

Proposal: Leveraging @CommBank Twitter Data for Valuable Insights

Prepared for: InsightSpark

Prepared by: Katie Nguyen

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1. Objectives

The key objectives of analyzing @CommBank's Twitter data include:

- Understanding customer sentiment and brand perception.
- Identifying trends in customer concerns and feedback.
- Measuring engagement levels and effectiveness of marketing campaigns.
- Benchmarking against competitors.
- Detecting emerging industry trends and public opinions.

2. Data Collection & Preparation

To extract insights, we will collect the following types of data from @CommBank's Twitter account:

- **Tweets:** Official announcements, promotions, and customer interactions.
- **Mentions (@CommBank):** Public responses and feedback from customers.
- **Replies and Comments:** Direct engagement with customers.
- **Hashtags & Keywords:** Recurring themes in conversations.
- **Engagement Metrics:** Likes, retweets, and replies to measure tweet performance.

3. Key Analytical Approaches

3.1. Sentiment Analysis & Topic Trend

- Classify tweets into **Positive, Negative, or Neutral** categories
- Detect **complex sentiments** such as sarcasm, irony, and mixed emotions
- Identifying recurring topics in conversations can highlight key areas of customer concern

Tools: ChatGPT API, Wordcloud

3.2. Engagement Analysis

We will analyze:

- Which tweets get the highest engagement (likes, retweets, comments)?
- Best times and days to post for maximum reach.
- Which hashtags generate the most interaction?

- What type of content (images, videos, plain text) performs best?

Tools: Twitter Analytics, Python (Pandas, Matplotlib)

3.3. Crisis Detection & Management

By monitoring **spikes in negative mentions**, we can:

- **Detect potential PR crises early** (e.g., data breaches, service outages).
- **Provide sentiment-based alerts** to mitigate reputational risks.
- **Track customer response trends** before issues escalate.

Tools: Real-time sentiment tracking using Python (Tweepy)

4. Expected Outcomes

By implementing this analysis, InsightSpark can provide CommBank with:

- A comprehensive sentiment analysis report on **customer perception**.
 - **Trend analysis:** Identification of emerging trends in customer conversations
 - Insights into customer pain points and expectations.
 - Real-time alerts for **potential reputational risks**.
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