

What makes a good **TED** talk?

# Motivation

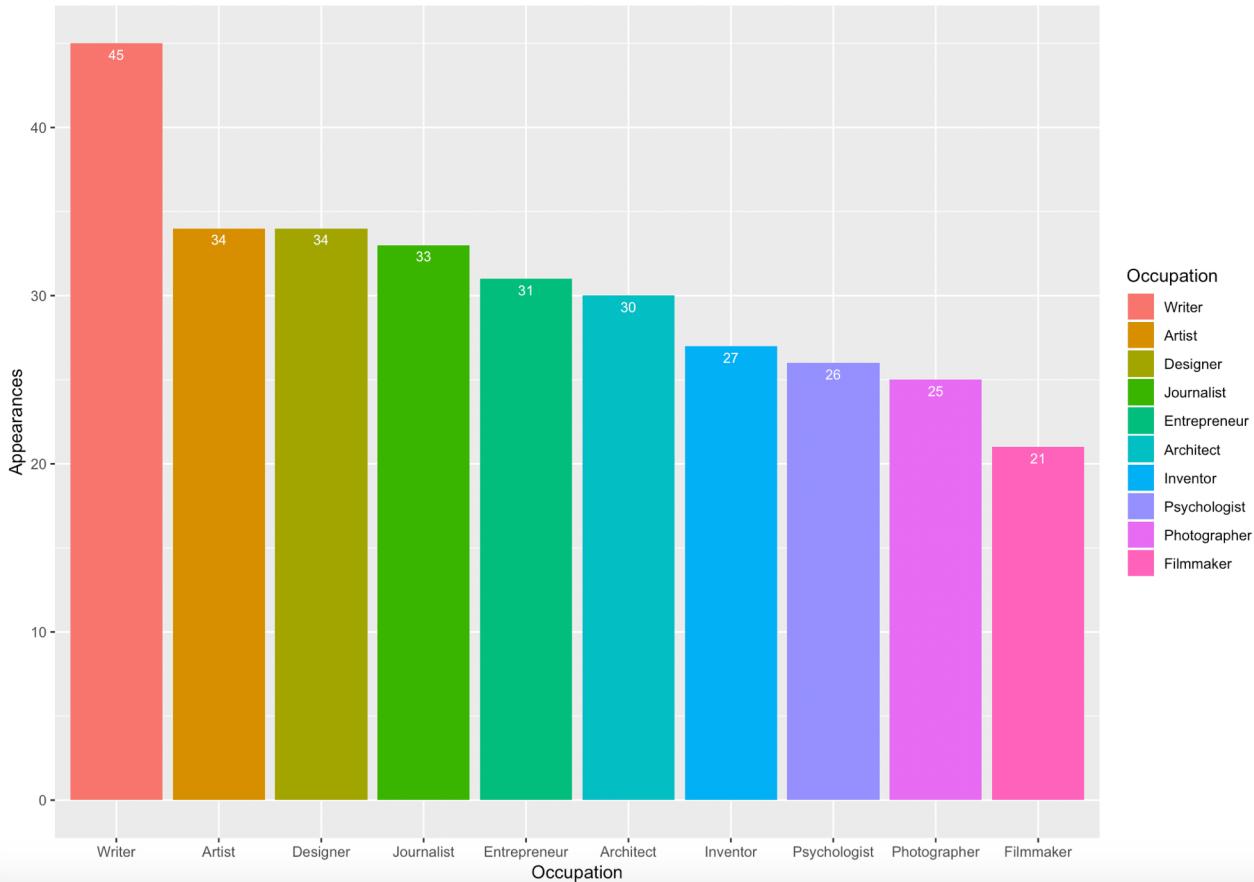
- Deduce the elemental reason why TED talks are considered the benchmark for influential speeches. What makes them so special?
- Sentiment analysis and emotional introspection of over 2500 TED talks conveys the uniqueness of the expert speakers and the trends in their speeches, giving an insight into the psyche of successful minds.

# Key Methods

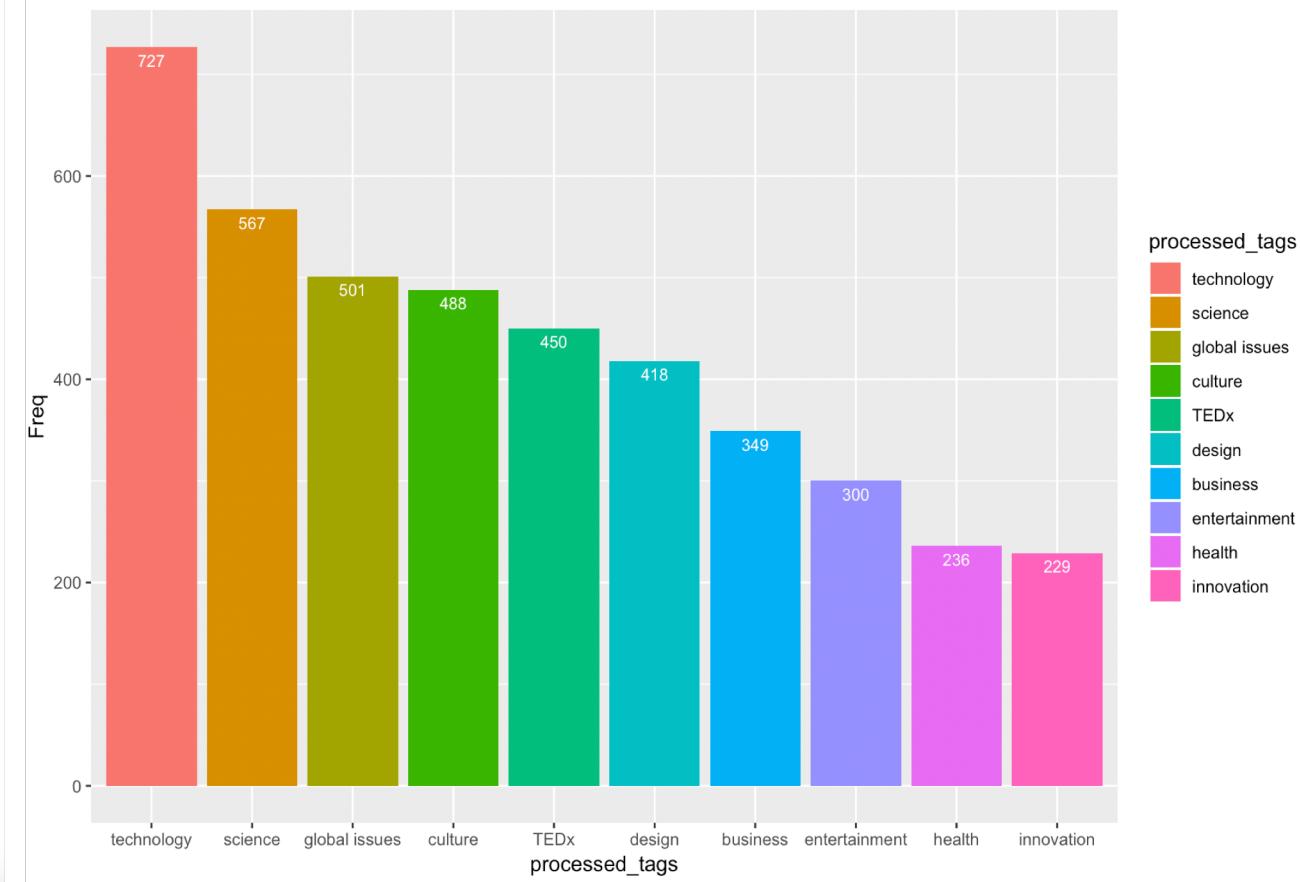
- Sentiment Analysis
- Network Analysis
- Text Mining
- Content Similarity
- Topic Modelling
- Time Series Modelling

# Speakers and Themes

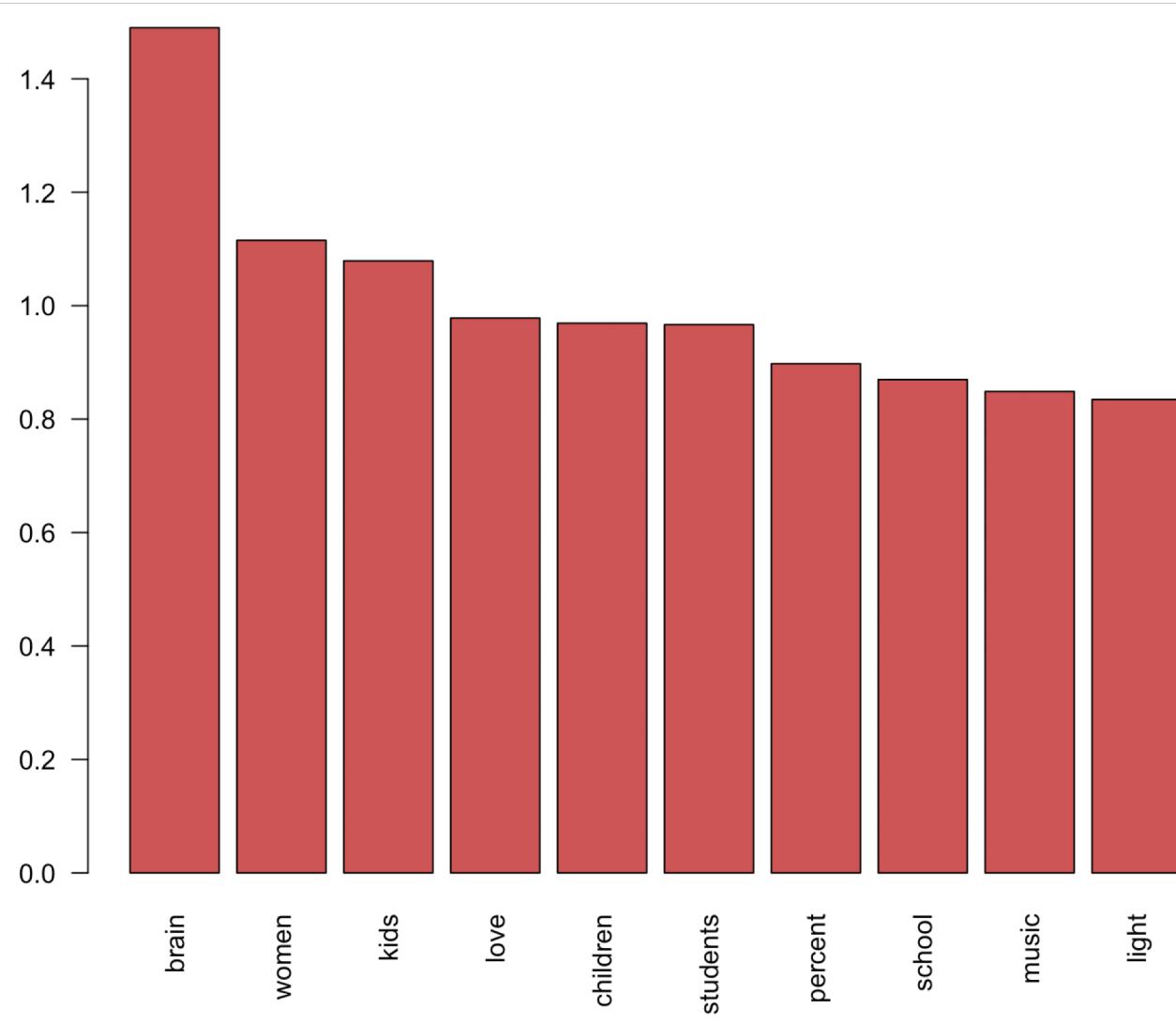
Occupations of Ted Speakers vs their Appearances



Most popular themes of Ted Talks



# Power Words



Top 500

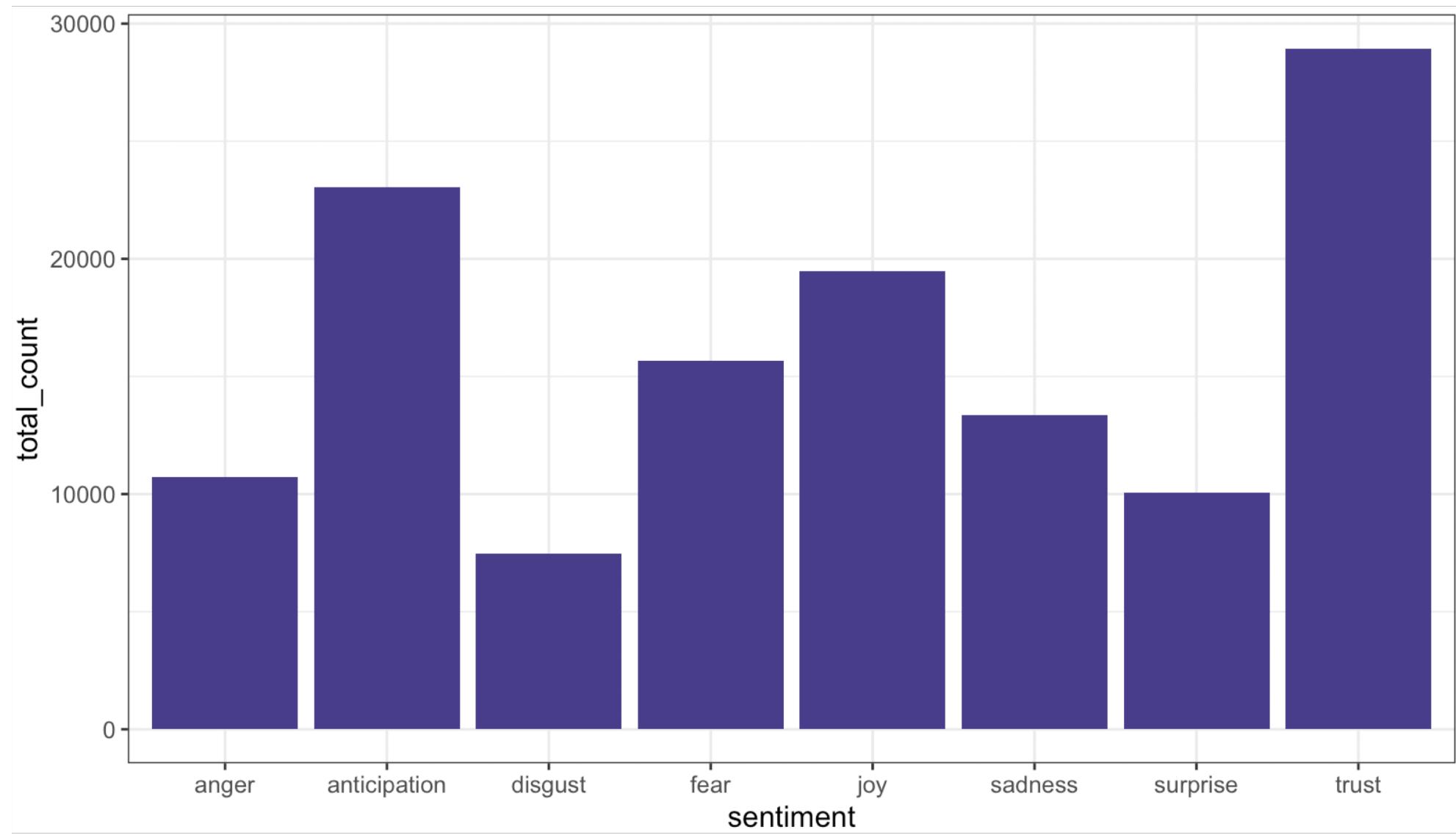
wrong went study  
three family happiness  
give desire hand maybe  
person back just somebody music  
know going get question work ask  
ive minutes bright life never  
thought way stress love dont number eyes  
start didnt say people feel job sex  
mind call got brain want youre care picture  
sort stories compassion need  
mothers good story kind computer problem  
put hiv laughter design will news  
africa technology see also nature  
ocean terms food world water designers  
able well actually really mountain  
species fish big together thats global  
mean building

Bottom 500

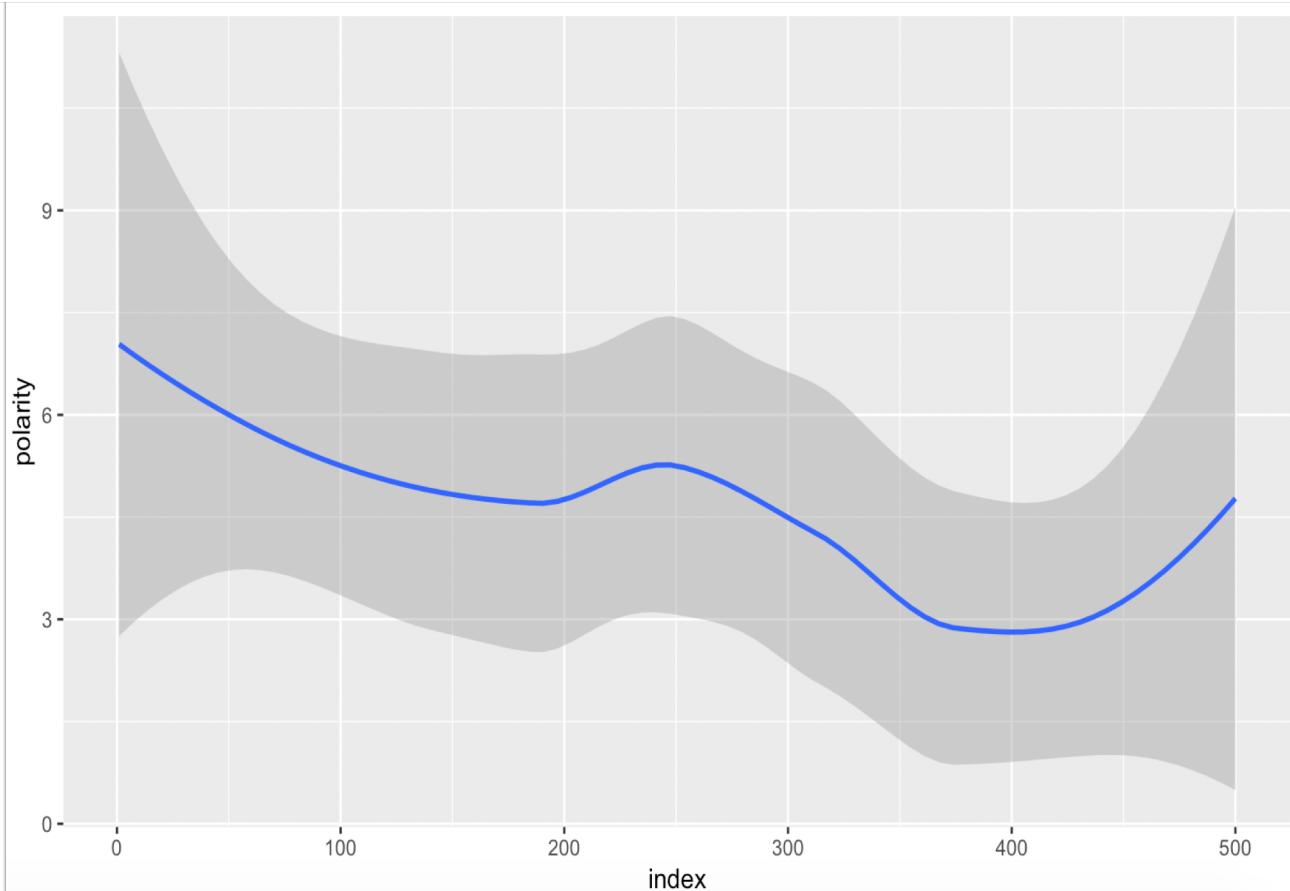
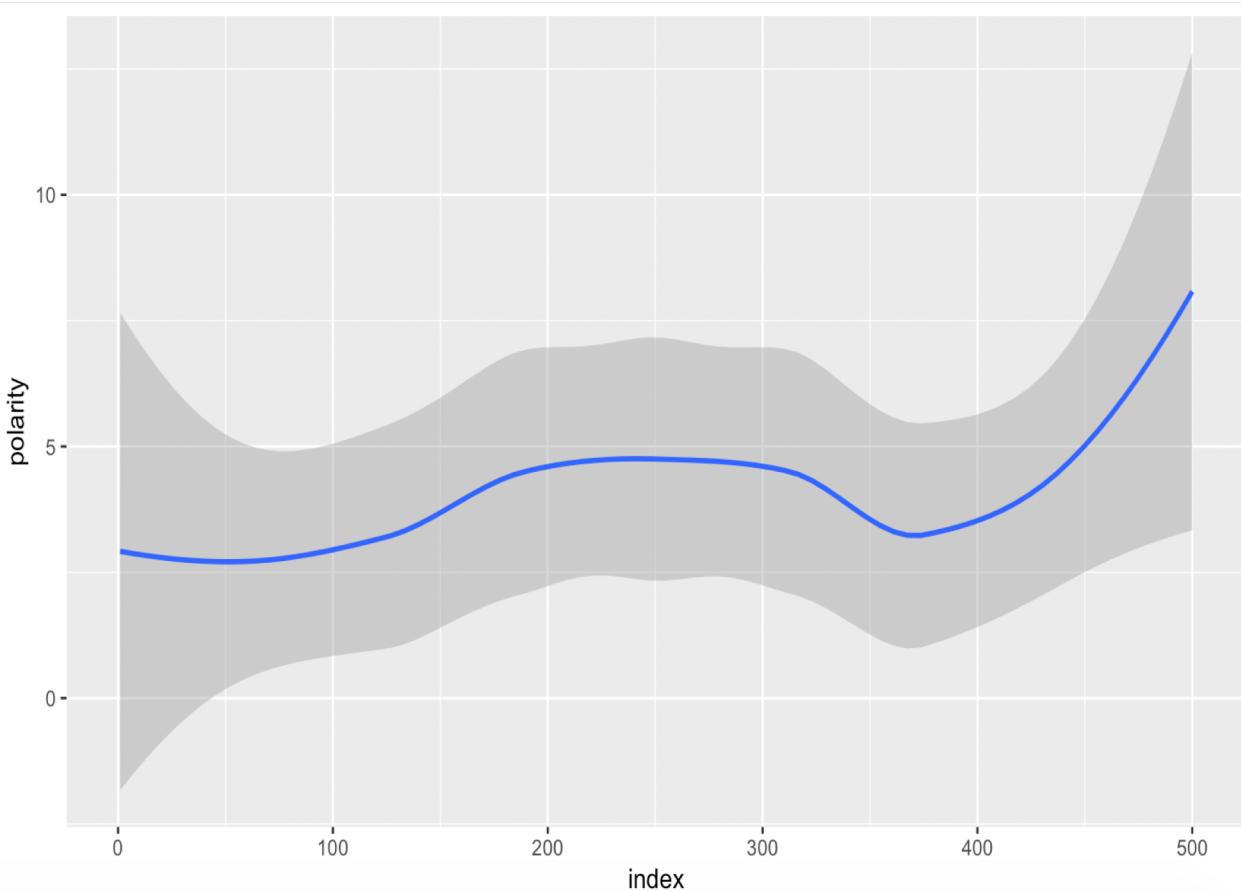
# Methodology

- Sentiment analysis using bag of words technique and a lexicon based approach has been used.
- Network analysis by content similarity analysis.
- Topic modelling between three different talks on women empowerment (TED, UN & Political speech) was carried out to gain insight on the differences of power words based on the intent of deliverance.

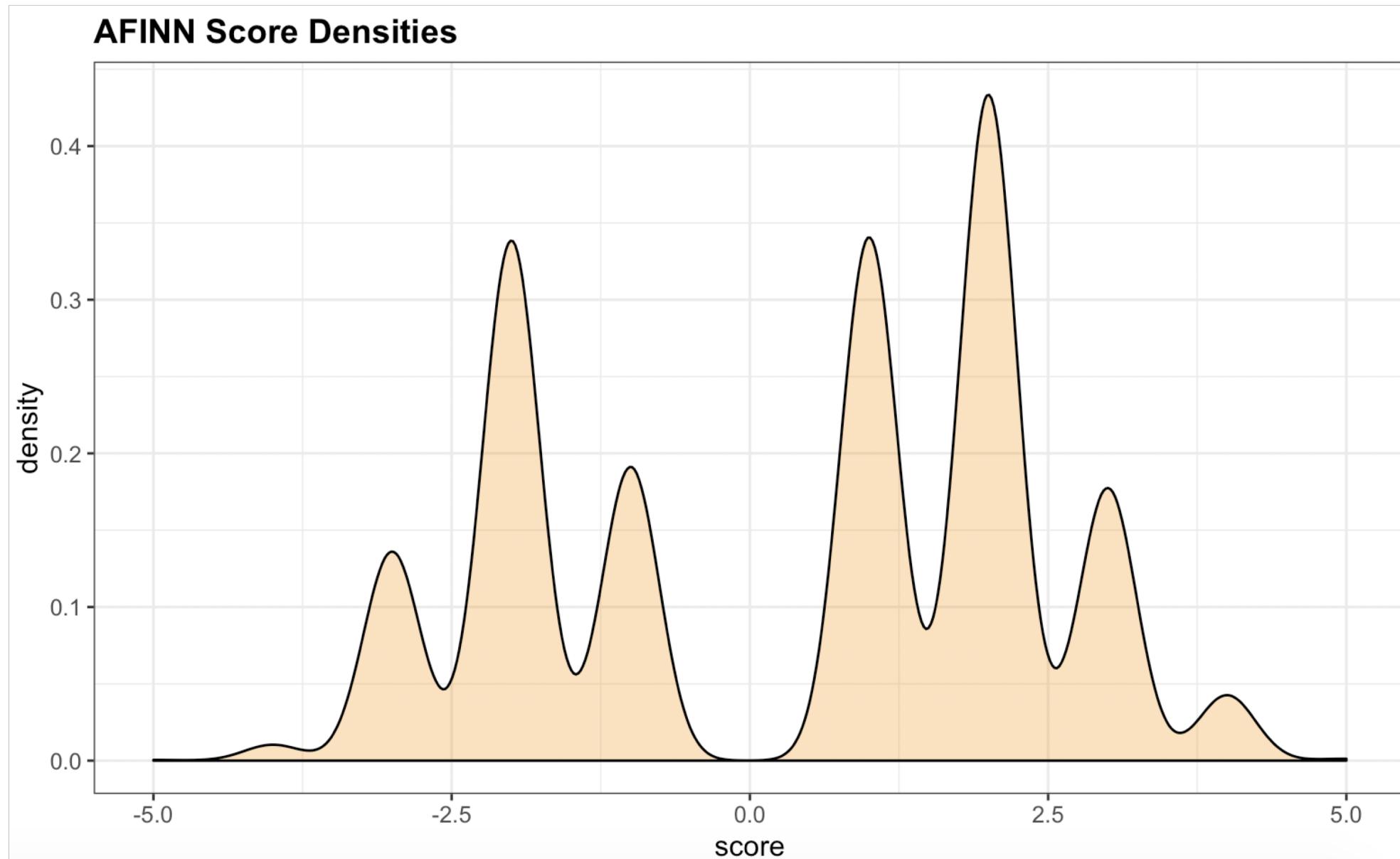
# NRC Lexicon



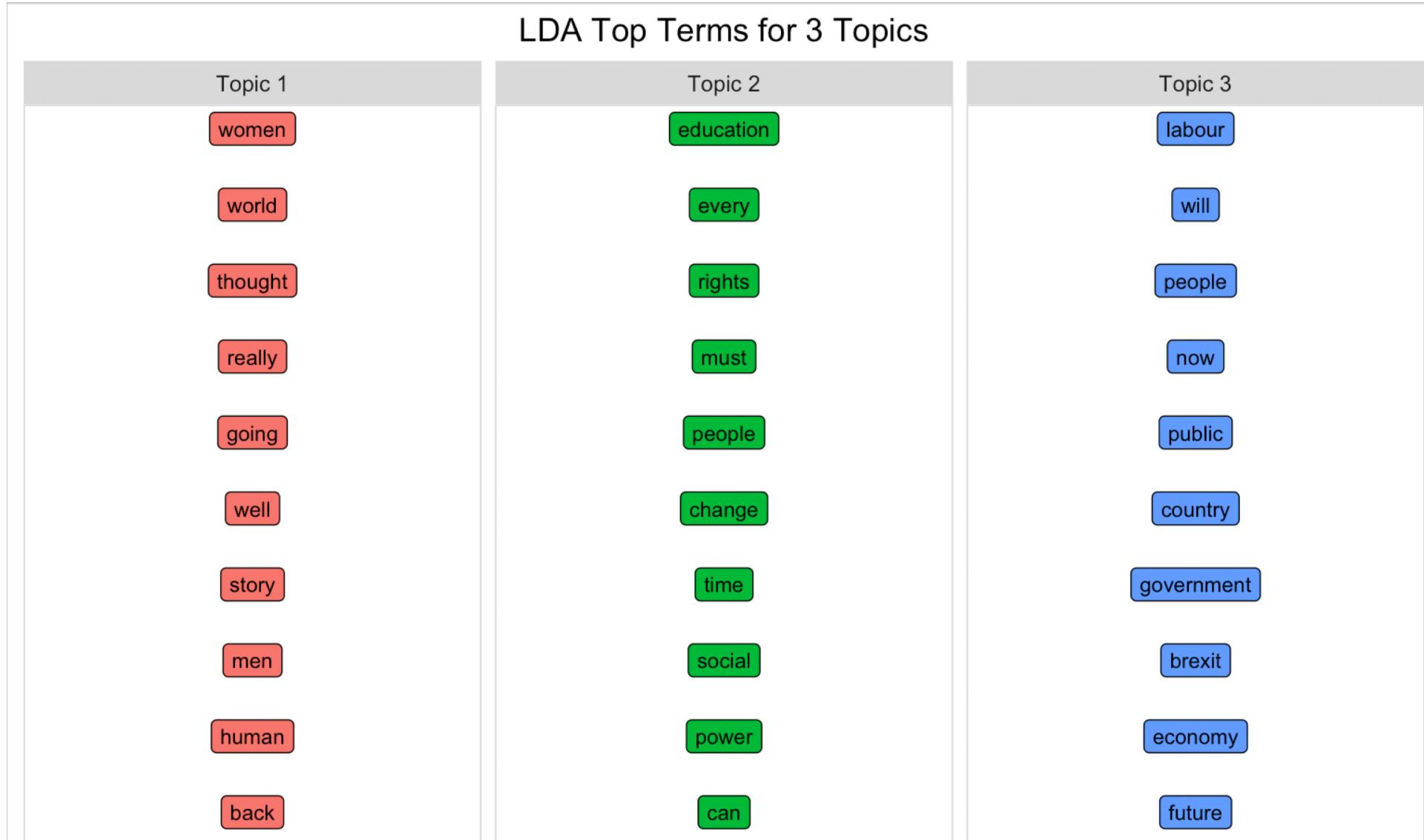
# BING lexicon



# AFINN Lexicon



# Topic Modelling



# Topic Modelling

K-Means Top Terms for 3 Topics

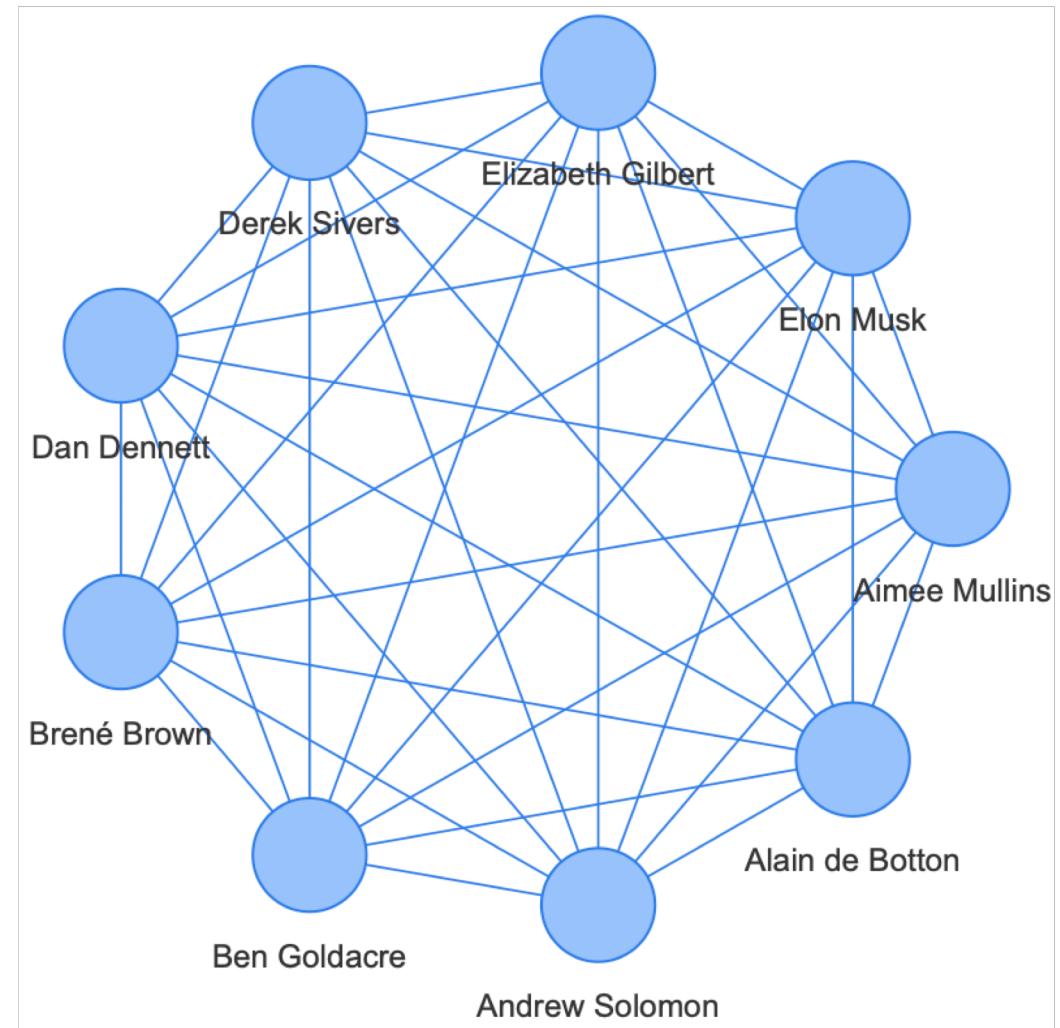
Topic 1	Topic 2	Topic 3
male	brothers	brexit
will	sisters	country
really	dear	now
world	world	public
thought	women	will
story	rights	labour
women	education	people

# Cosine similarity

- A measure of similarity between two vectors of an inner product space that measures the cosine of the angle between them
  - Angle= 0 -- cosine=1:
    - vectors are oriented in identical directions
    - corresponding data sets are completely similar to one another
  - Angle = 90 degrees – cosine = 0:
    - Corresponding variables are perpendicular
    - But not necessarily that are uncorrelated

# Recommendation of similar speakers

- The example shows a subgraph of the result of recommended speakers when the user is interested in talks similar to Elon Musk.



# Conclusion

- We can analyze that although the TED talks are of progressive nature, they mostly revolve around wisdom, women, family and passion.
- The greatest quality a TED speaker possesses is the ability to gain the trust of the audience. Also, creating an atmosphere of anticipation while storytelling is characteristic trait of great TED speakers.