Maragatham K N
Project McNulty

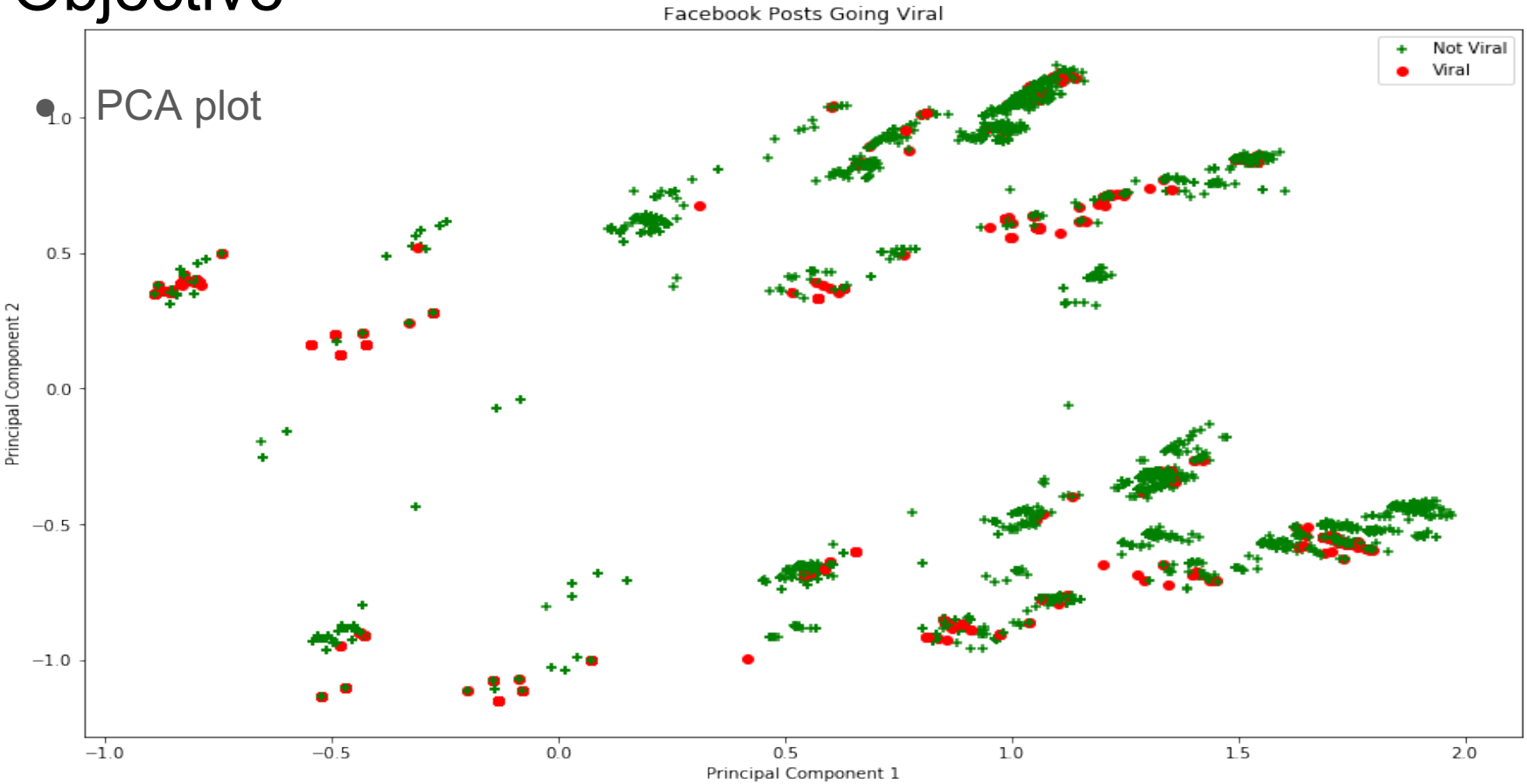
Problem Statement

Predicting if a post on Facebook will go viral or not.

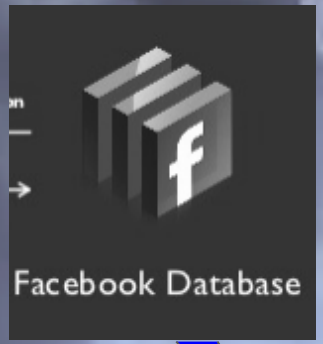
This will help companies plan their marketing strategies in the most cost effective way.

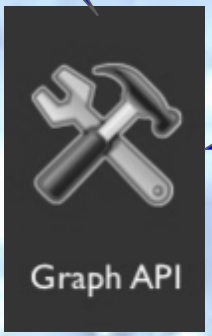
Objective

- PCA plot



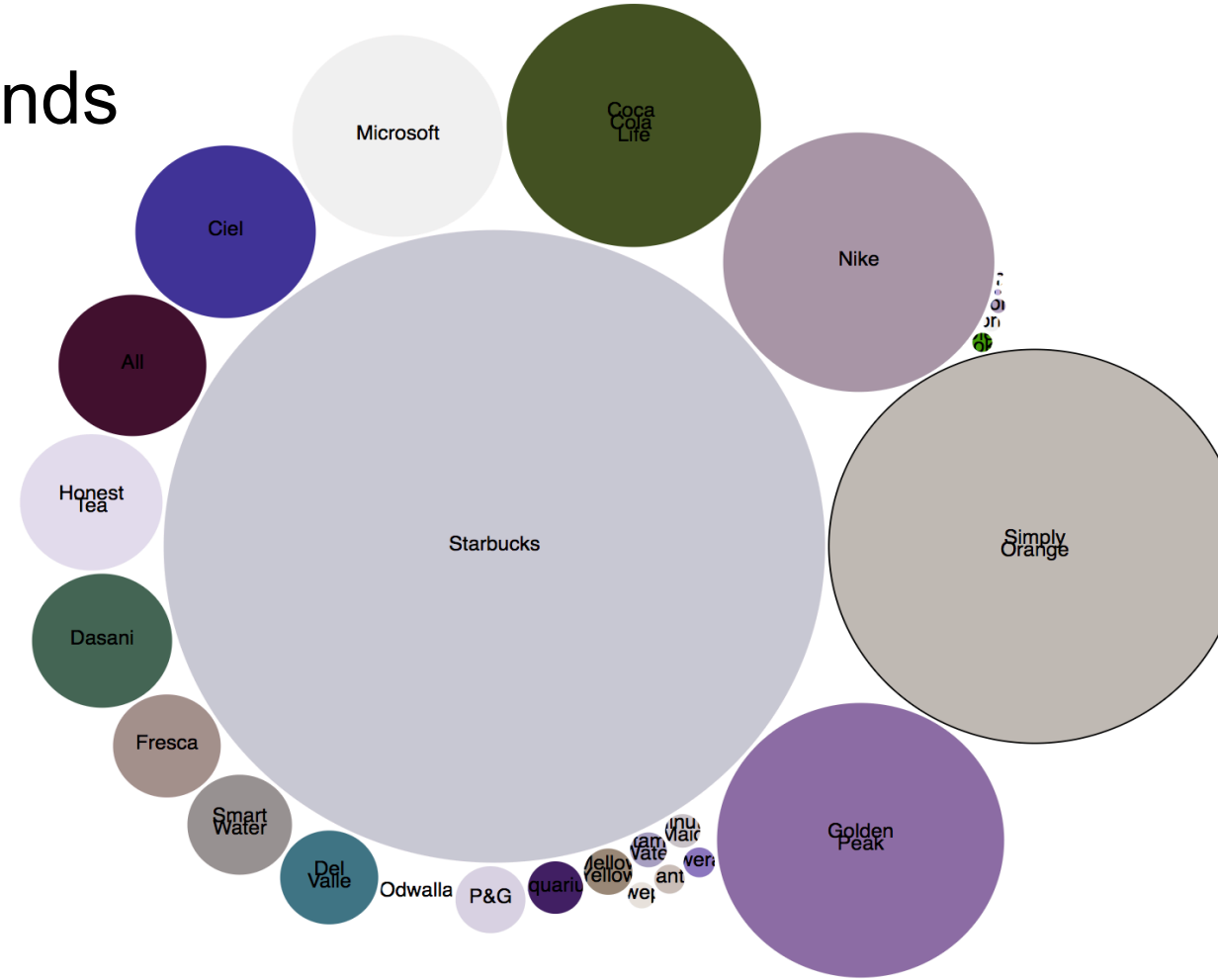
Data Retrieval And Storage



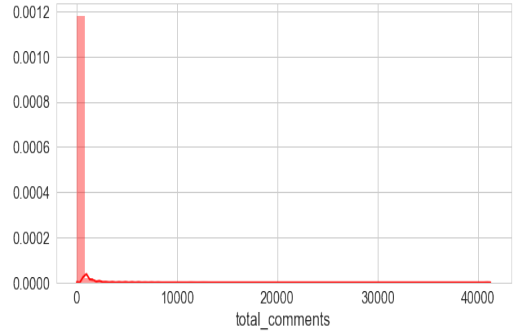


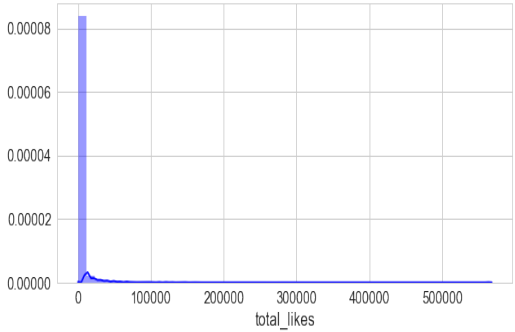
Company and Brands

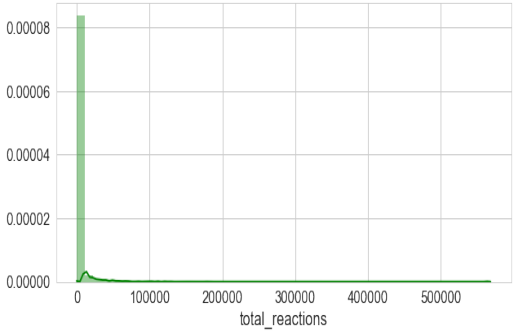
- Starbucks
- Coca Cola
- Microsoft
- Nike
- P&G

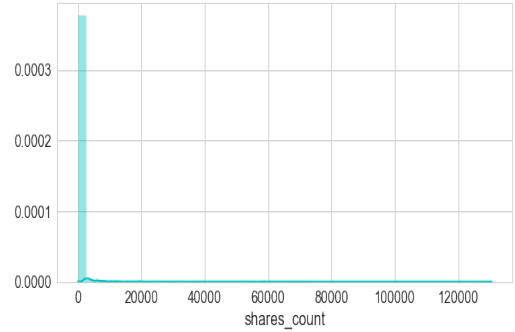


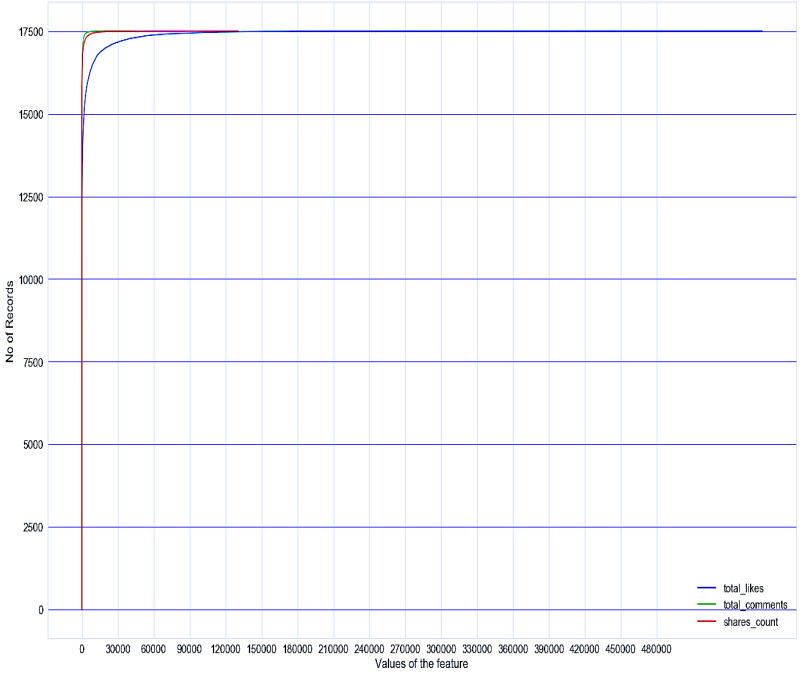
Data Analysis





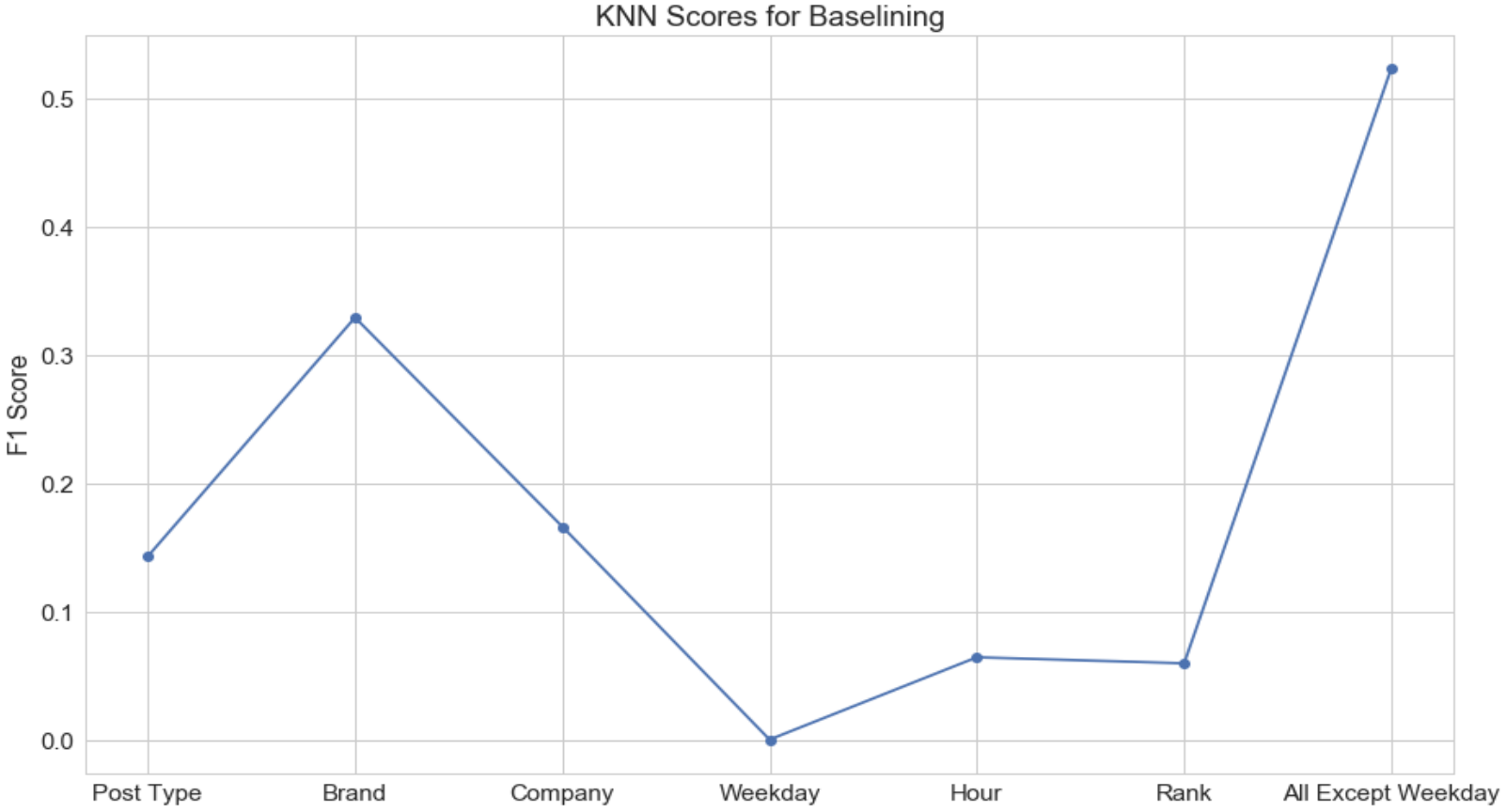




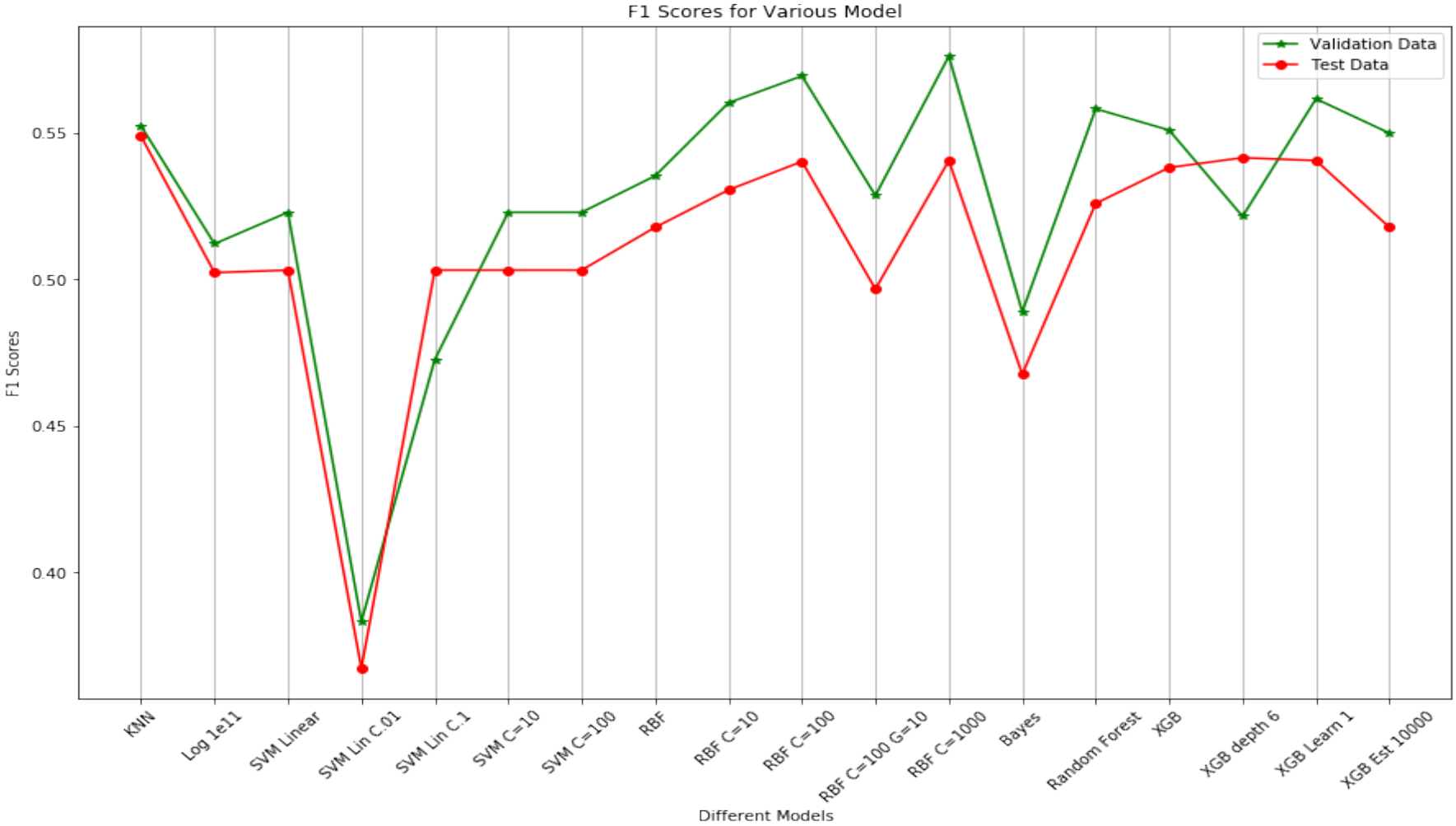


40000 Likes, 1000 Comments and 1000 Shares

Baselining & Modelling

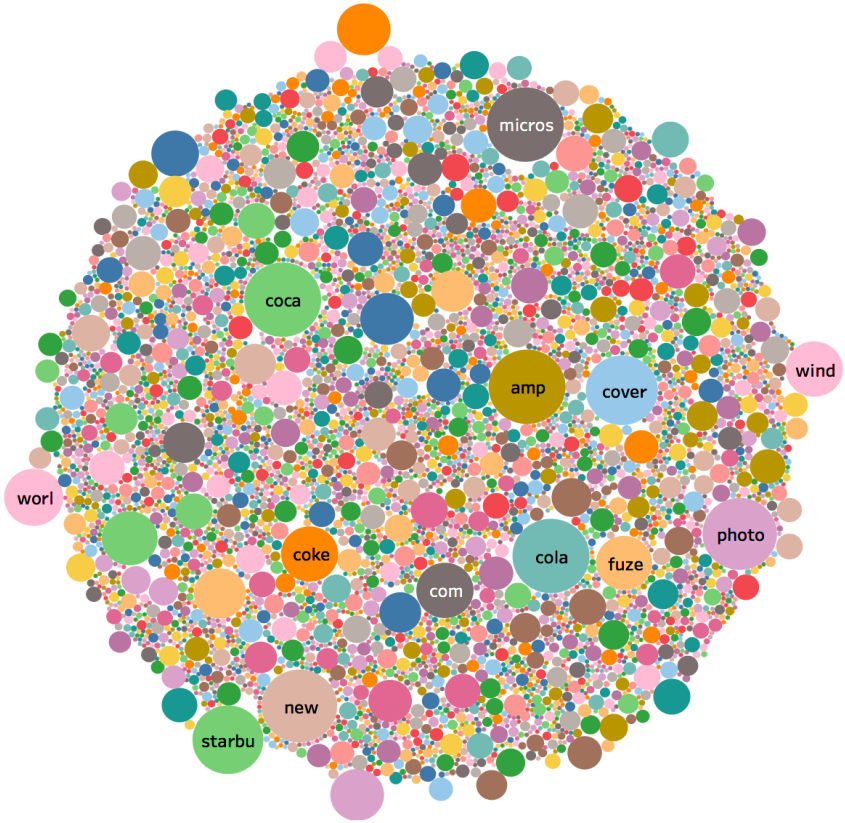


With Oversampling and Cross Validation

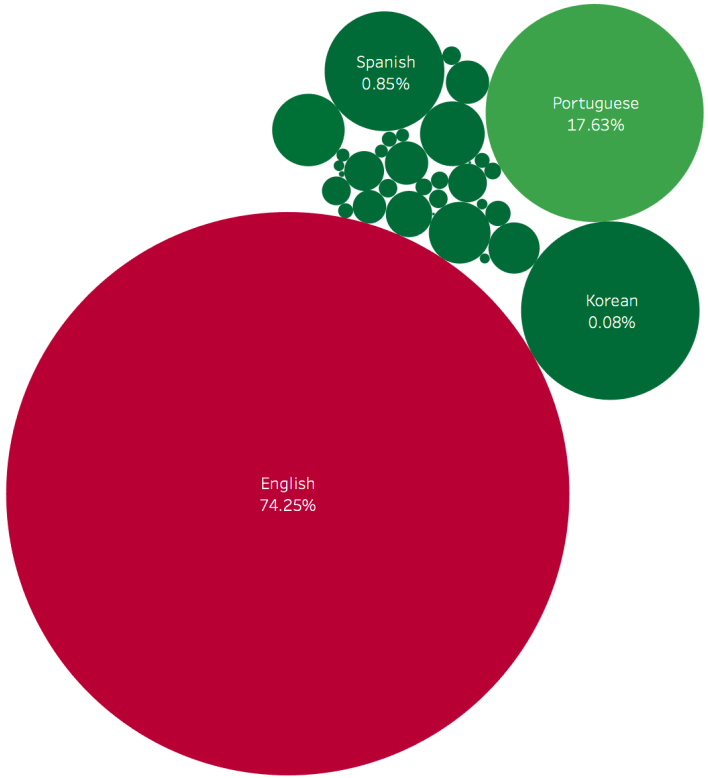


Post Message as features

Word Cloud



Viral Posts per Language



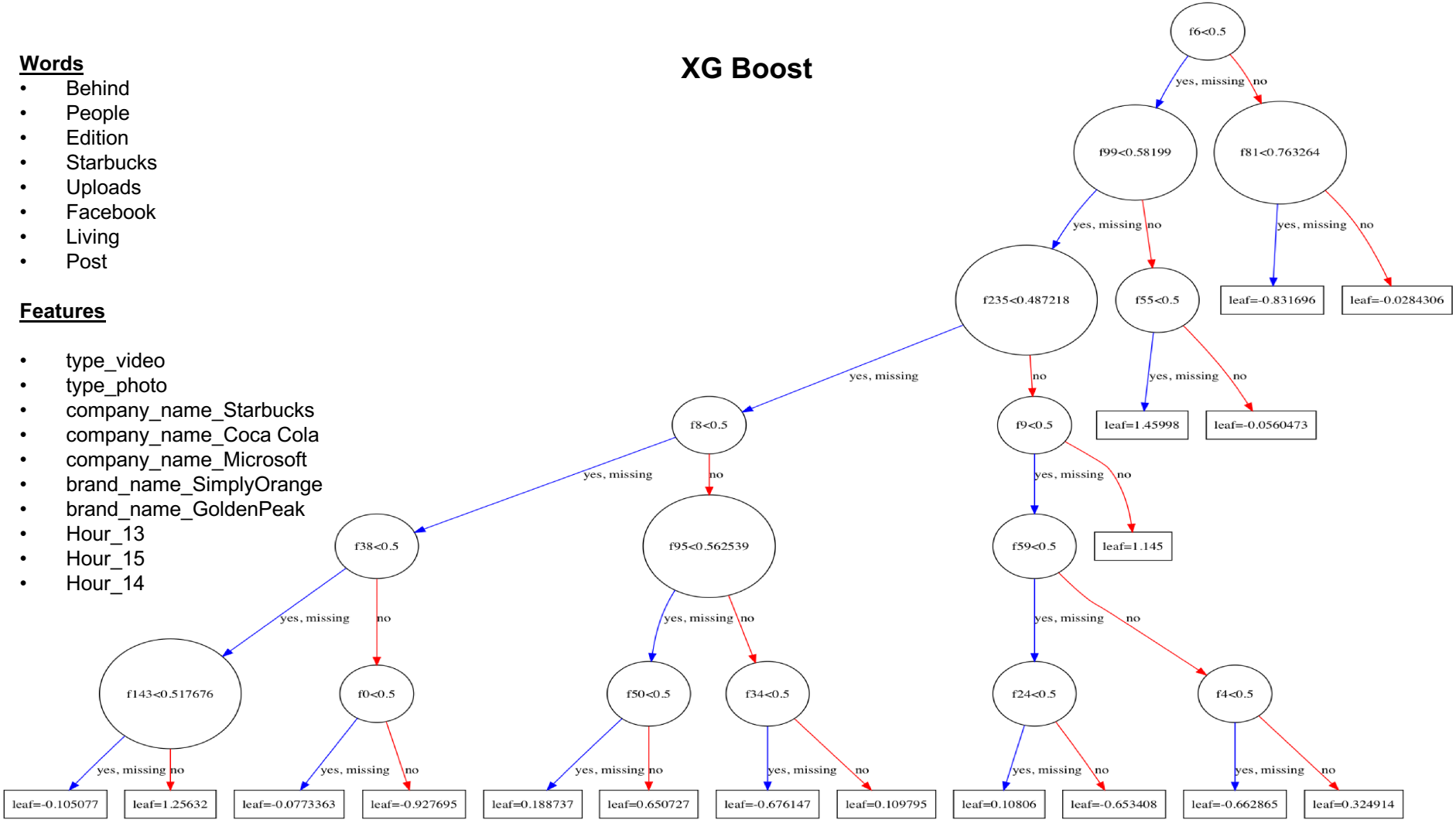
Words

- Behind
- People
- Edition
- Starbucks
- Uploads
- Facebook
- Living
- Post

Features

- type_video
- type_photo
- company_name_Starbucks
- company_name_Coca Cola
- company_name_Microsoft
- brand_name_SimplyOrange
- brand_name_GoldenPeak
- Hour_13
- Hour_15
- Hour_14

XG Boost



F1 Score

- F1 = .56
- Computing F1 with
- β = .2

- $(1+.2)\ \dfrac{(.65 * .49)}{(.2 * .65) + .49}$

- .62

Cost Benefit Analysis

Confusion Matrix	True Positive	False Positive
Actual Positive	4596	116
Actual Negative	192	193

Posts	Price for 1000 click $	Price per 1000 impression $	$ Spent on Ads
5097	190	0	$968,430
4788 + 309	190	3.99	$910,952
Net Gain			**6%** ($57,500)

thank you
gracias
merci
danke
謝謝
ngiyabonga
teşekkür ederim
tapadh leat
mahalo
рахмат
Баярлалаа
спасибо
faafetai lava
mersi
kia ora
barka
welalin
tack
spas
dank je
misaotra
matondo
paldies
grazzi
vinaka
blagodaram
спасибі
kiitos
dankie
nanni
nandri
dhanyavad
mauruuru
köszönöm
hvala
bayarlalaa
gràçie
bedankt
enkosi
dziękuję
dankon
aċiū
akun
хвала
asante
manana
obrigada
murakoze
tenki
djiere dieuf
tau
mochchakkeram
дякую
mamnun
chokrane
chnorakaloutioun
gratias ago
gràcies
sulpáy
go raibh maith agat
sobodi
děkuji
sagolun
sukriya
kop khun krap
taiku
arigatô
takk
dakujem
trugarez
obrigado
mèsi
didi madloba
najis tuke
ありがとう
tanemirt
grazie
rahmet
terima kasih
kam sah hamnida
rahmat
diolch
dhanyavadagalu
shukriya
mercé
мерси
তোমাকে ধন্যবাদ
감사합니다
xièxie
ευχαριστώ