

Sprint 0:

The Problem Area:

I am interested in social listening, with a specific focus on sports brands. Social listening involves tracking and analyzing conversations around a brand to gauge public sentiment and brand perception. In the sports industry, where brand loyalty and public image are crucial, understanding how consumers discuss and perceive brands online can offer significant insights. One challenge I aim to address is how sports brands are perceived across different social media platforms and how these perceptions impact brand loyalty and consumer behavior.

The User:

The primary users who experience these problems are marketers, brand managers, and business analysts working for sports brands. They need to understand the ongoing conversations about their brands to adjust their marketing strategies, manage public relations, and respond to crises. By leveraging social listening, these professionals can benefit from real-time insights into consumer sentiment, helping them make informed decisions that enhance brand image, drive customer engagement, and ultimately boost sales.

The Big Idea:

Machine learning can bring solutions to this area by analyzing vast amounts of social media data to detect sentiment, identify key discussion topics, and predict future trends in brand perception. For instance, sentiment analysis models could automatically classify social media posts as positive, negative, or neutral, allowing brand managers to quickly assess the public's mood. Additionally, topic modeling can help identify what aspects of a brand are most frequently discussed, such as product quality, sponsorships, or recent advertising campaigns. I will research how others have approached social listening using machine learning, particularly in the context of brand analysis, to guide my methodology.

The Impact:

My project could add significant business value by providing sports brands with actionable insights into how they are perceived by their audience. This could lead to better-targeted marketing efforts, more effective public relations strategies, and ultimately stronger brand loyalty. If I can quantify the scale of the problem, I might estimate potential increases in sales or improvements in brand sentiment resulting from targeted interventions based on social listening insights.

The Data:

To execute this project, I have identified several possible datasets:

- **Twitter API:** I will use this to collect tweets mentioning specific sports brands. The data will include tweet text, user demographics, timestamps, and engagement metrics, which will be invaluable for sentiment analysis and trend identification.
<https://developer.x.com/en/docs/twitter-api>

- **Reddit Data:** I plan to use the Reddit API to gather discussions from relevant subreddits. This platform provides more in-depth community discussions, which could complement the more fast-paced Twitter data. <https://www.reddit.com/dev/api/>
- **Sentiment140 Dataset:** This dataset contains pre-labeled sentiment data from tweets, which I can use to train or validate my sentiment analysis models.
- **Google News API:** I will use this to gather news articles mentioning sports brands. This will allow me to analyze how news coverage impacts social media discussions.
- **Kaggle Datasets:** I will explore Kaggle for any available datasets on sports brand sales or consumer behavior, which can provide context to the social media data.

If I encounter difficulty in finding adequate datasets, I will consult with my Educator to explore alternative approaches.

The Alternative:

I am currently working in my alternative project, since the main did not work.