Identifying sentiments in tweets

Overview

- Project objective
- The data
- Method and approach
- The final model
- Results and implications

Business Problem

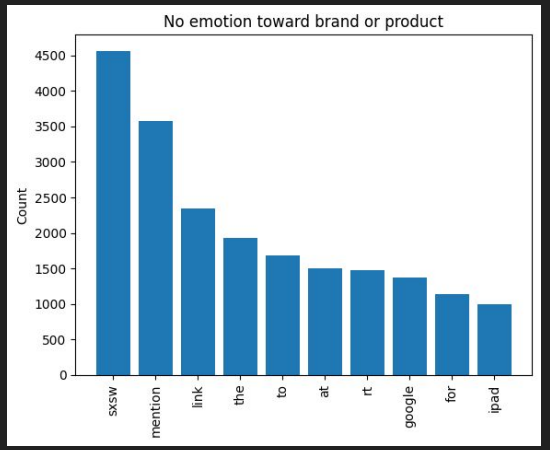
Objective: **Categorize** tweets by **sentiment** expressed

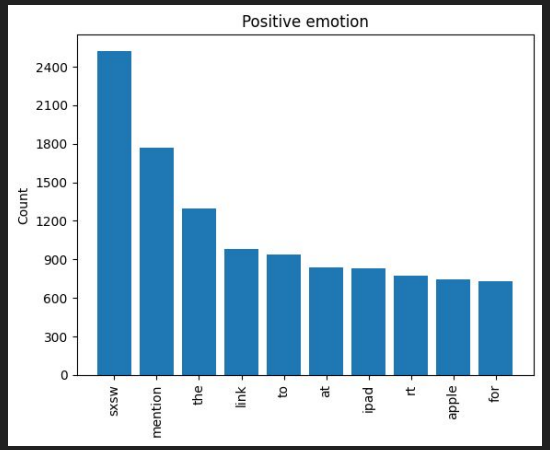
- ➢ Help the advertising team identify positive and negative tweets
- ➢ Help inform clients what **twitter users like** and **dislike** about their products
- ➢ Clients can **refine** their **advertisements** accordingly

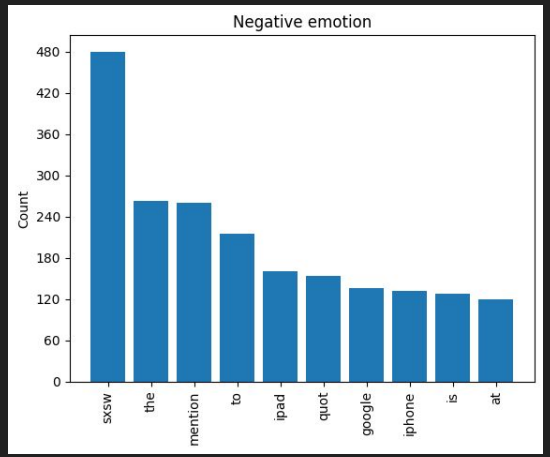
Data

- Almost **10,000** real tweets about various products
- **Contents** of the tweet and **sentiment** expressed (positive, neutral, negative)

Distribution of most frequently used words in each category:







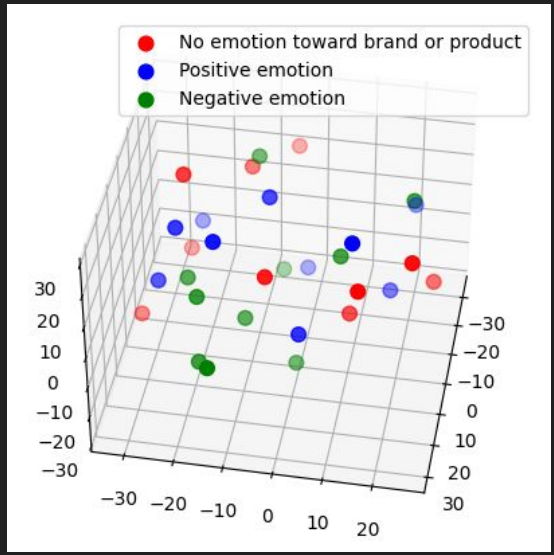
Modeling method

Support Vector Machine

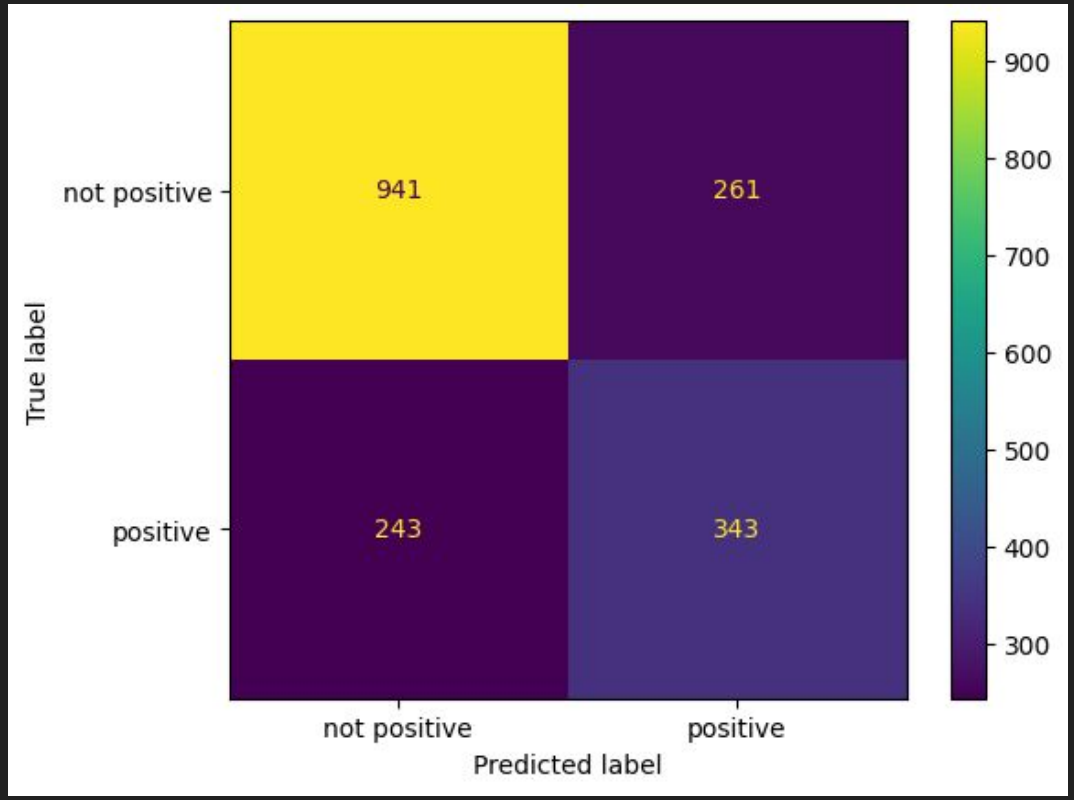
➔ Maps data into multidimensional space
➔ Find the **best line of separation** between categories

Binary classification

➔ Sorts tweets into **positive** and **not positive**
➔ Prioritizes identifying positive tweets correctly



- ~ 72% accuracy, ~60% of positive tweets identified



Implementation

- A tool for sorting tweets to **gauge public opinion**
- Analyse tweets identified as **positive** to find points to **include** in promotion
- Analyse tweets identified as **non-positive** to find points to **exclude** or **improve** upon
- **Further filtering** is recommended

Next Steps

- ❏ Obtain more data points about negative tweets
- ❏ Add more features to train the model
- ❏ Expand into multiclass classifier

Thank you for listening!

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