

# TV or not TV

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#### overview

- Getting the data
- List of entities
- MDS plots and similarities
- Topic modeling journey
- Bigram journey

# Cutting The Cord

- "Cord- Cutting", the pattern of viewers cancelling their subscriptions to traditional cable companies in favor of multichannel subscription services
- •Like-Minded "cord cutters" flock to reddit to share their experience.

r/cordcutters

# Sourcing Data

Using the Reddit API

- •Call data on the last 30-days of comments Using *pushshift.io* 
  - •Extracts reddit comments every month and puts them into a google big query
  - •We queried the last 3 months of data from google big query

Using both gave us comments for the last 4 months

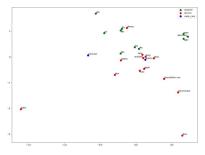


# Finding Relevant Entities

- Using the spacy package in python we generated a list of entities
- •From this list of entities, we pulled out companies and categorized them as cable, services or channel

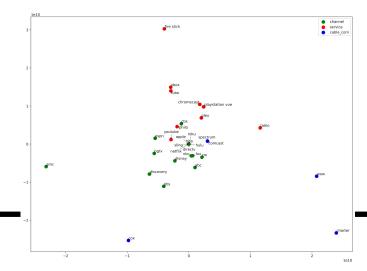
## **MDS** Plotting of the Entities

- Found the lift between the entities and created MDS plots
- Interpretation: There are some niche channels, cable companies, and services
  - Examples: AMC, Charter, Cox, WOW!, fire stick



# Comparing the Channels and Services

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#### Comparing the Channels and Services

- After removing the cable companies, we can see which channels are associated with which services
- Many of the channels are far away from the services, meaning that people are associating the channel only with the popular services (Hulu, YouTube, Sling)
  - Netflix is not on this list
- Interesting observation: disney has managed to pull abc and fox away from the crowd with it
  - Two factors play into this: Fox acquisition and the upcoming streaming service

#### Zooming in on Popular Choices

- We decided to look closer at some popular (and some less popular) companies
  - Netflix, Hulu, Amazon, Fubo, Comcast, DirecTV, Spectrum (formerly Time Warner)
- Interpretation: Spectrum and Comcast need to worry about each other; DirecTV is pretty safe from everyone else except Fubo. Netflix and Hulu are both far away from the companies and each other, which may be surprising



### Topic Modeling

- After gauging the crowd's perceptions of how the services and companies compared, we wanted to find out what topics were of the most concern to customers
- We used LDA with 4 topics to get an idea of what these topics were

# Topic Modeling with LDA

Торіс	Words within Topic
User Experience	Update, Interface, Guide, Provider, Support, Disconnect
Net Neutrality	Neutrality, Throttling, Jefferson (Thomas Jefferson), Speed, Internet
Sports Packages	Soccer, Football, Sport, Monthly, Watch
Traditional Cable Experience	Antenna, Comcast, Tuner, Broadband

#### Let Bigrams be Bigrams

- We browsed through all of the comments and found the significant bigrams
- With these bigrams, we found sentiment scores associated with each using VADER (sort bigrams by sentiment and show the first and last 5 as a picture on this slide)
- We then found the lift between companies or service providers

their originals original content
already paying stranger things
adam sandler Netflixexclusive content
catalog my data free shipping

bandwidth

 $too\ expensive \pmb{Comcast}$ 

good reception

their streaming modem service

hidden fees free shipping

total cost Amazon Prime original programming

sneaky pete annual subscription

concurrent streams better dvr
regional sports
local broadcast
extra money best picture
best picture
best picture
great price
nfl network
totally worth

not skip free trial
their originals

Hulu
few bucks
big bang theory

commercial free

expensive good choice
worst app Fubo super bowl

bad service red zone

#### Conclusion