

Problem Definition:

The problem is to perform sentiment analysis on customer feedback to gain insights into competitor products. By understanding customer sentiments, companies can identify strengths and weaknesses in competing products, thereby improving their own offerings. This project requires utilizing various NLP methods to extract valuable insights from customer feedback.

Design Thinking:

- 1. Data Collection:** Identify a dataset containing customer reviews and sentiments about competitor products.
- 2. Data Preprocessing:** Clean and preprocess the textual data for analysis.
- 3. Sentiment Analysis Techniques:** Employ different NLP techniques like Bag of Words, Word Embeddings or Transformer models for sentiment analysis. a, **Feature Extraction:** Extract feature; and sentiments from the text data
- 5. Visualization:** Create visualizations to depict the sentiment distribution and analyze trends.
- 6. Insights Generation:** Extract meaningful insights from the sentiment analysis results to guide business decisions.