Managing Customer Churn

Austė Maštavičiūtė

Sales vs Retention





Customer Retention Challenges



Gigantic Amounts of Data



TIMELY Access to Review Data



Sentiment Analysis and Interpretation



Categorizing Reviews



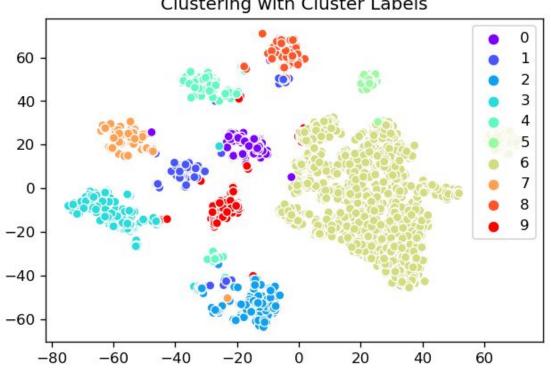
Taking Proactive Action

Approach

- **♦** 14,885 Tweets about Airlines
- TextBlob & Vader
- Count Vectorizer
- Non-negative Matrix Factorization (NMF)
- KMeans
- t-Distributed Stochastic Neighbor Embedding (t-SNE)

Clustering





Not Too Shabby...

TWEET

SUGGESTION

@AmericanAir thank you so much that helps a lot

@United I have never had such a horrible customer service

Qunited and most frustratingly, all this delay happened either at the gate, or even onboard the aircraft! No heads up in advance!!!

@USAirways but my bag is still missing

Keep up the good work! **№**

Please Improve Customer Service Rep Training ●

Please Improve Your Scheduling (§

Please Pay More Attention at Baggage Handling ≜

Could be better...

TWEET

@united Making sure your flights aren't delayed due to poor maintenance would be a start.

@AmericanAir Worst airline. You Cancelled my, didn't let me know, I waited on hold for 30 mins, you told to call back at middle of the night?!!

@AmericanAir don't they already know? Isn't everyone sharing how nasty the food is? It's not even close to decent

SUGGESTION

Keep up the good work! **♦**

Weather Is Out of Your Control, Relax €

Please Improve Your Rebooking Process *****

Next Steps

- Further Tweet Analysis
- Improve Spelling
- More Data
- Neural Network
- Flask App

Thank You