



أكاديمية سدايا
SDAIA Academy



ASOS

SENTIMENT ANALYSIS ON ASOS TWEETS

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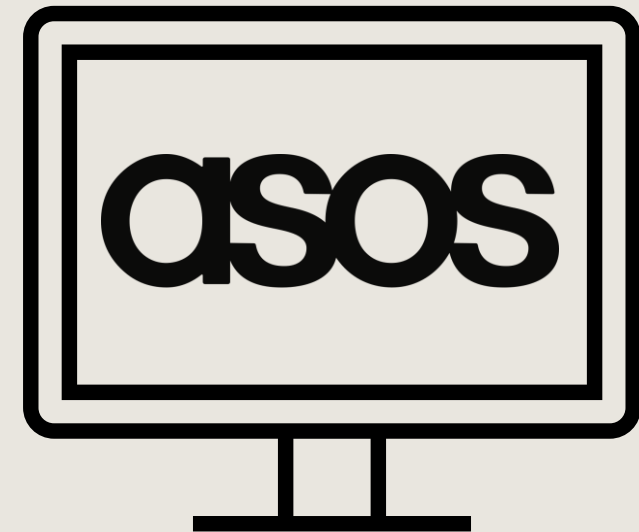
Reef Alturki

AGENDA

- Project Introduction
- Data Acquisition
- Topic Modeling
- EDA
- Conclusion/ recommendations

ASOS ONLINE MARKET PLACE

ASOS plc is a British online fashion and cosmetic retailer. The website sells over 850 brands as well as its own range of clothing and accessories, and ships to all 196 countries.



SENTIMENT ANALYSIS

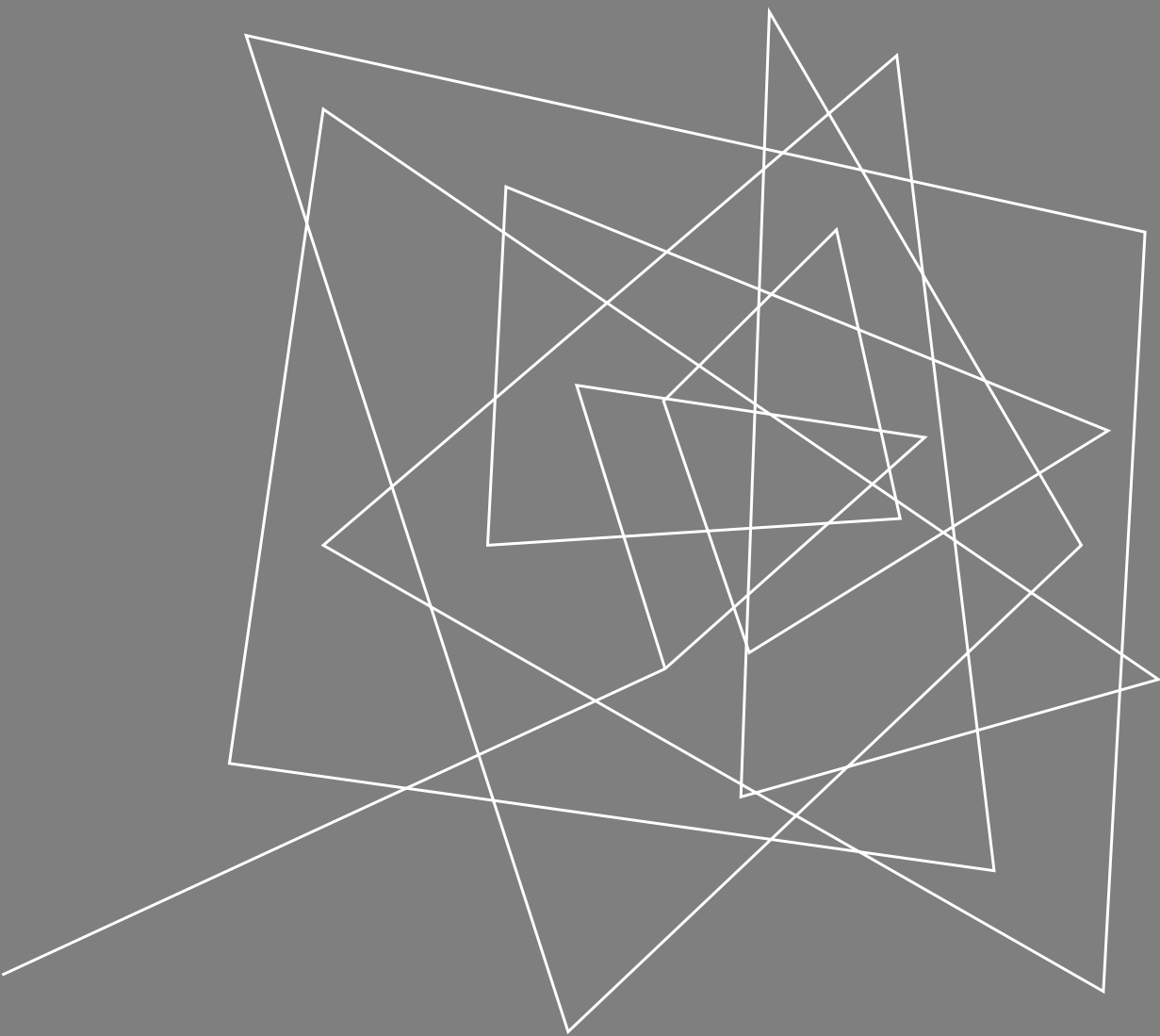
- sentiments are feelings, opinions, emotions, likes/dislikes.
- Sentiment analysis is a NLP task that aims to obtain the writer's feelings expressed in **positive** or **negative** text.



PROJECT GOAL

Build unsupervised topic modelling
on twitter users' tweets about their
options on ASOS services

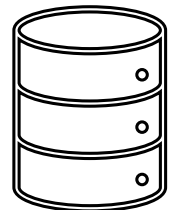


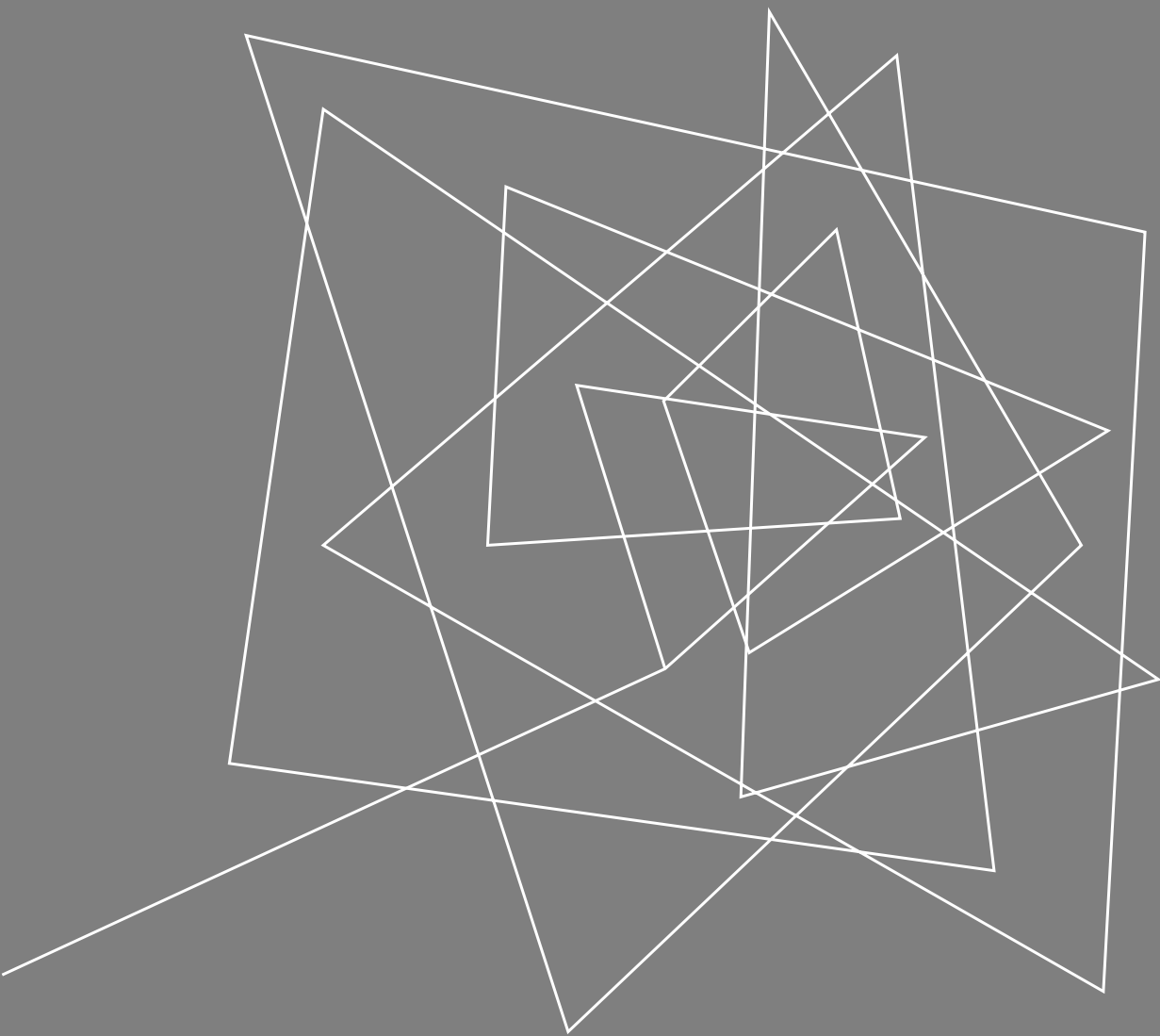


DATA ACQUISITION

DATA ACQUISITION

- Scraping tweets about ASOS using TWINT
- tweets starting from 30/10/2019 until 03/11/2021
- 22676 rows and 37 features





TOPIC MODELING

PREPROCESSING



Data Cleaning

Remove symbols,
hashtags, mentions



Spelling Correction

Correcting the
misspelled words in
tweet



Lemmatization

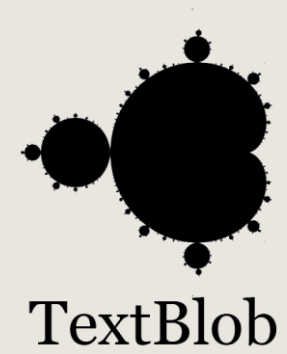
Lemmatize the tweets'
words



Vectorization

Count Vectorizer, TF-
IDF Vectorizer

TOOLS



TOPIC MODELING ALGORITHMS

Trying different topic modeling algorithms with different number of topics

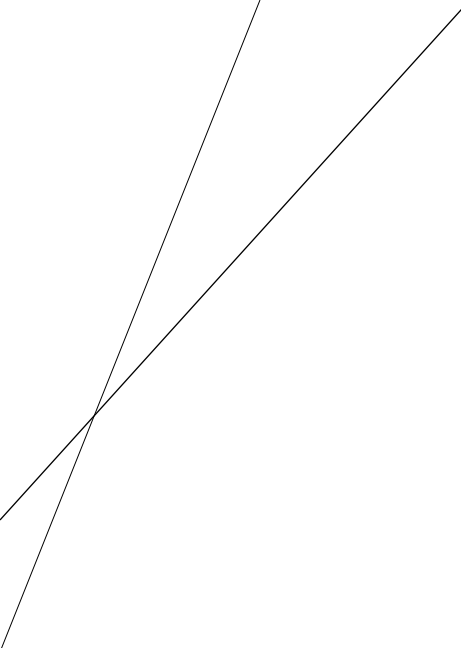
LSA

LDA

CorEx

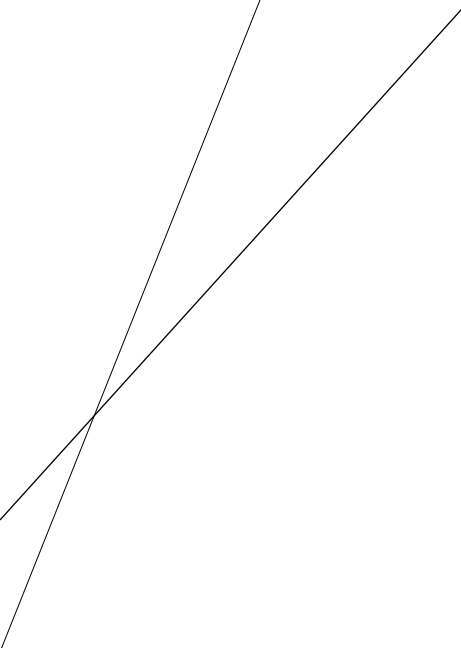
NMF

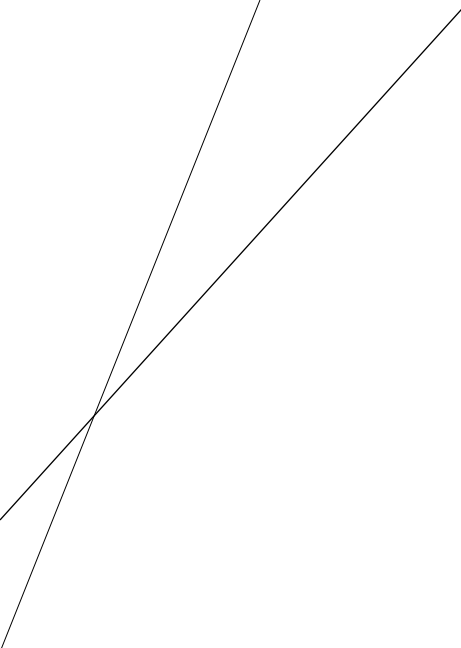
The best model is NMF with 6 topics



Topic: Products

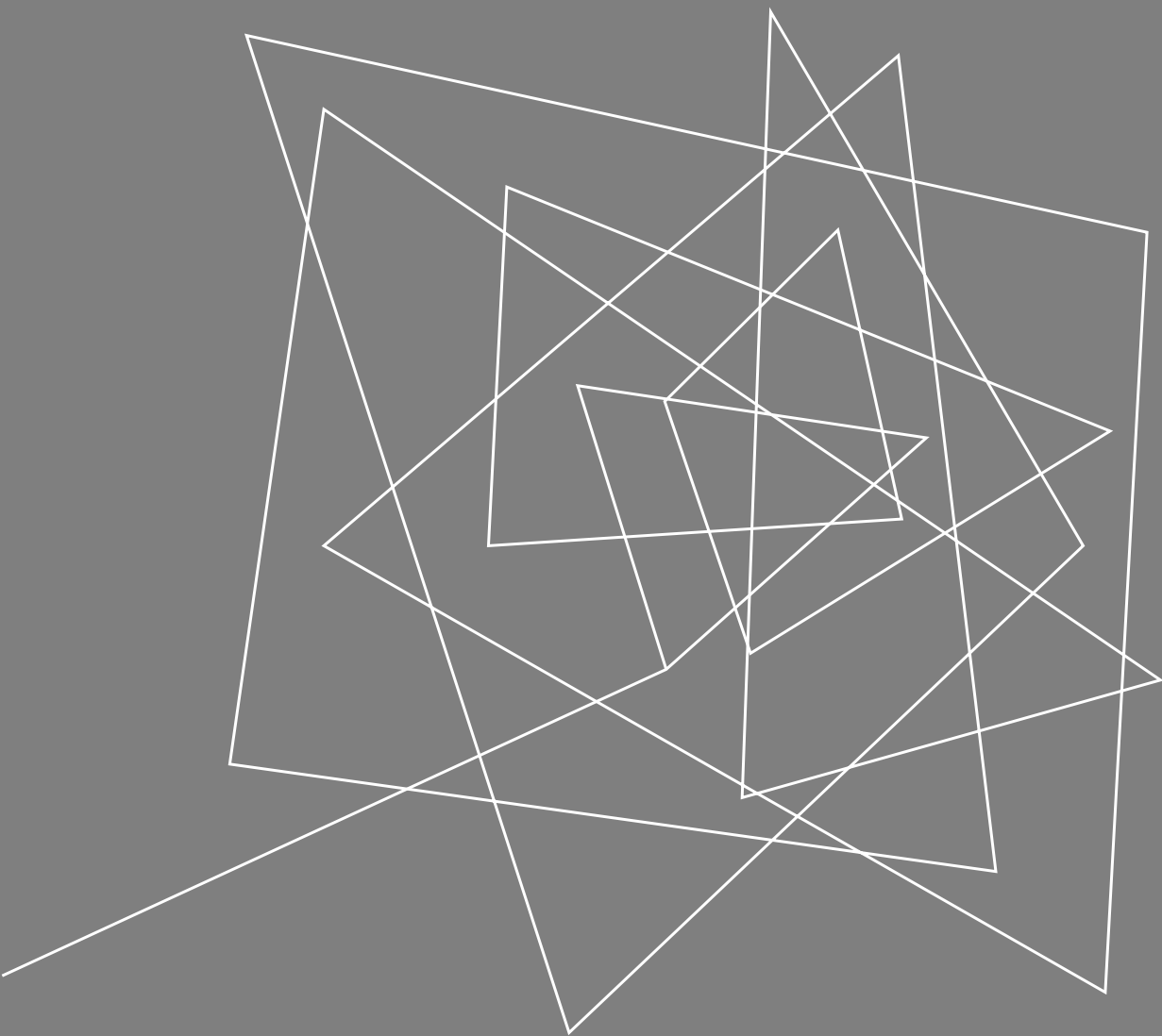






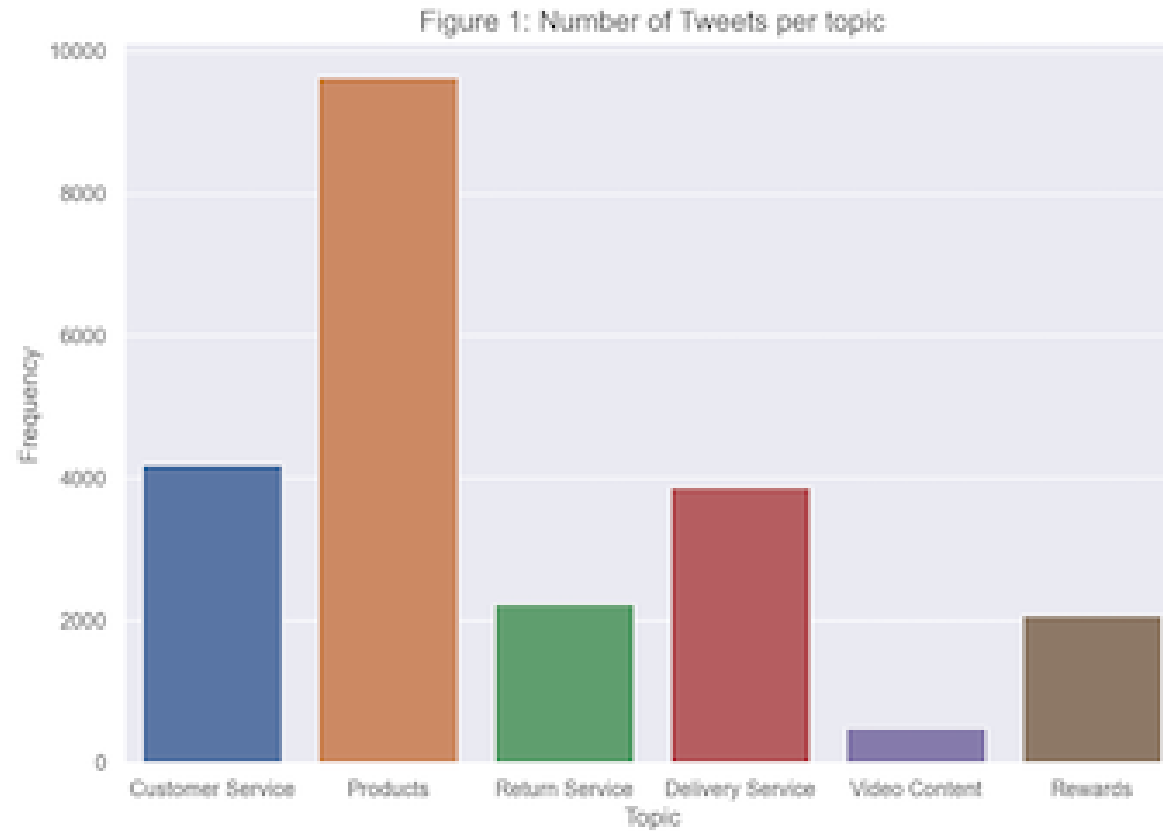






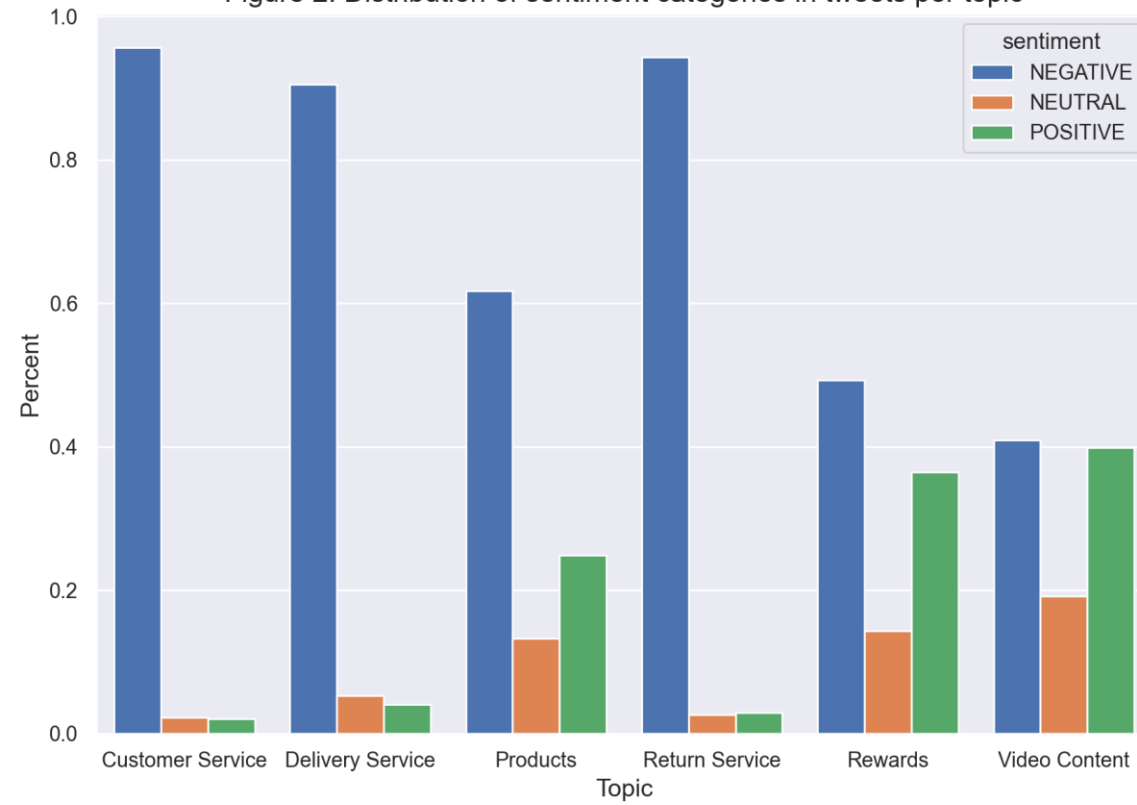
EDA

FREQUENCY OF TOPICS

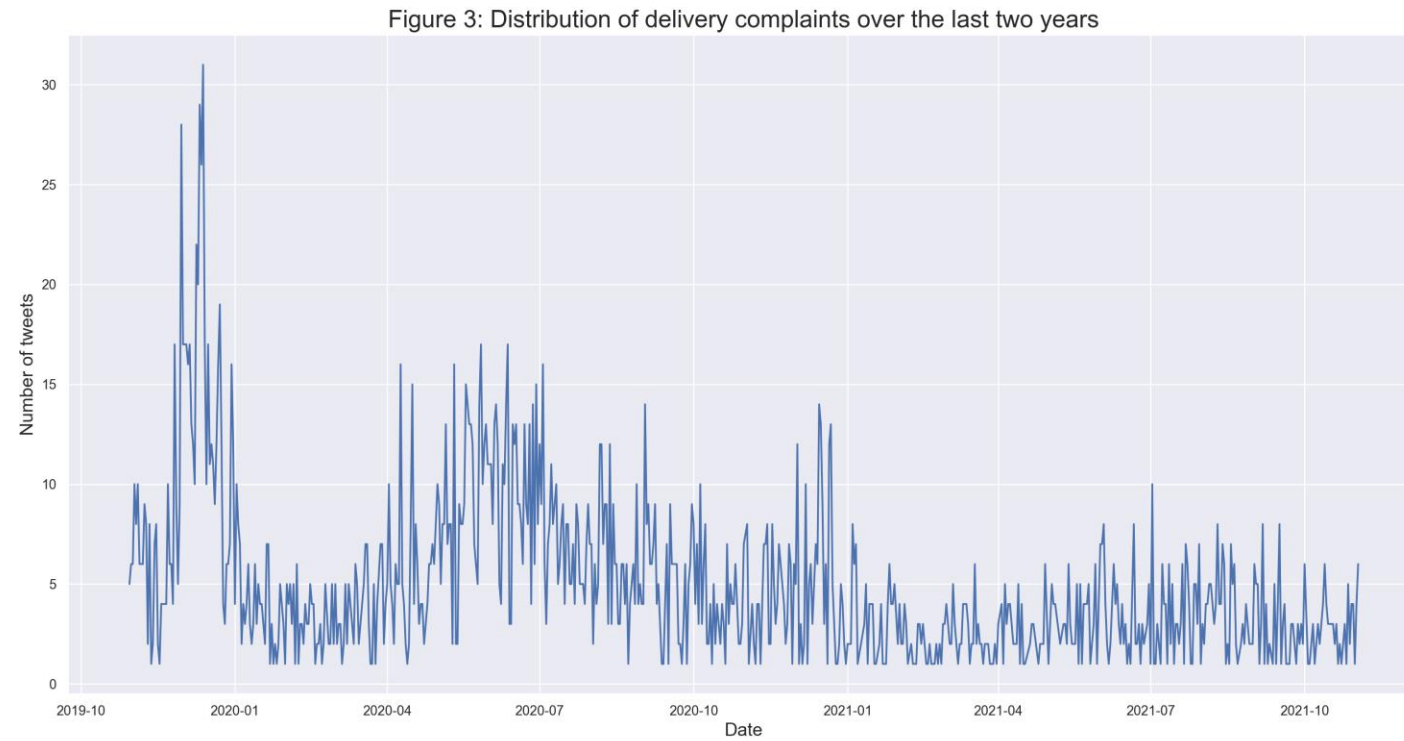


SENTIMENT PER TOPIC

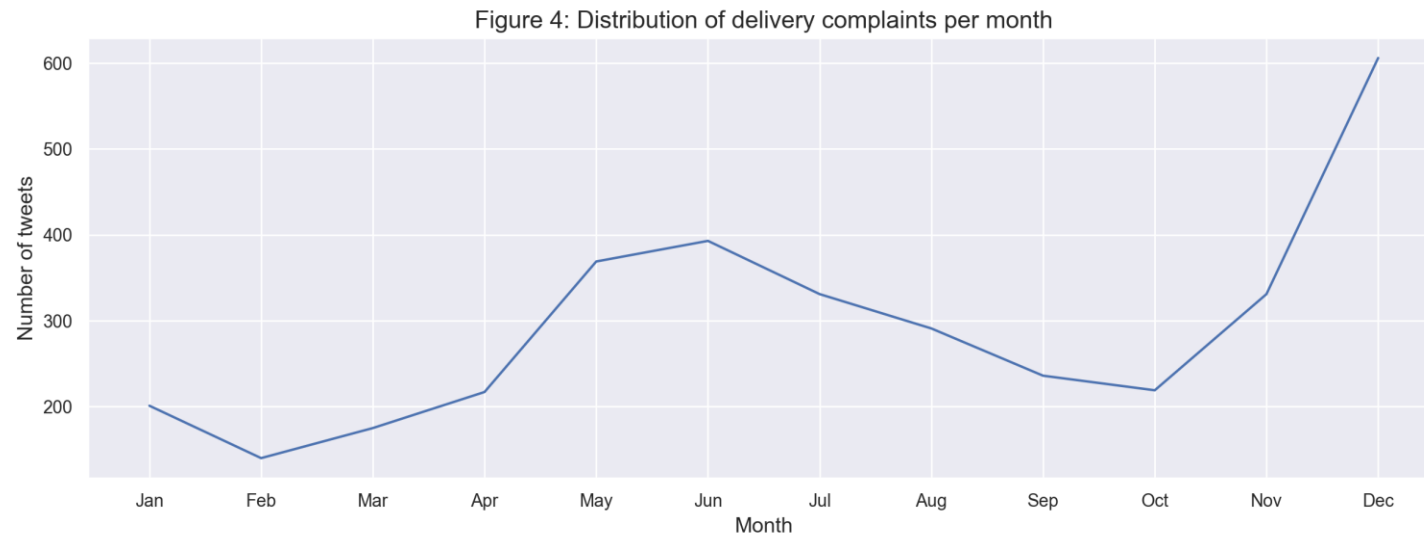
Figure 2: Distribution of sentiment categories in tweets per topic



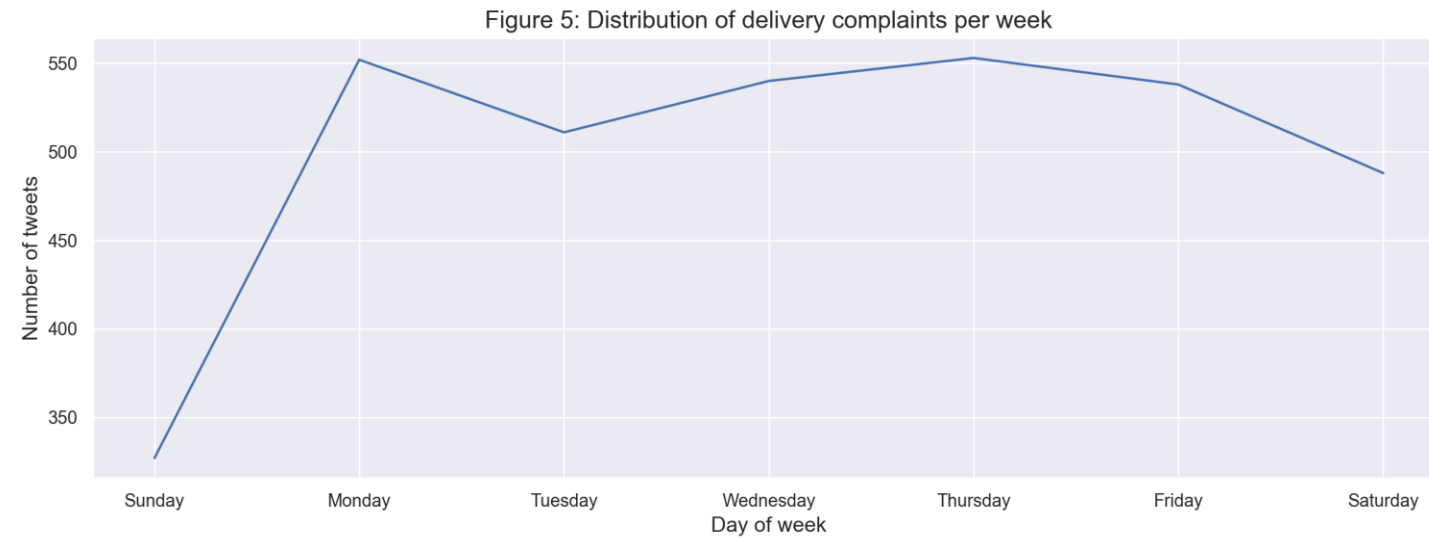
DELIVERY COMPLAINTS TWEETS OVER TIME



DELIVERY COMPLAINTS TWEETS PER MONTH



DELIVERY COMPLAINTS TWEETS PER DAY OF WEEK



RECOMMENDATIONS

Improve delivery, return and customer services

Focus on improving delivery service during December

Focus on improving delivery service on Sundays



A series of white, thin, overlapping geometric lines and polygons on a dark gray background, creating a modern, abstract design on the left side of the slide.

THANK YOU