



# Samsung Launch: The Folding Tablet

Tweets' Sentiment Predictions

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# 01 Overview

Objectives & Context

# Samsung Folding Tablet: Launch at SXSW

## The Task

→ Shaping the marketing strategy for the launch of the folding tablet

## Objectives

1. Analyze success stories of industry technology leaders at South by Southwest
2. Predict sentiment to evaluate strategy efficacy

## Intended Audience

→ Samsung Marketing Strategy Teams





02

# Preparation

Tweets Preprocessing

# Tweet Data Preprocessing

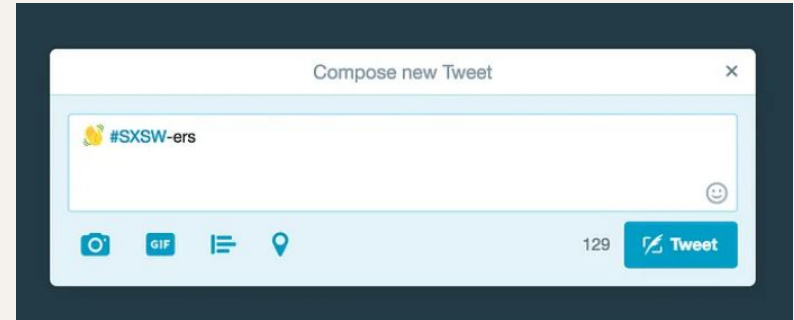
## Sentiment Category

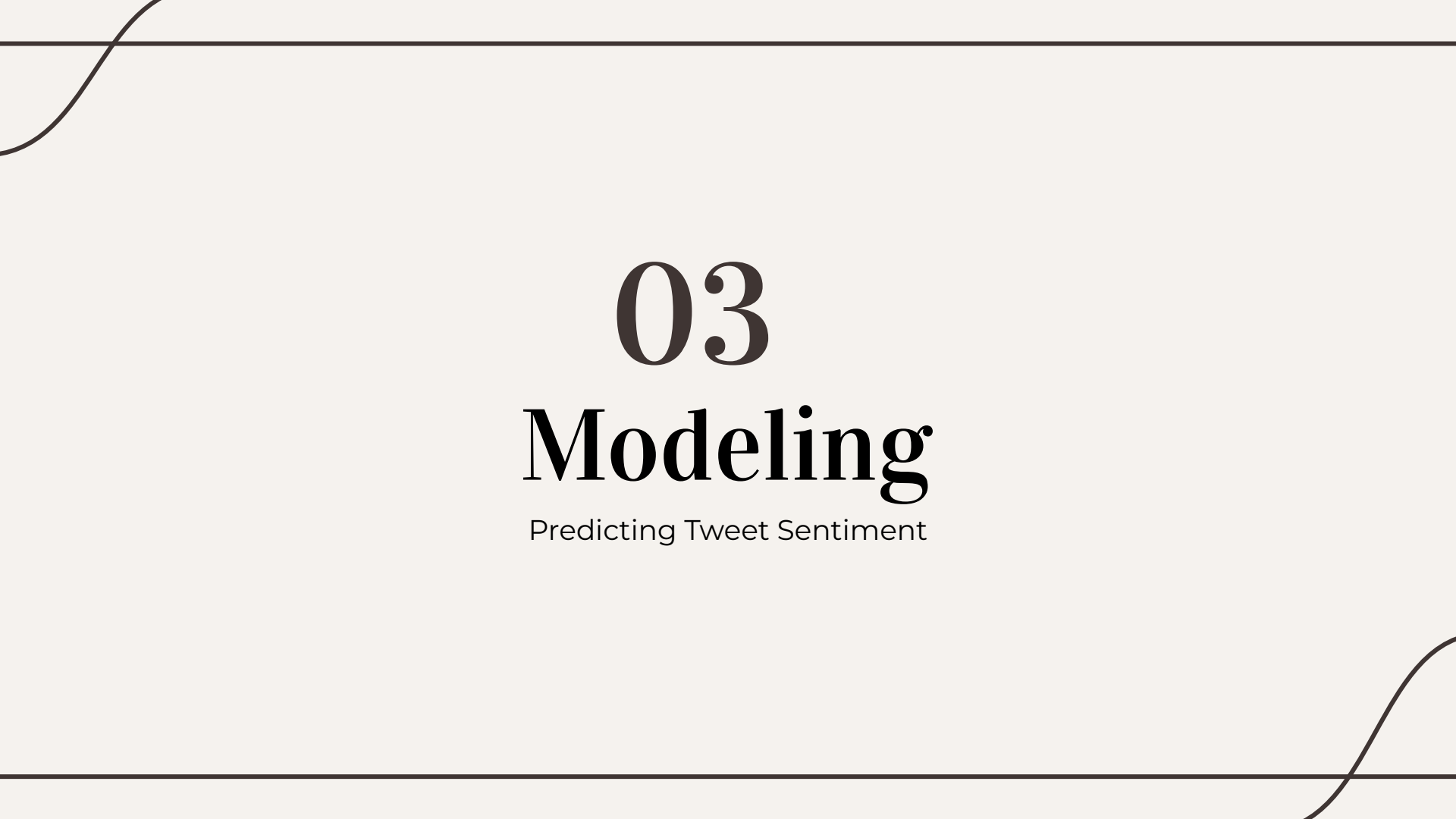
→ **Positive** vs Not Positive

*Summarized as **Positive vs Negative** for easier use*

## Tweet Transformation

- Standardized case
- Individualized words (tokenized)
- Removed common function words (stopwords)
- Reduced words to their base (lemmatized)



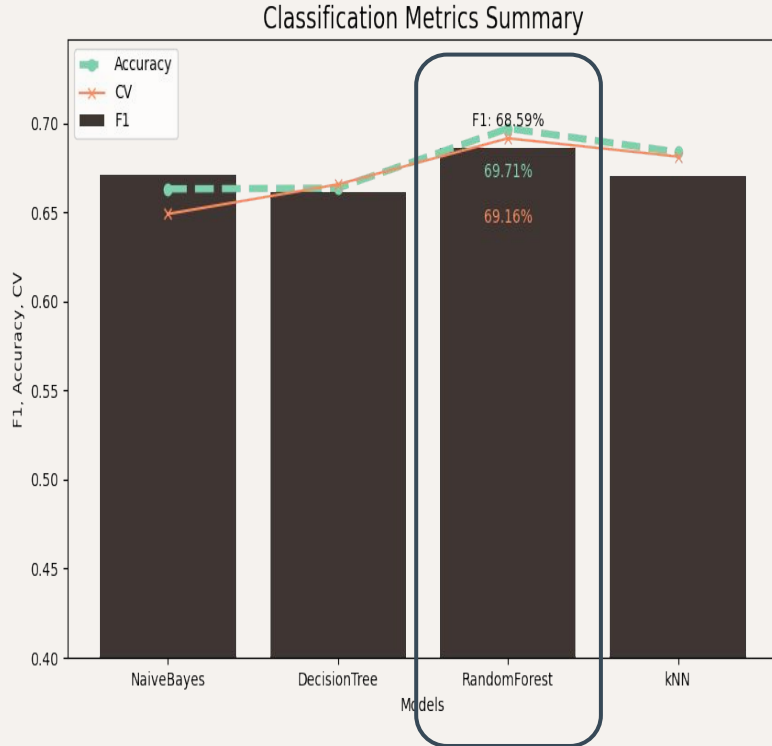


# 03

# Modeling

Predicting Tweet Sentiment

# Predicting Tweet Sentiment



## Word Scoring Through the TF-IDF Method

→ How often a word appears & how unique it is

### 4 Model Types

- Naive Bayes
- Decision Tree
- ➔ - Random Forest
- K-Nearest Neighbor





04

# Evaluation

Best Model

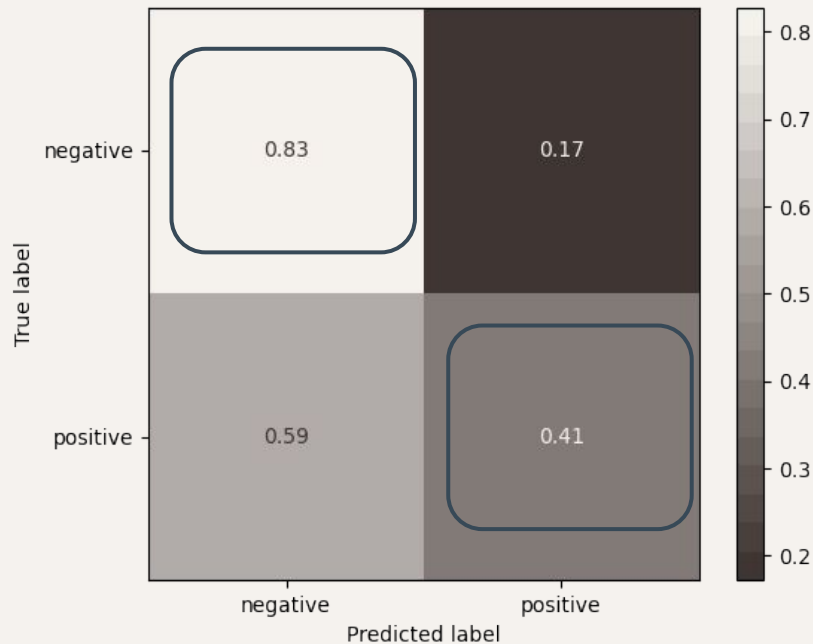
# Evaluating Sentiment Prediction Model

## Model Performance

- Close to 70% of all tweets correctly predicted (accuracy)
- Highest score for main metric (F1)  
Balance between FP and FN
- Better prediction of negative sentiment tweets (83%)

The cost of false negative is as important as false positive

Model Performance: Confusion Matrix



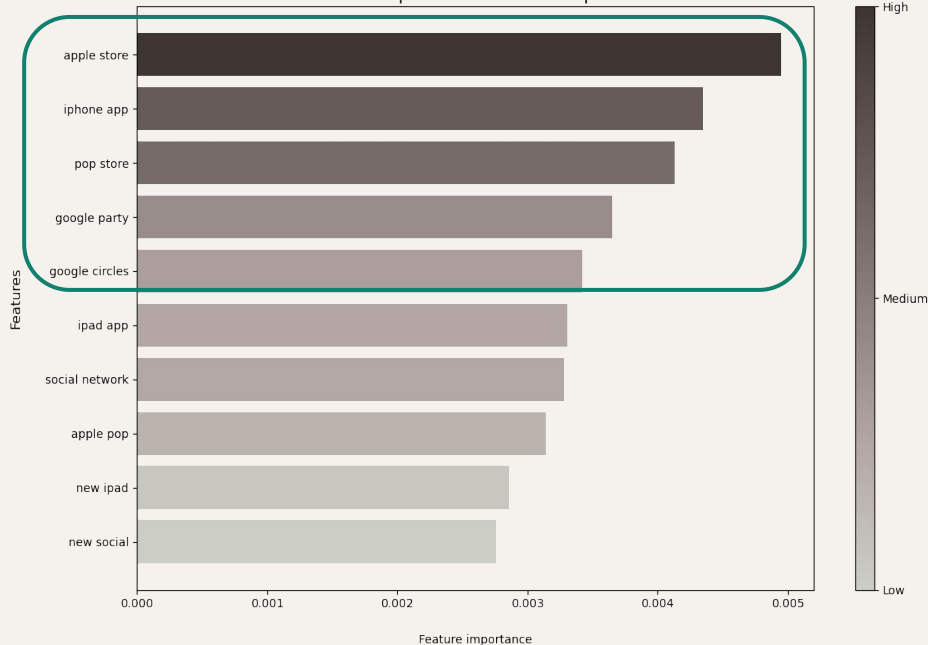


05

# Recommendations

# Marketing Strategy Recommendations

Most Important Features: Top 10



## 1. In-Person Sales & Pop-Up Stores

→ Offer exclusive early access to the tablet

## 2. Develop an app for the conference

→ Leverage the app to facilitate access at SXSW

## 3. Strategic Hashtag Campaign

→ Position the hashtag as a means to win a tablet

*Inspiration from excitement around 'social network launch*

## 4. Exclusive Party Integration

→ Create exclusive experience at an amazing party



06

# Next Steps

Limits

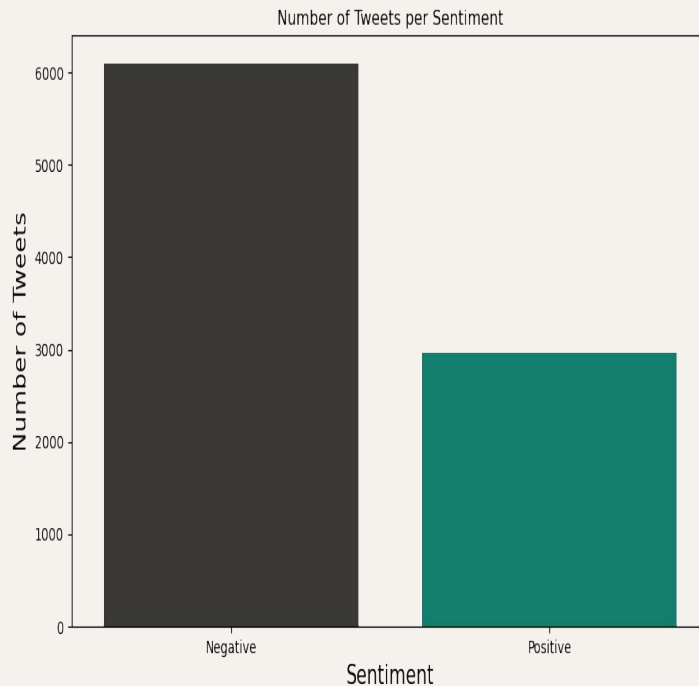
# Limits

We would aim for accuracy & F1 scores above 70%

To achieve this, we would:

## **Address Further Class Imbalance**

- Synthetically Oversample Positive Tweets
- Stratify Undersample Negative Tweets
  - keeping the words' ratios per class





## Contact Information

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