline, combined as a power score (Fig.4). Not only does this highlight general areas of concern for airlines, but potential gaps in the market where your airline could gain competitive advantage. Customer service appears to be of the utmost importance to consumers. This plot allows airlines to redesign their marketing strategy to convey a friendly, consumer centric service.

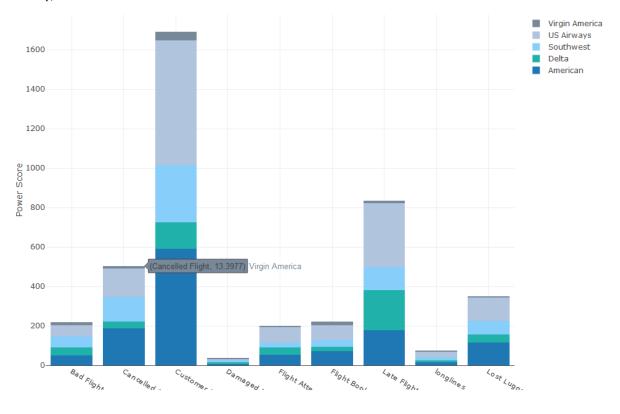
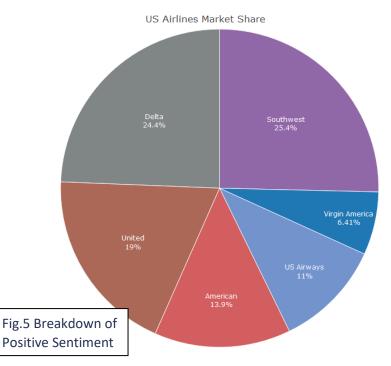


Fig.4 Negative Reason Breakdown

The above plot indicates that US Airways are trailing behind in terms of providing an enjoyable consumer



experience. They appear to account for the largest proportion of negative tweets in each category, from Bad Flights to Lost Luggage. This is further reflected in Fig 5., where US Airways account for only 11% of positive tweets in the market. These charts enable airlines to assess competitor's strengths and weaknesses and develop strategies to strive where others are lacking. This is the key to gaining competitive advantage.

Improved Customer Service

Sentiment analysis can identify negative discussion and give real time alerts to allow timely responses. Fast, efficient responses to disgruntled customers can prevent tweets gaining momentum and escalating



further. Airlines have a small window of opportunity to convert a negative customer experience to a positive one, furthering the need for the tools we provide.

An hourly chart of power scores over a 24-hour period allows airlines monitor the times where tweets concerning their business are highest (Fig 6). This informs the number of staff required to operate social media platforms, providing consolation and support to customers.

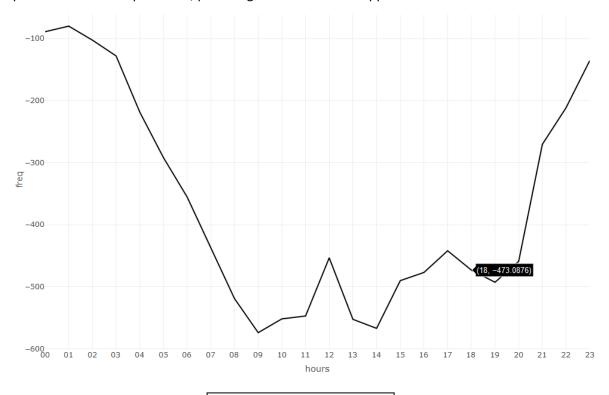


Fig.6 Power Scores vs Time

Sentiment analysis of social media listening to manage complaints helps transform customer opinion from negative to positive. When interacting with the public face-to-face, airlines become reliant on favourable reviews for business. It is therefore paramount to understand customer complaints and issues. Maintaining positive customer relations can drive revenues as airlines receiving the largest number of searches will be ranked highest on google search and are presented to consumers before competitors.

Fig 7 outlines the issues that are most retweeted, and therefore most widely spread through social media. Although issues such as cancelled flights and late flights cannot be corrected through online platforms, it is vital to understand and respond to consumer complaints. Consumers are most frustrated by poor customer service. This furthers the need for airlines to utilize our services in predicting the volume of tweets they receive, informing staffing requirements and reducing costs by limiting the number of idle staff.

Further Analytics

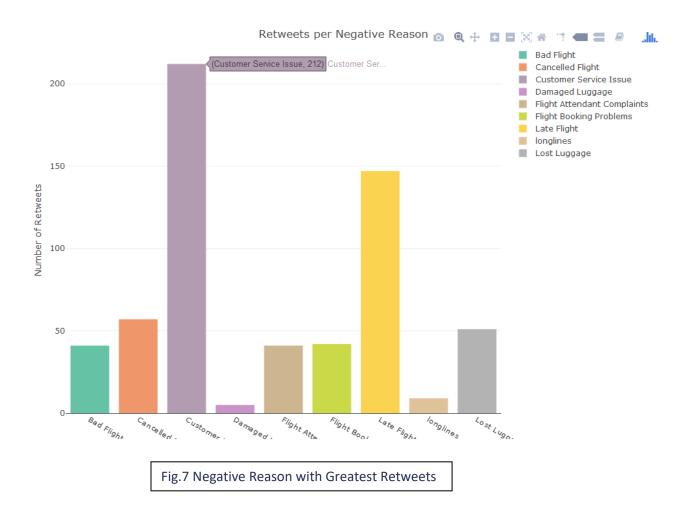
Investment in the second branch of Airwitter would provide a variety of informative, easy to use visualizations. A higher volume of tweet locations calculated using time zones and alongside analysed text language, would provide graphs clearly labelling locations of greatest concern, who are generally most dissatisfied by airline services. Such locations are ripe for targeting with improved services and customer experience, potentially offering wider revenue streams.



By developing our second branch of analytics, tweets would be labelled based solely on the text entered. This would allow Airwitter visualize the motivations behind positive sentiments, informing business strategy and increasing profits.

Analytics into the use of language could provide insights into the age of the reviewer. This would aid the development of age-specific advertising strategies, as we have the capabilities to visualize the most important aspects of airline services with regards to age.

Finally, by monitoring the effects of features which negatively impact an airline, followed by user sentiment to any efforts made by the airline to rectify the issue, would provide insights into the correct way to handle complaints. Analysing impacts on shares price and power scores for businesses following rectification would allow forecasting visualizations of customer reaction to airline efforts. This would allow airlines predict consumer behaviour and better refine strategy.



Conclusion

The real question here is not if airlines can afford our product, it is if they can afford to go without it. Understanding consumer opinion through our clear, effective visualizations will allow airlines to make effective, dynamic decisions and rapidly transform their brand image. Consumers will become the heart of the business plan, using their ideas to inform new strategies, products and objectives. Delivering a service centring around consumer needs will boost revenues, whilst reducing staffing costs through use of visualizations provided by Airwitter. Further investments will add new functionality that can only further our success. There really is no limit to the value our company can add to airlines in this industry!

