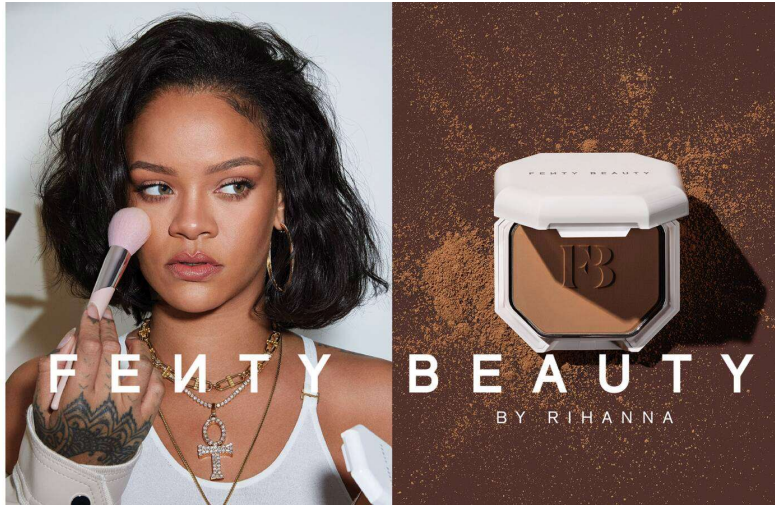# FENTY BEAUTY ANALYSIS

AMANDA AIRD, EMILY EDWARDS, KARINA JOINER AND ELLIE PAUL

# OBJECTIVE



- Fenty Beauty

- Identify possible collaborations using historical collaborations

- Understand Tweets about Fenty Beauty

- Recommendations and improvements for future research

# ANALYSIS OVERVIEW

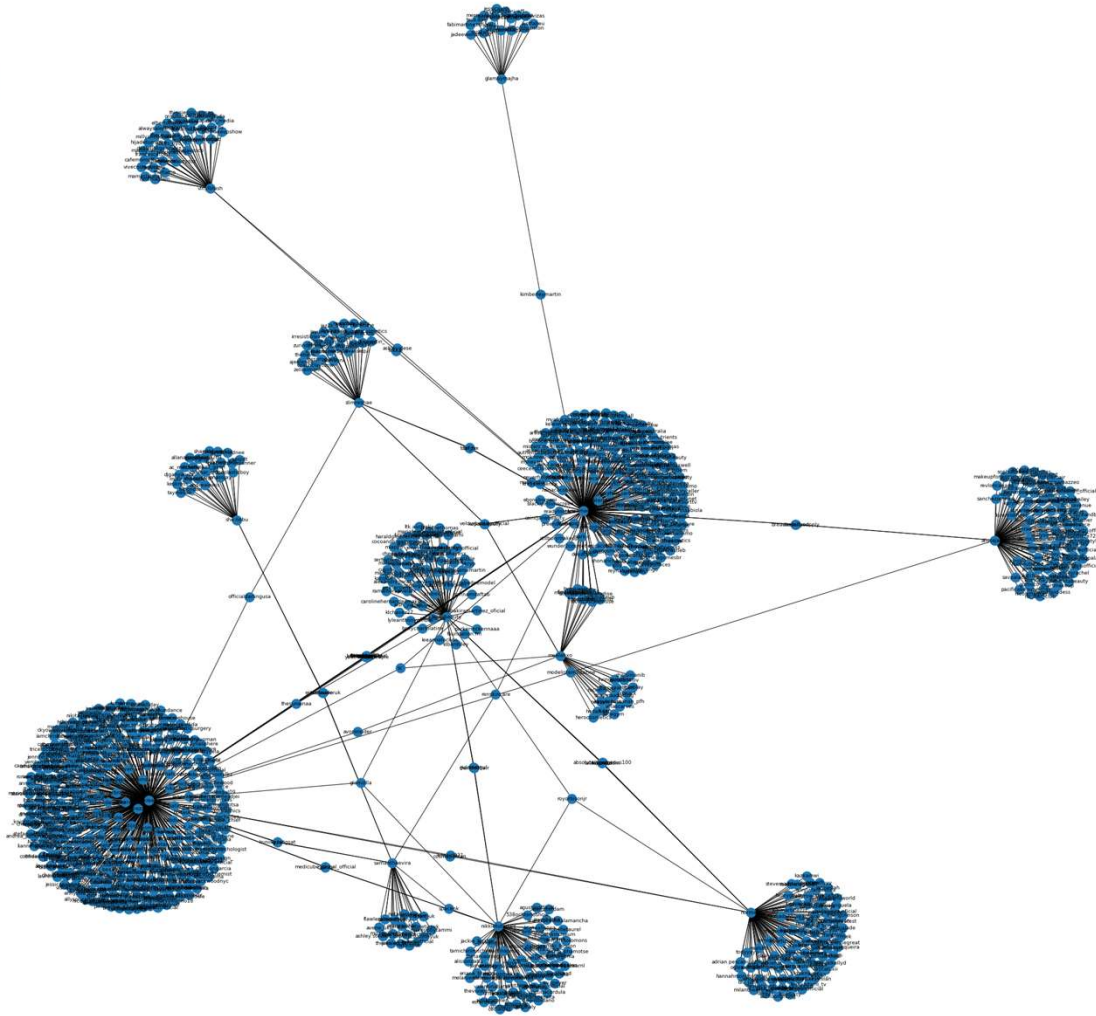Fenty Beauty collaborations with influencers

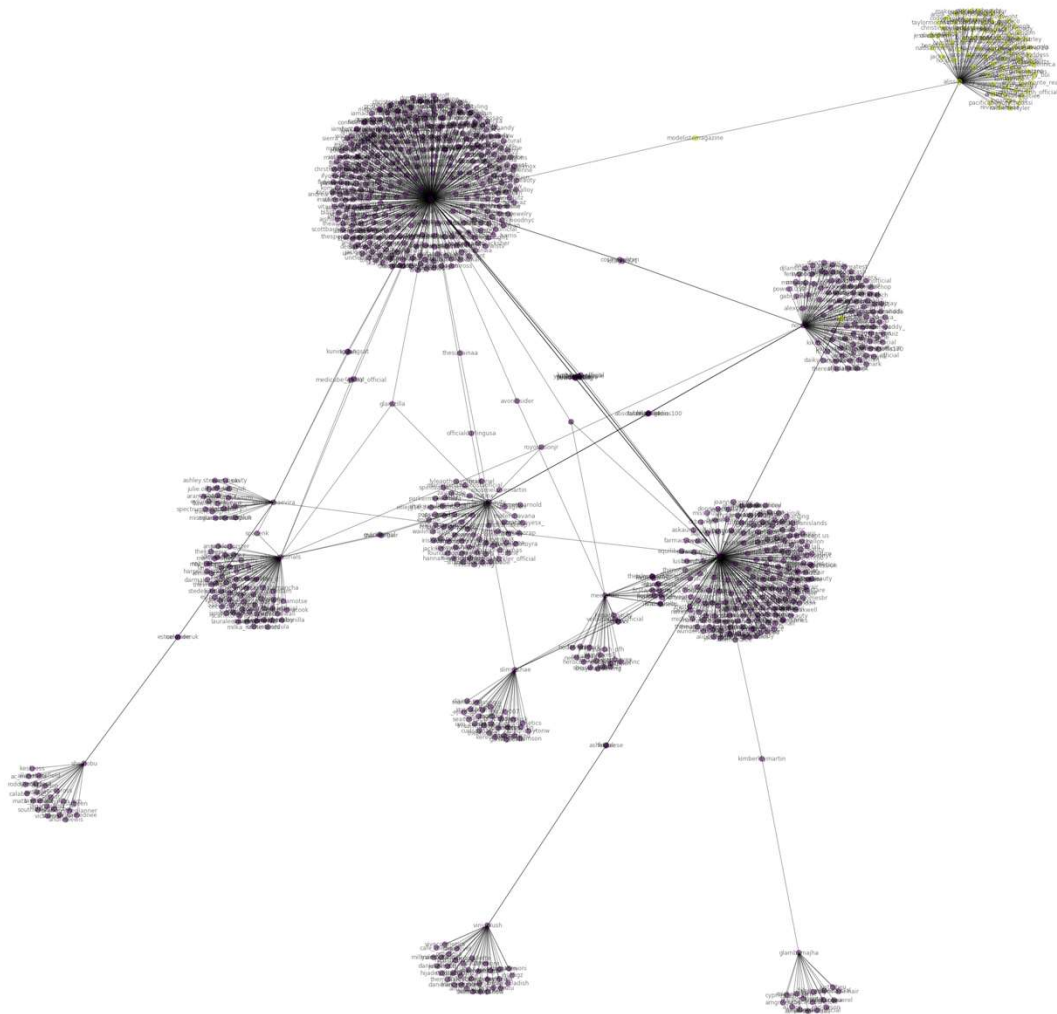Social Network Analysis: Find egos and boundary spanners

Text Analysis: Topic Modeling and NER

# DATA COLLECTION: SOCIAL NETWORK ANALYSIS

- PhantomBuster: Instagram followers
  - Appended each influencers dataset
  - Dropped columns to create nodes and edges

# NETWORK VISUALIZATION

COMMUNITY
VISUALIZATION

# DEGREE CENTRALITY

'jackieaina': 0.1878121878121878,
'lyssamariexo': 0.1028971028971029,
'normani': 0.046453546453546456,
'alissajanay': 0.04295704295704296,
'nikkietutorials': 0.03396603396603397,
'fentybeauty': 0.03296703296703297,
'vinylblush': 0.01848151848151848,
'meelahxo': 0.015984015984015984,
'slimreshae': 0.015984015984015984,
'she.nobu': 0.011988011988011988,
'samanthaevira': 0.011488511488511488,
'glambymajha': 0.008491508491508492,
'royorbisonjr': 0.0014985014985014985,
'glamzilla': 0.0014985014985014985,
'sc': 0.0014985014985014985,
'koparibeauty': 0.0014985014985014985,
'velourbeautyofficial': 0.0014985014985014985,
'caliray': 0.000999000999000999,

# CLOSENESS CENTRALITY

'jackieaina': 0.21157668757176348,
'sc': 0.17694316664803966,
'youthtothepeople': 0.17490243813174614,
'flowerbeauty': 0.17490243813174614,
'kosas': 0.17490243813174614,
'peachandlily': 0.17490243813174614,
'dalijahamelia': 0.17490243813174614,
'lysbeautyofficial': 0.17490243813174614
'dongala': 0.17490243813174614,
'lyssamariexo': 0.16627294021682928,
'glamzilla': 0.16133053429674207,
'kitagirl921': 0.15777612840036342,
'cosmopolitan': 0.15777612840036342,
'modelistemagazine': 0.1571988986623133,
'caliray': 0.1553049360278276,

# BETWEENNESS CENTRALITY

```
jackieaina': 0.19720943280361852,
lyssamariexo': 0.11340409013224496,
normani': 0.0429945237131323,
alissajanay': 0.04045067208850209,
nikkietutorials': 0.03205639436019968,
fentybeauty': 0.02980436317278479,
modelistemagazine': 0.0257320800049208808
samanthaevira': 0.021394172759287802,
glamzilla': 0.020473598370560894,
kitagirl921': 0.01766173272736514,
cosmopolitan': 0.01766173272736514,
vinylblush': 0.01743908265647396,
slimreshae': 0.01367487818817437,
sc': 0.012133487205331885,
thesunainaa': 0.011903127241307725,
```

# RECOMMENDATIONS

- Glamzilla
    - High betweenness and degree centrality
    - Low closeness score
- Kitagirl921
    - High betweenness
    - Low closeness score
- Modeliste Magazine and Cosmopolitan
    - High betweenness
    - Low closeness score

# IMPROVEMENTS

- Scrape all Instagram followers, not just a subset
- Filter out current influencers
- Choose more accounts to scrape

# DATA COLLECTION: TEXT ANALYTICS

- Kaggle Dataset: Tweets pertaining to Sephora

- Subset to only tweets that mention Fenty Beauty

- Remove stop-words, punctuation, etc.

# WORD CLOUDS

# WORD CLOUDS

# SUBJECTIVITY AND POLARITY

Mean scores

- Polarity = .089

  (mainly neutral, closer to positive than negative)

- Subjectivity = .346

  (mainly objective, slightly neutral)

# LDA MODEL

Topics:

- 1 and 2 = Fenty in general / brand awareness
- 3 and 4 = marketing and product specific
- 5 and 6 = product releases / online drops


- Jupyter Notebook for interactive model
- Sephora tweets are most effective for finding topics surrounding the Fenty brand

# NER

- Last 10 rows

| | entity | label | explanation |
|---|---|---|---|
| 21074 | babi fenti sephora rihanna | PERSON | People, including fictional |
| 21075 | fenti skin | PERSON | People, including fictional |
| 21076 | sephora | PERSON | People, including fictional |
| 21077 | fenti skin | PERSON | People, including fictional |
| 21078 | fenti | PERSON | People, including fictional |
| 21079 | sephora fenti | PERSON | People, including fictional |
| 21080 | sephora birthdayi sephora fenti music sephora | PERSON | People, including fictional |
| 21081 | fenti skin sephora | PERSON | People, including fictional |
| 21082 | african | NORP | Nationalities or religious or political groups |
| 21083 | africa nigeria | NORP | Nationalities or religious or political groups |

# IMPROVEMENTS

- Need a new dictionary with influencer names for a more effective NER analysis

- More tweets about influencers found from Social Network Analysis

# QUESTIONS?