

## **Proposal To Extract Valuable Analysis @CommBank Twitter Account**

**Objective:** A proposal outlining strategies for InsightSpark to leverage data from the @CommBank Twitter account to derive meaningful insights.

**Data Collection:** Twitter API is used to collect the data@**@CommBank**.We collect tweets content,timestamp,retweet count ,favorite count and any associated hashtags or mentions.

### **Data Analysis:**

**Sentiment Analysis:** Sentiment analysis aims to classify text based on the emotions or attitudes expressed, categorizing it as positive, negative, or neutral. The objective of sentiment mining is to analyze people's opinions in a way that helps businesses grow. It provides valuable insights into how customers perceive and respond to @commBank's services and announcements.

**Topic Modeling:** Topic modeling is a technique used to uncover hidden themes or topics within a large collection of text. It is especially useful for analyzing documents, articles, or social media posts to identify prevalent patterns. @commBank can leverage this approach to gain insights into common discussions and trends.

**Engagement Analysis** – Examining which @CommBank tweets receive the most likes, retweets, comments, and shares to identify high-performing content.

**Trend Analysis** – Identifying patterns related to when these tweets are posted and whether specific days/times yield higher engagement.

**Text Analysis** – Analyzing the content of high-engagement tweets to find common themes, keywords, sentiment, or tone that resonate with the audience.

**Opinion Mining** – Identifying key emotions, concerns, or praise expressed in responses to different tweets. These insights help **CommBank** refine its engagement strategies, address customer concerns, and enhance brand perception.

**Audience Analysis**-Exploring user profiles of those engaging with **@CommBank**, analyzing their demographics, interests, and engagement behaviors. Segmenting the audience into categories (e.g., customers, industry professionals, casual followers) to tailor marketing strategies. Identifying influencers or highly engaged users who can amplify content reach.

**Tools and Technologies:** Data Science & Machine Learning Tools for Custom Models

- Python (with libraries like Numpy, Pandas, Matplotlib, Seaborn): Widely used for custom data analysis, creating sentiment models, and performing deeper insights on Twitter data.
- R (with packages like tm, tidyverse, and ggplot2): For those who prefer R over Python, it offers strong text mining and data visualization capabilities to analyze social media data.

### **Leveraging @CommBank Twitter Data for Actionable Business Insights**

**Customer Experience Improvement:** By analyzing the sentiment in replies and comments, CommBank can identify customer satisfaction levels, uncover complaints, and address issues swiftly, improving customer experience.

**Brand Health Monitoring:** It can help assess how customers feel about CommBank's services, marketing campaigns, and corporate announcements. Understanding public sentiment allows the bank to manage its reputation and make necessary adjustments to its offerings or communications.

**Crisis Management:** If negative sentiment spikes (e.g., due to an issue with a service), CommBank can quickly respond, engage with affected customers, and mitigate potential damage to the brand.

**Content Strategy:** Understanding trending topics enables CommBank to create content that resonates with their audience, enhancing engagement with relevant, timely, and interest-driven posts.

**Seasonal or Event-Driven Strategies:** By identifying peak engagement periods (e.g., during holidays or financial year-end), CommBank can align its marketing campaigns with these times to maximize effectiveness.