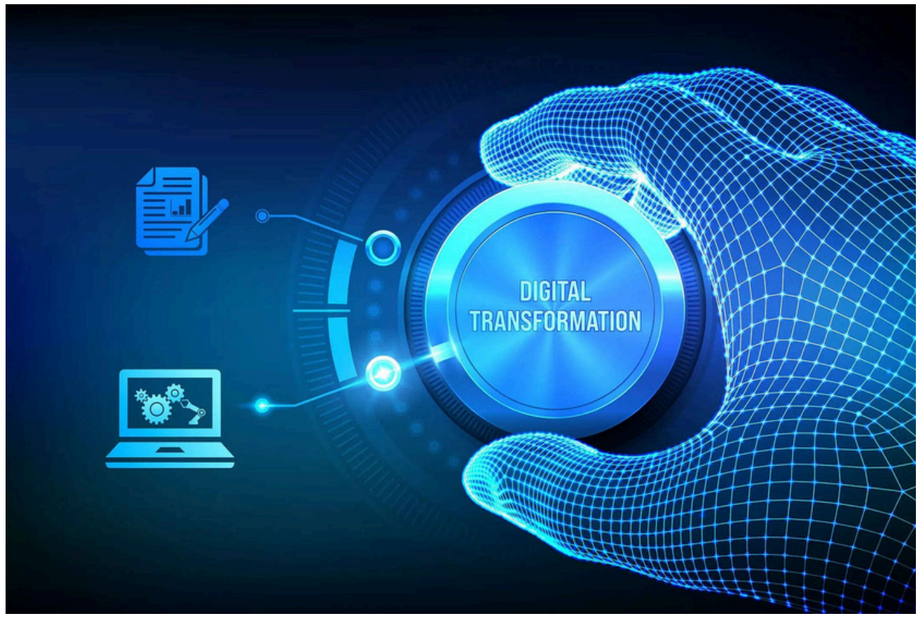
Brands product

Emotion Analysis



Introduction

- Project to analyze public sentiment toward technological products using social media data

Objectives of the analysis

- Classify tweets related to major tech brands (e.g., Apple, Google)
- Detect tweets with positive sentiment for further insights
- Optimize marketing strategies and product development

Stakeholders

Who’s the Target?

01 **Marketing Teams**

02 **Product Teams**

Business Case

Core Objective

- Analyze public sentiment toward technological products

Results implications:

01 Guide decisions on marketing strategies, and product management

02 Help companies fine-tune product features that resonate most with consumers for increased customer satisfaction and competitive edge

Data

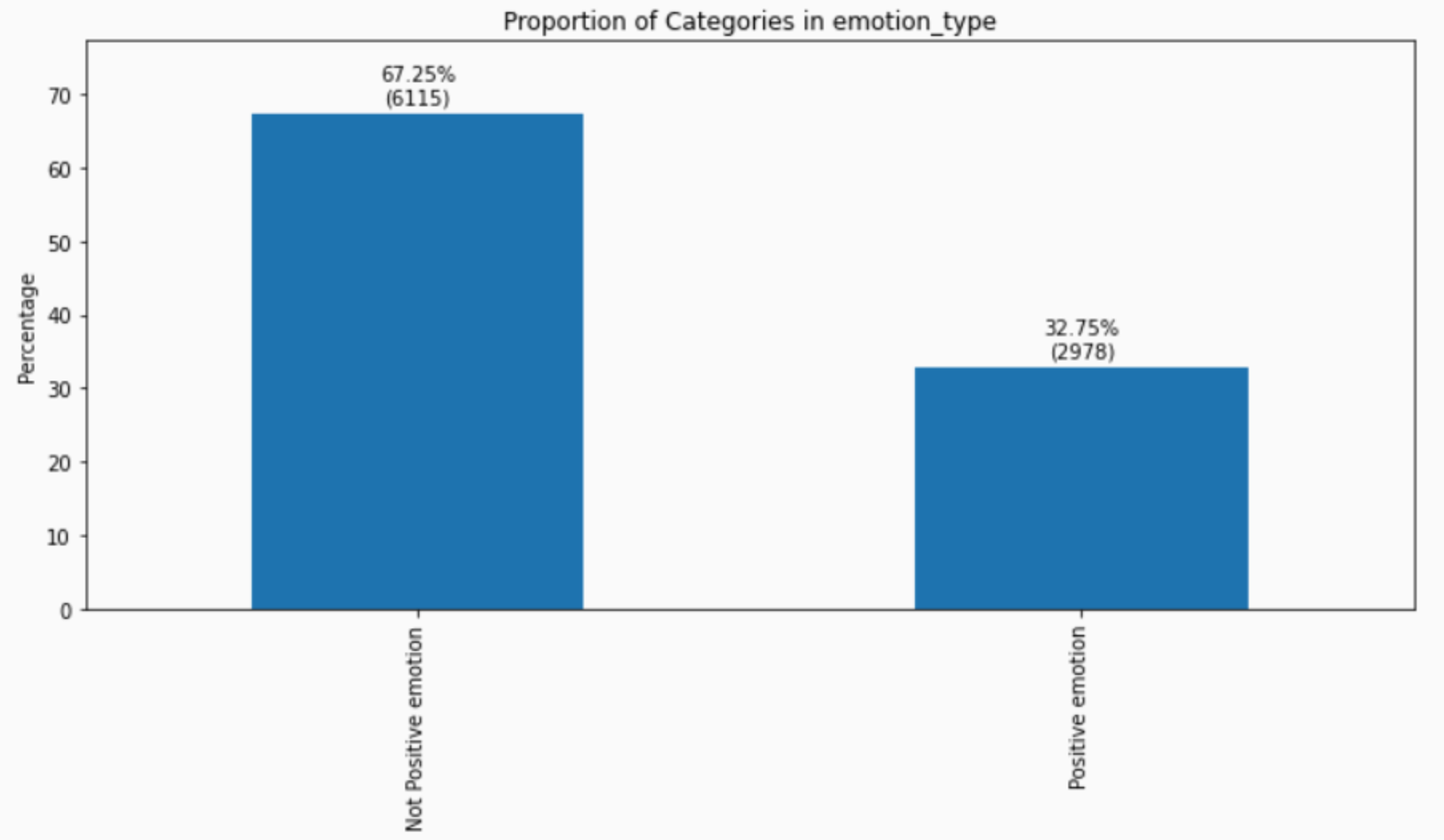
Dataset Overview

- Source: data.world
- Link to the source: https://data.world/crowdflower/brands-and-product-emotions
- Traning dataset: 5910 records
- Testing dataset: 3183 records

Dataset Description

- Fields: tweets, emotion, brand device

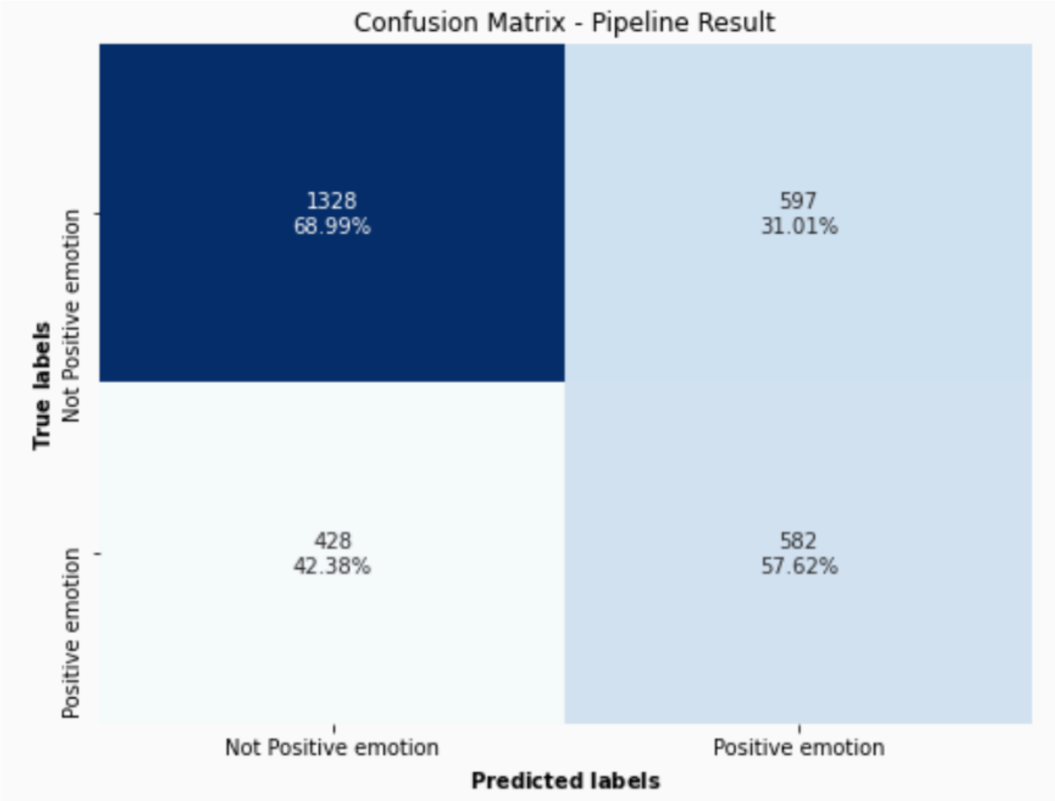
Emotion Status



Modelling Approach

Models tested: Logistic Regression, XGBoost, Random Forest, and Neural Networks

Best model: XGBoost because it had the highest precision score with the lowest false positive rate (31%)



Focus Areas

Focus on improving the false positive rate of 31.01% in predicting positive sentiments by:

- **Increasing the size of the training dataset (in particular the tweets with positive emotions)**
- **Enable the model to capture word dependencies**

Future Goal: Deeper insights

01 Build a model to identify **characteristics** that drive **positive sentiment** in technological products

02 Use insights to **optimize product development** and **marketing strategies**

Thank You Very Much

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