



# Smartphone Reviews Classification

-Stuti Singh

# Business Problem



**Its impractical for a buyer to go through all available reviews**

**Reviews are often long but having few words about features**

**Buyer's choice can be biased on first few reviews**

**Buyers look for specific features in reviews**

# Business Application



**Assist users in making product choices**

**Enhance user experience**

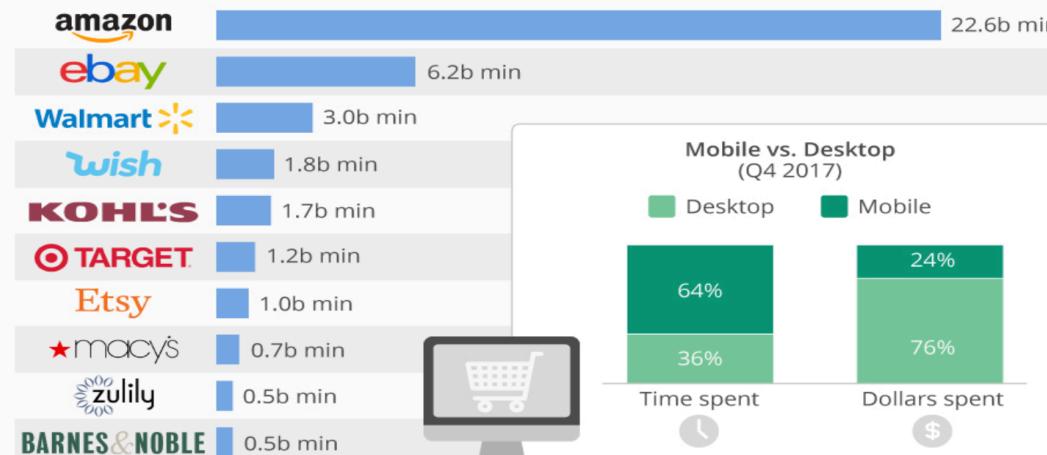
# Project Overview

- Predict rating of smartphones based on users' reviews
- Sentiment analysis and recommendation system for opinion based Features Mining

# Dataset Selection

## Amazon Dominates Online Shopping in the U.S.

Amount of time U.S. consumers spent on websites/apps of leading online retailers in Dec. 2017

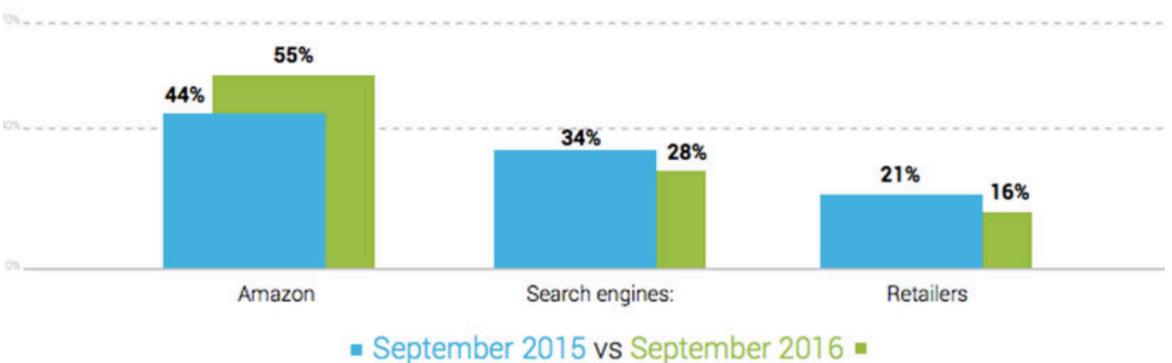


@StatistaCharts Source: comScore

statista

Comparing 2015 to 2016, Amazon has increased its lead as consumers' first destination for product search over search engines and retailers.

## Where customers begin their product search



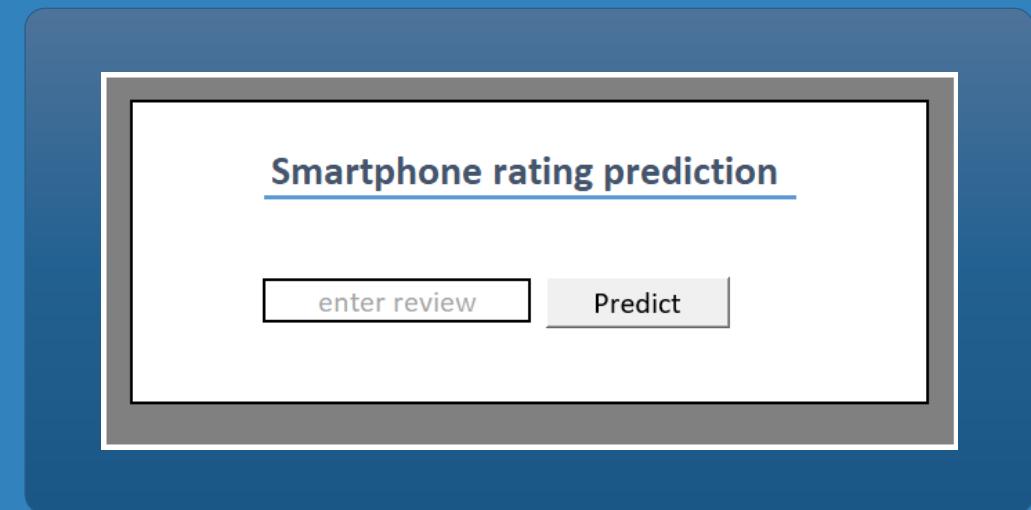
# Mobile Rating Prediction

Random Forest Model

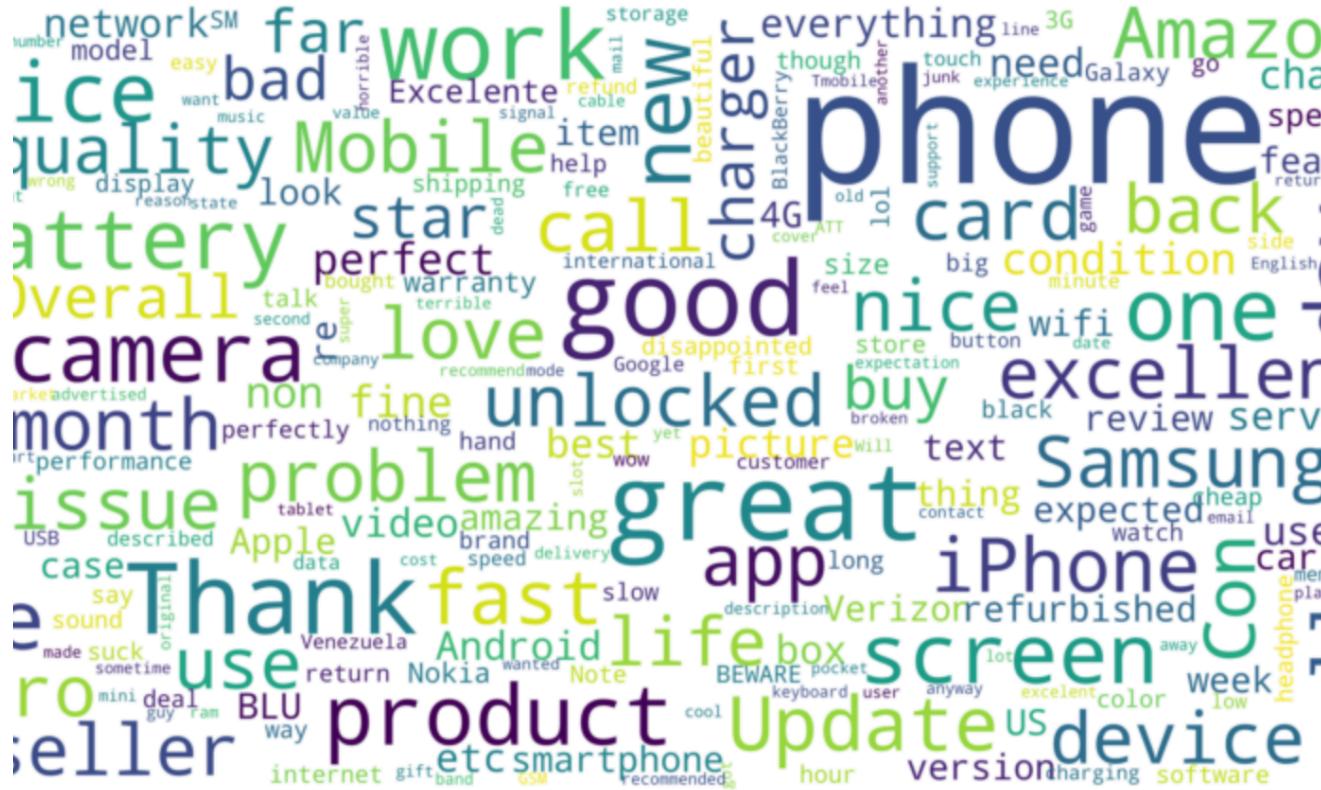
App

86%

Accuracy



# Opinion based Feature Mining



## Recommendation System based on TextBLOB

Example search text: “good phone with good battery life and affordable price”

	product	weight
362	BLU Studio 7.0 II -Unlocked Smartphone - US GS...	26
750	Motorola Moto E (1st Generation) - Black - 4 G...	25
330	BLU Life Pure Unlocked Phone (Black)	25
331	BLU Life Pure Unlocked Phone 32GB ROM, 2GB RAM...	22
749	Motorola Moto E (1st Generation) - Black - 4 G...	21
...	...	...
1013	Samsung Galaxy Note 3 N9005 32GB 4G LTE PINK U...	1
429	Casio G'zOne Ravine C751 Rugged Cell Phone Ver...	1
638	LG G3 S D722 8GB Unlocked GSM 4G LTE Quad-Core...	1
431	Caterpillar CAT B15Q Dual Sim, 4GB, IP67, Fact...	1
402	BLU Tank II T192 Unlocked GSM Dual-SIM Smartph...	1



# Thank You