



FENTY BEAUTY ANALYSIS

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Background

Show reviews from my **Beauty Matches** ?

Color: All ▾ | Filter ▾ | Sort by: **Most Helpful** ▾

Color: 150

20 Mar 2018

Eye Color Gray
Hair color Blonde
Skin Tone Light
Skin Type Oily
Skin concerns Acne

AMAZING but oxidizes once dried down !!

ok so i have oily skin and this has worked AMAZING it really doesn't budge all day. the only thing i can say is it definitely oxidizes a few shades but it actually works out. the shade 150 straight out of the bottle is too light for my but it certainly gets darker once it dries down but it's great and would absolutely recommend it !!

Recommends this product

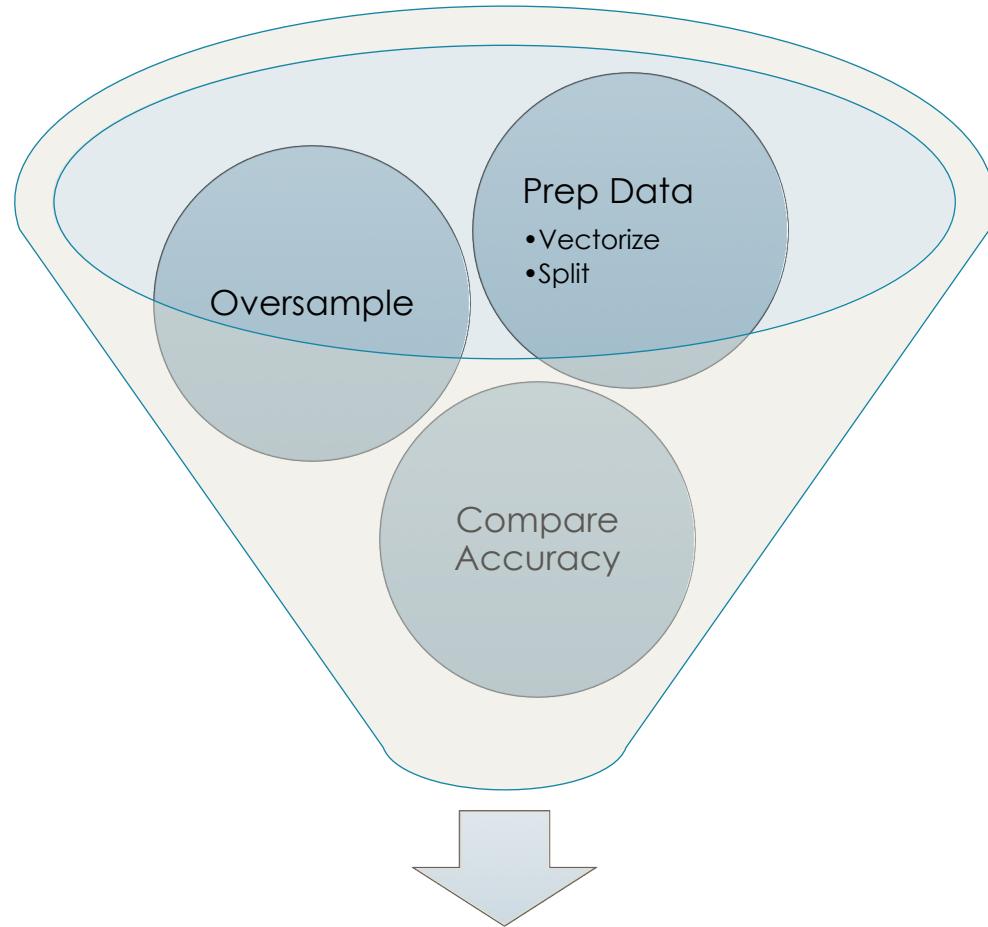
NOT HELPFUL (0) **HELPFUL (1)**

What are reviewers generally saying?

- LDA: Unmeaningful Topics
- NMF: A little harder to read than LSA
- LSA CV With TruncatedSVD (Human Interpretation):
 - General Foundation Descriptors
 - Dry Skin and Patchiness
 - Lots of love from both dry and oily skin types
 - Oily Skin and Wear
 - Application methods

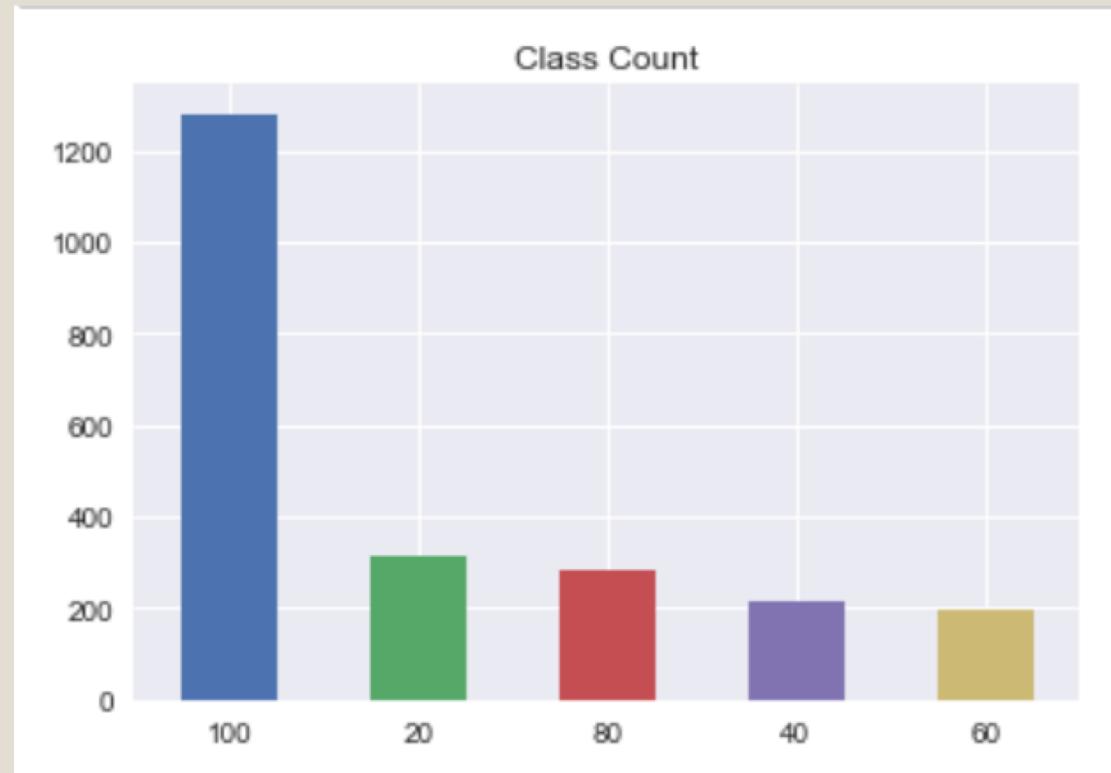


Analysis: Rating

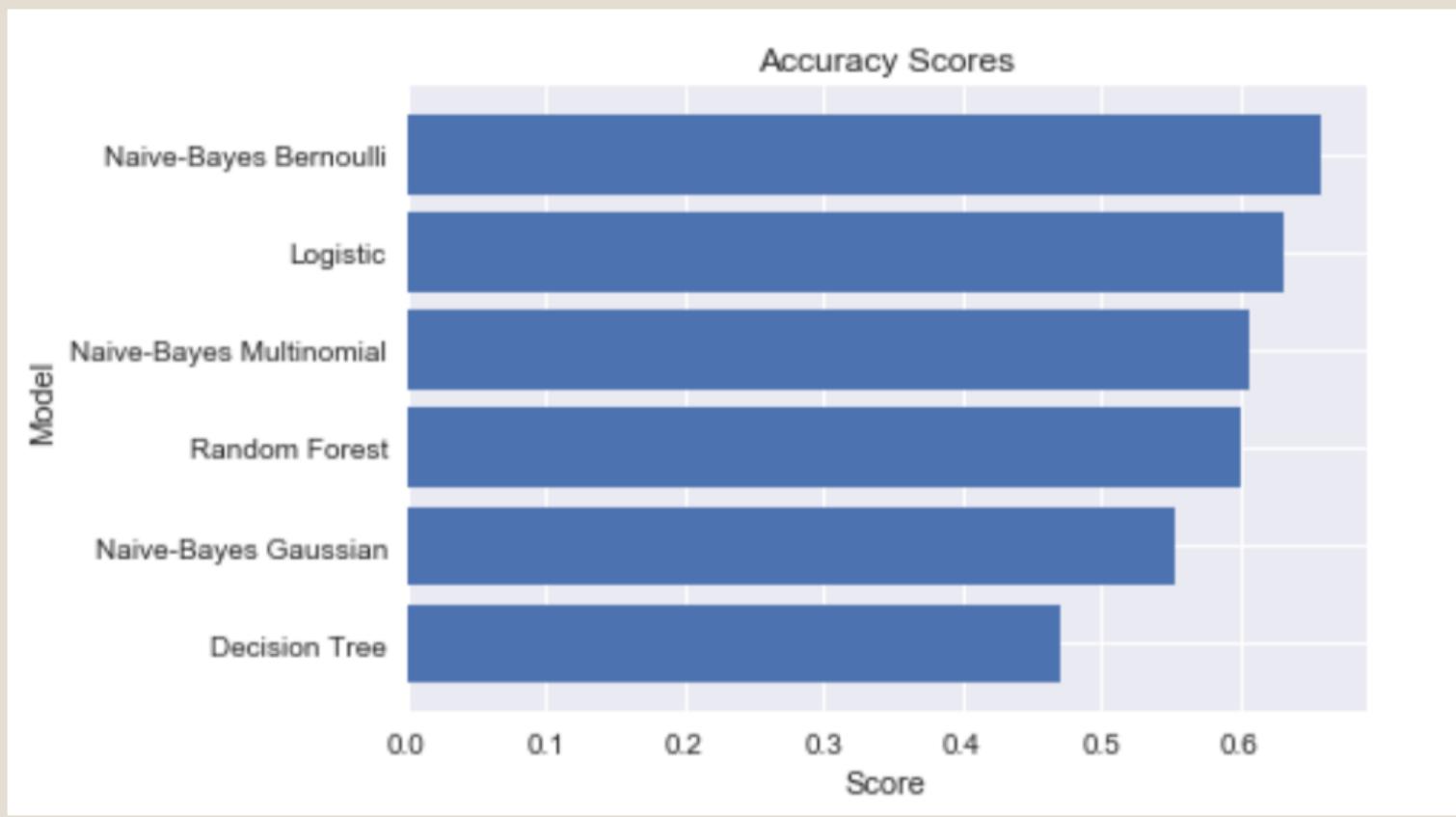


Naïve Bayes Bernoulli

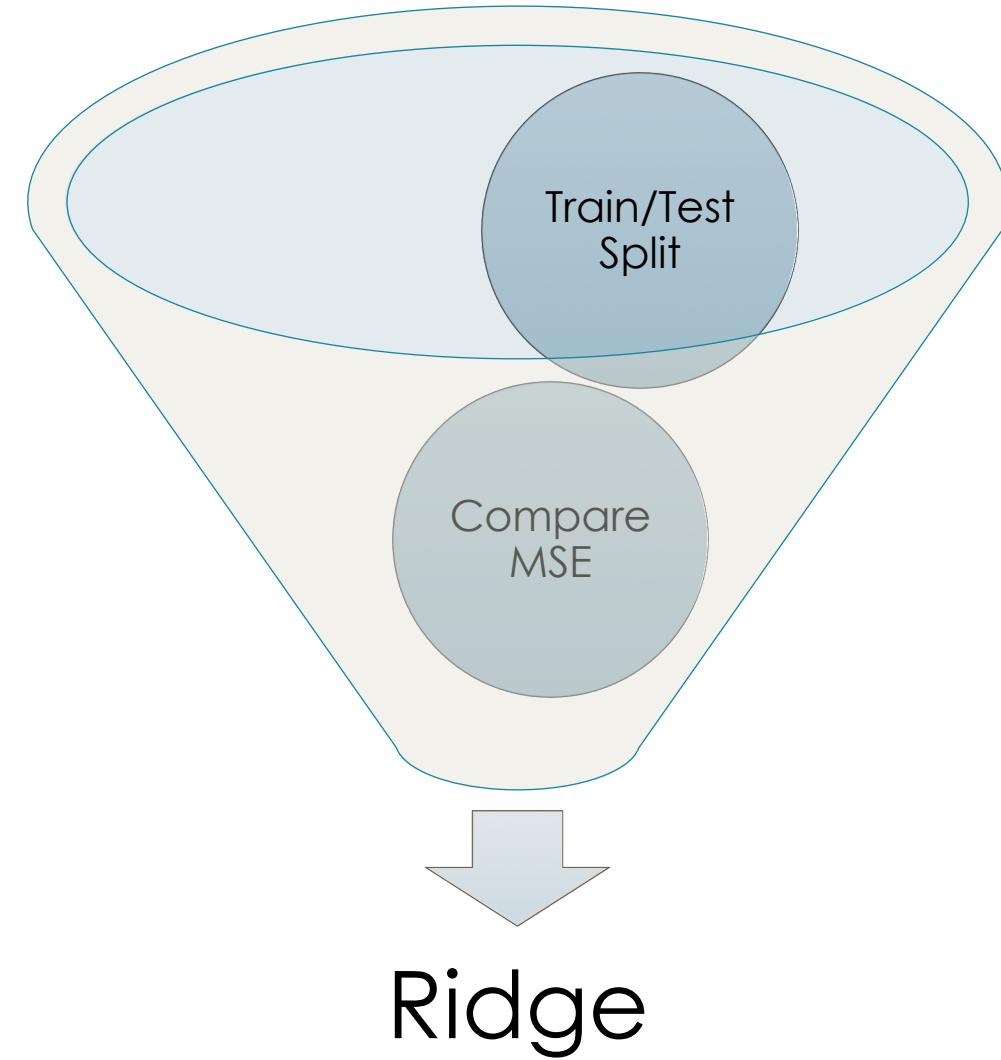
Class Imbalances: Oversampled



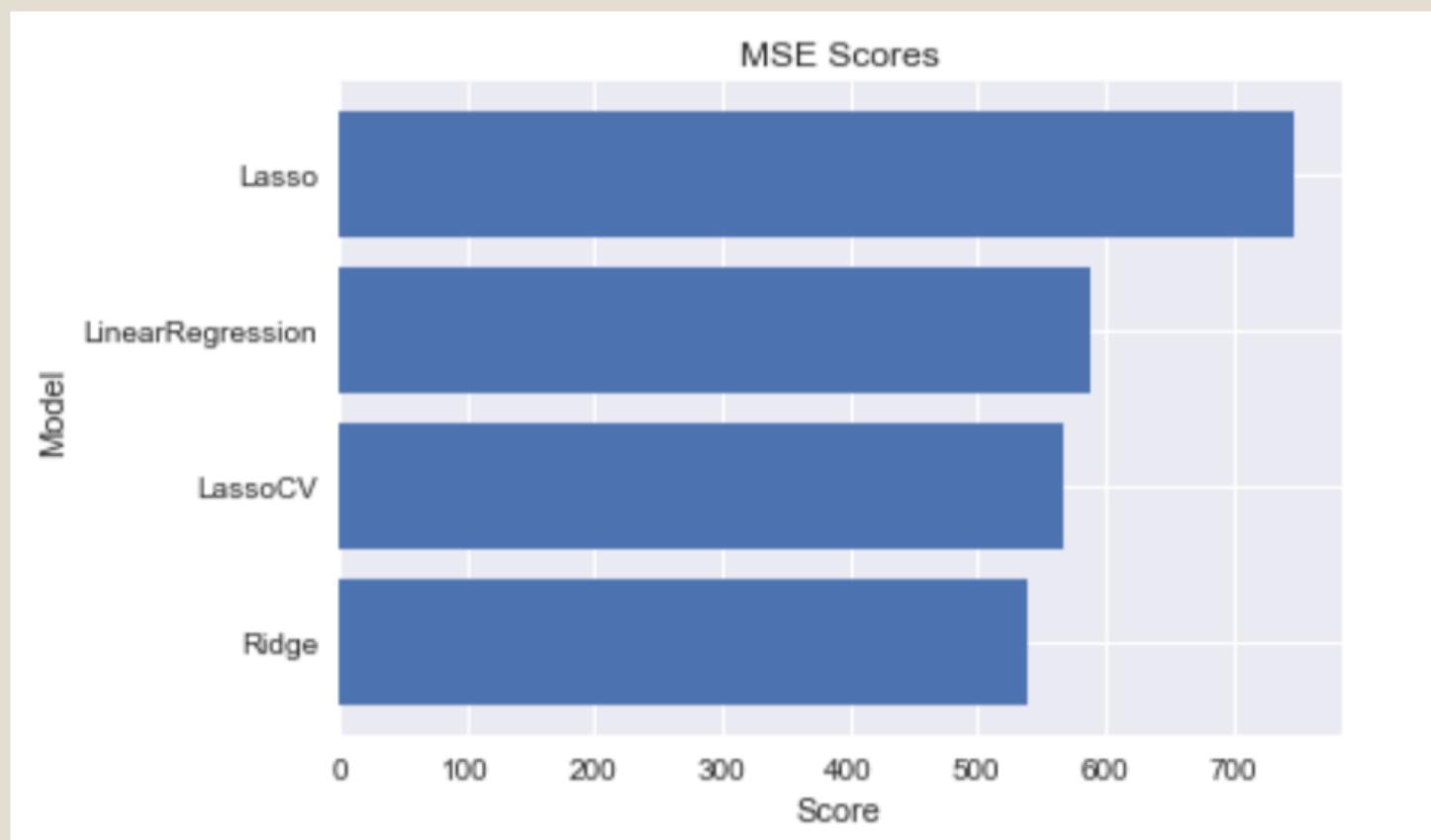
Results: Accuracy Scores



Analysis: Helpfulness



Results: MSE



Predicting Helpfulness

★★★★★

6 h ago

 Color: 140

i didn't buy this product but id like to say my reason as to why.. its not animal cruelty free, and it doesn't have the symbol. It doesn't say it doesn't test on animals which disappoints me...such evil

NOT HELPFUL (0) **HELPFUL (0)**

Prediction: 7 People Find This Unhelpful



You Throwing
Shade

At My
Foundation
Shades??

Topic Model on Negative

- LSA CV With TruncatedSVD (Human Interpretation):
 - General Thoughts About Product
 - Shade matching
 - Blending
 - Dry skin
 - Oily skin



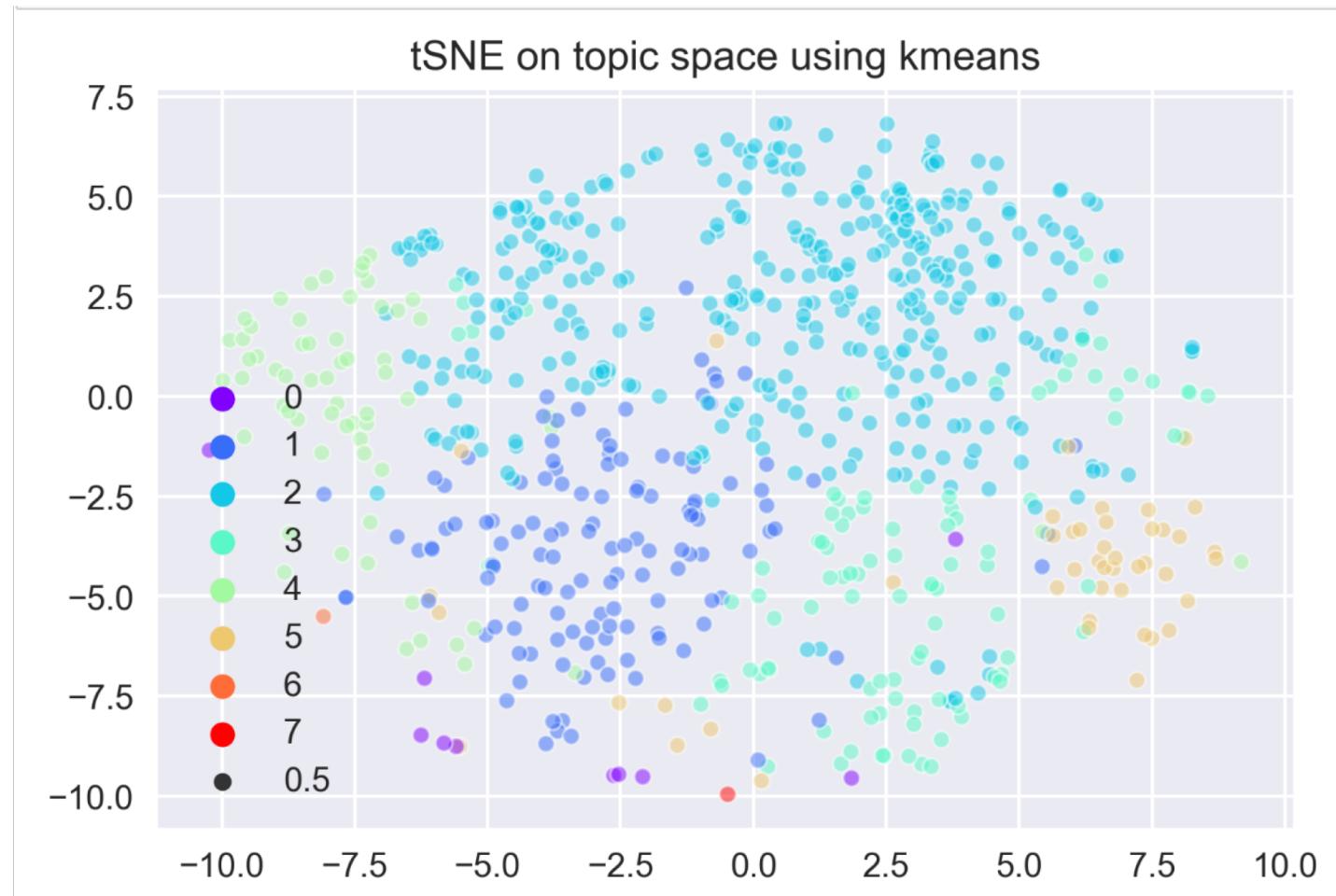
Going Forward

1. More Data
2. Including image and video reviews
3. Spammy Reviews

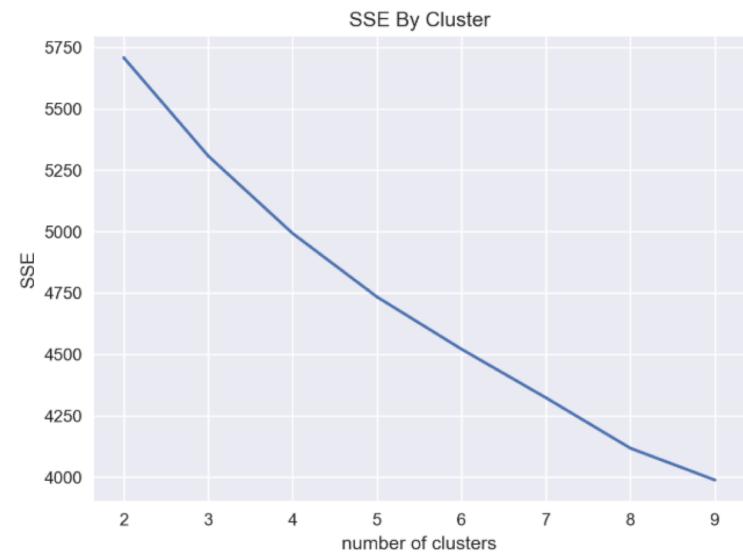
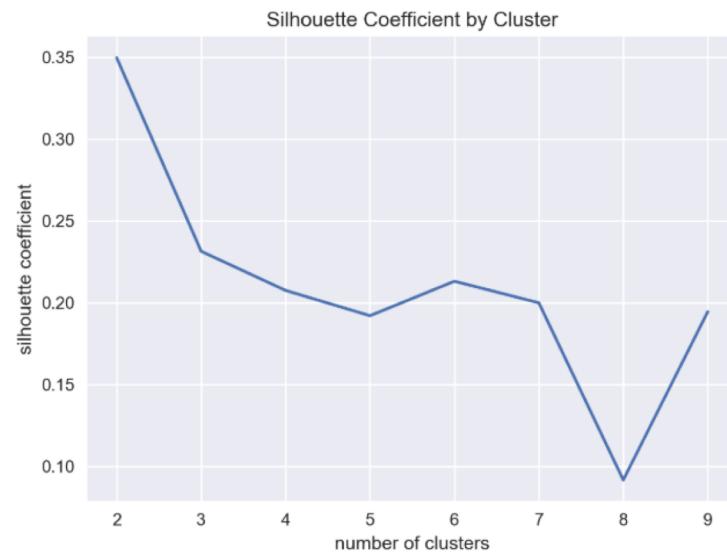


QUESTIONS

CLUSTERING ON NEGATIVE REVIEWS: DIMENSION

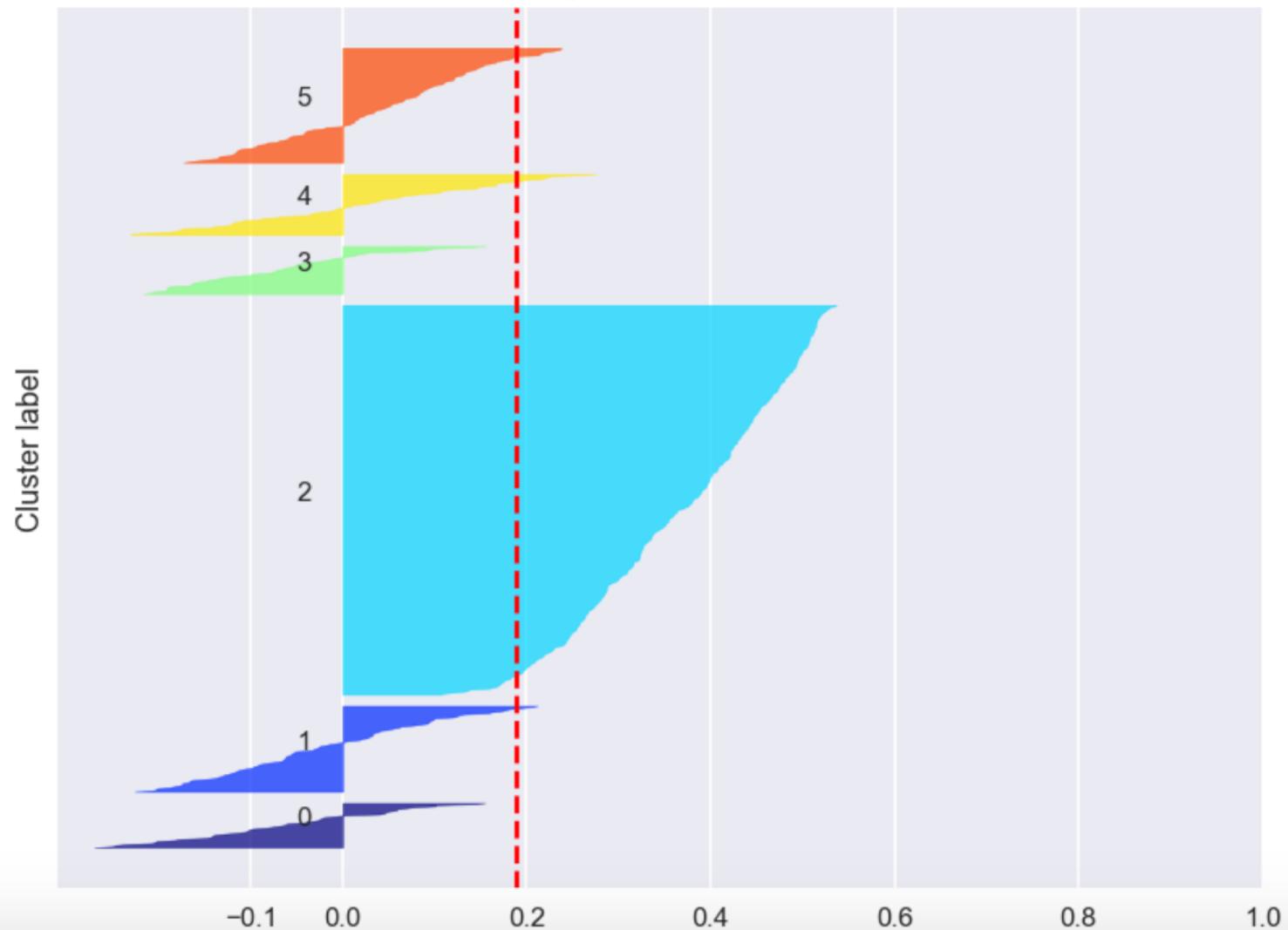


CLUSTERING ON NEGATIVE REVIEWS: N CLUSTERS

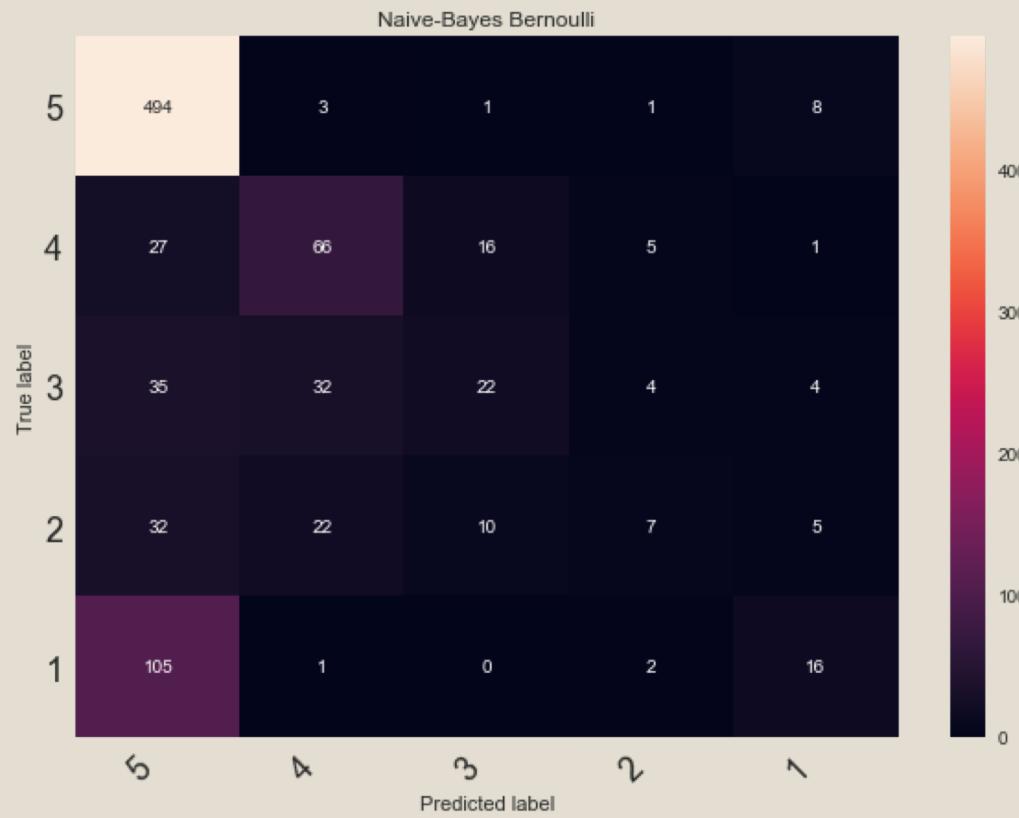


CLUSTERING ON NEGATIVE REVIEWS: NOT GREAT

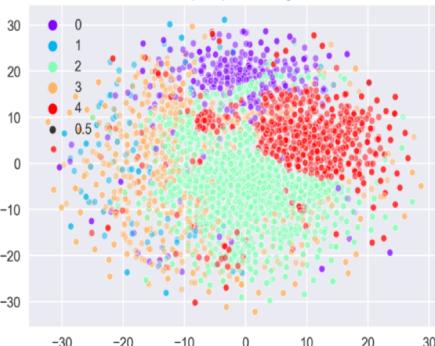
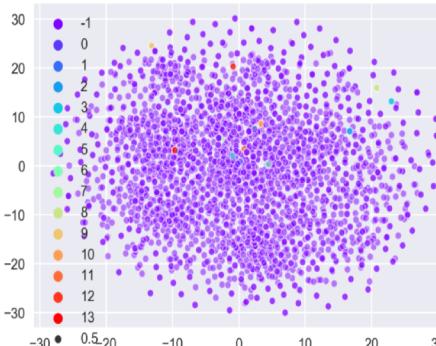
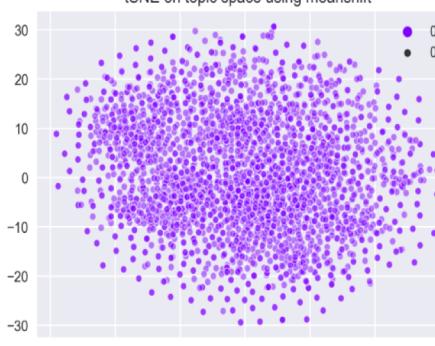
The silhouette plot for the various clusters.



Confusion Matrix



Clustering On Whole Dataset

Model	Kmeans	DBSCAN	Meanshift	Spectral
N Clusters	5	14	1	
TSNE	<p>tsNE on topic space using kmeans</p> 	<p>tsNE on topic space using db</p> 	<p>tsNE on topic space using meanshift</p> 	

Meaning in Clusters?

- Same Proportions Across Clusters For:
 - Star Rating
 - Helpfulness
- **Ans:** Not Yet Identified