

HEALTH AND WELLNESS APP REVIEW


ANDI OSIKA

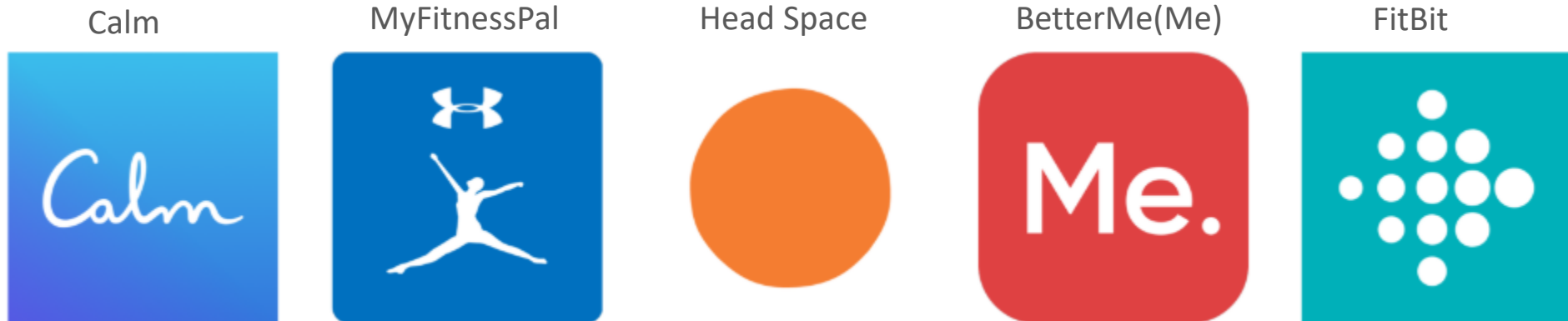
BACKGROUND:

HEALTH AND WELLNESS APPS

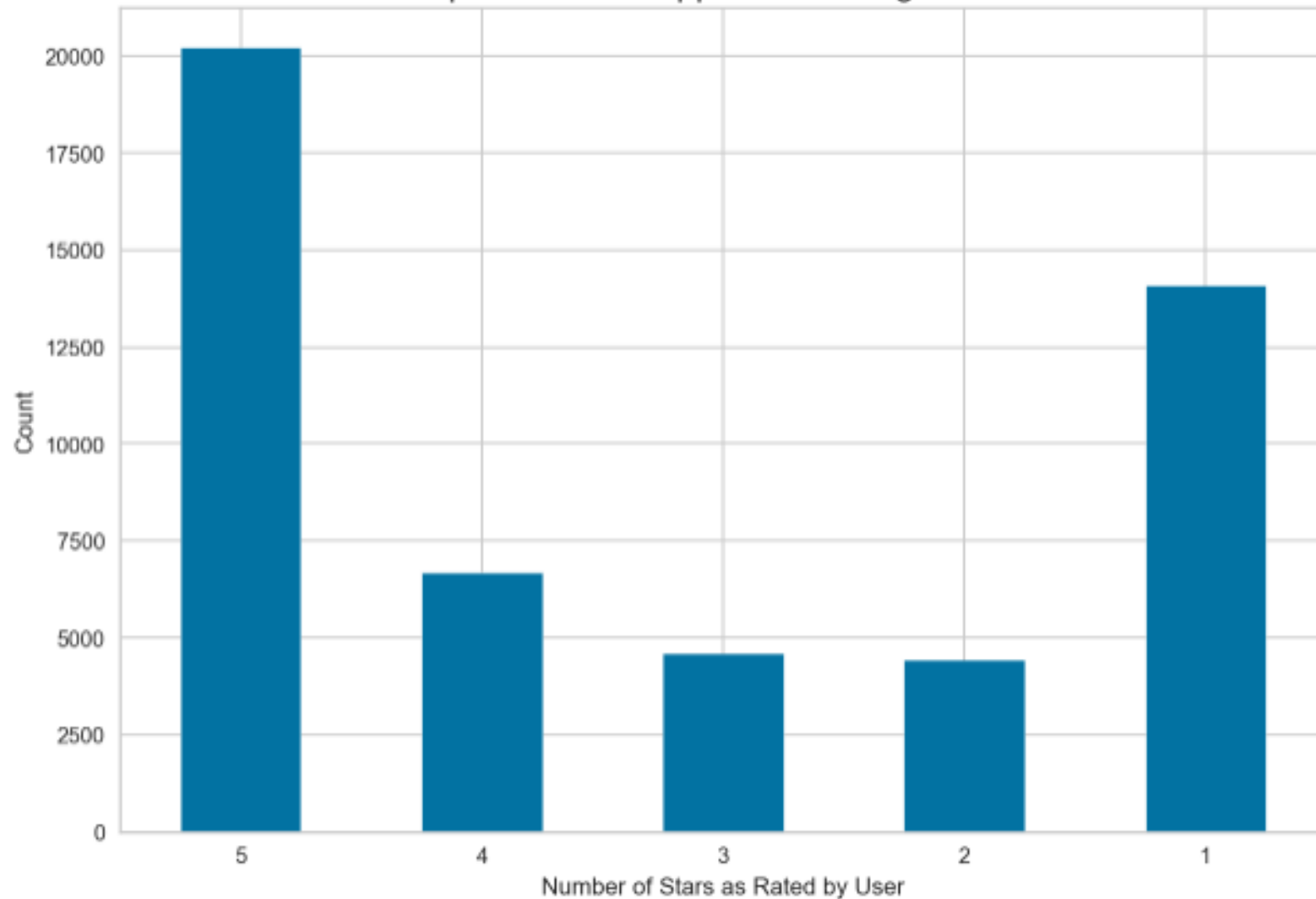
USER REVIEW INSIGHT

BACKGROUND:

- Mobile application programs focusing on various aspects of promoting digital health
- Categories/Examples:
 - Sports/Fitness Tracking
 - Diet Nutrition/Weight Loss
 - Stress Reduction
 - Mediation
 - Medical Tracking, Community, and Services
- Positive user sentiment  key component of conversion rate.
- Top 5 Grossing Health/Wellness Apps on Google Play:

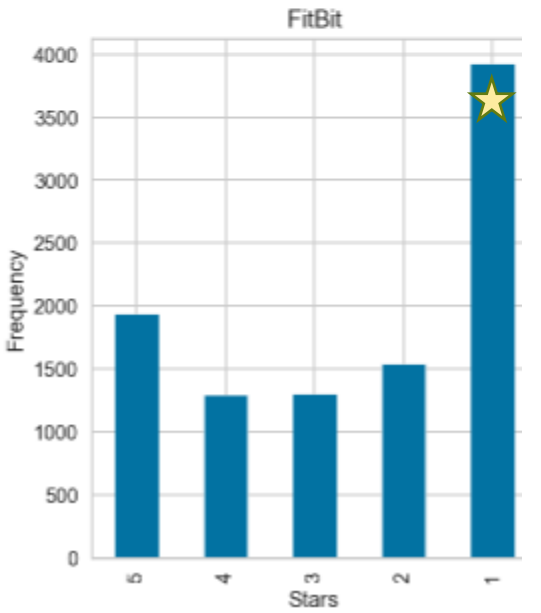
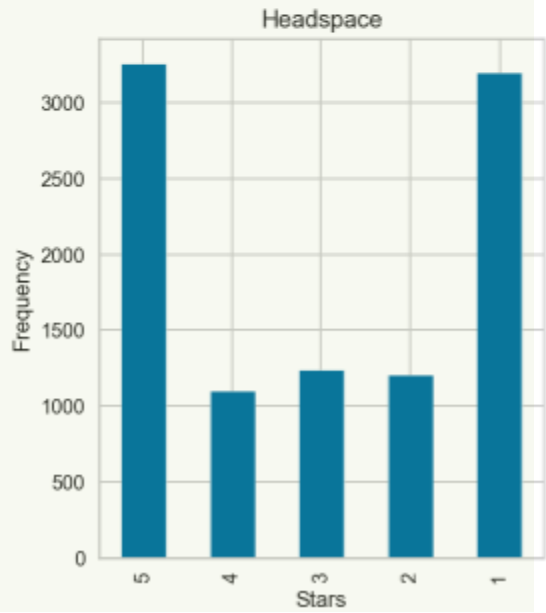
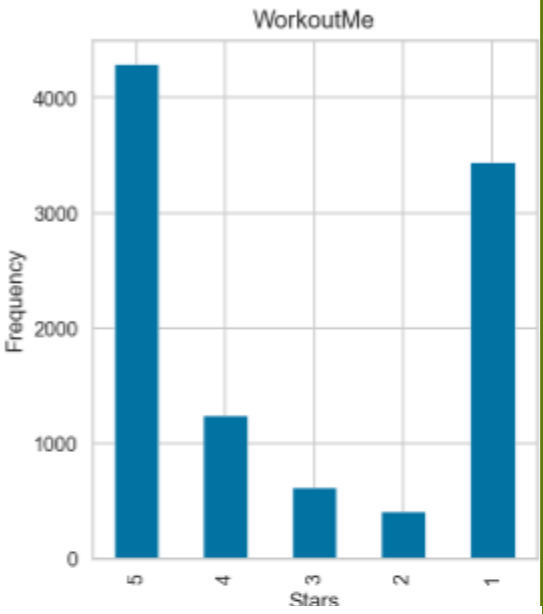
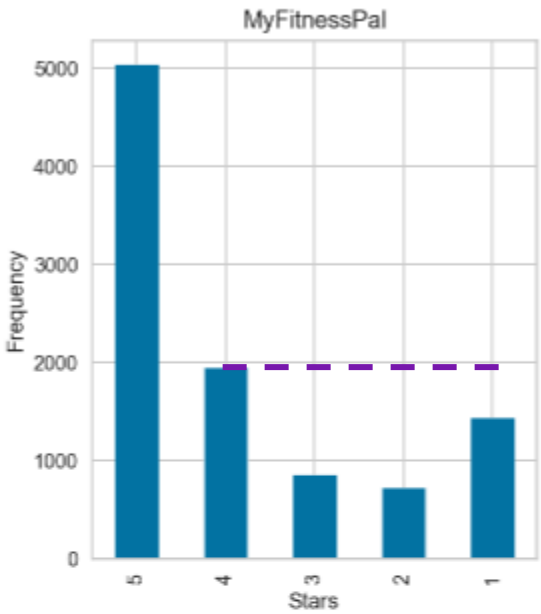
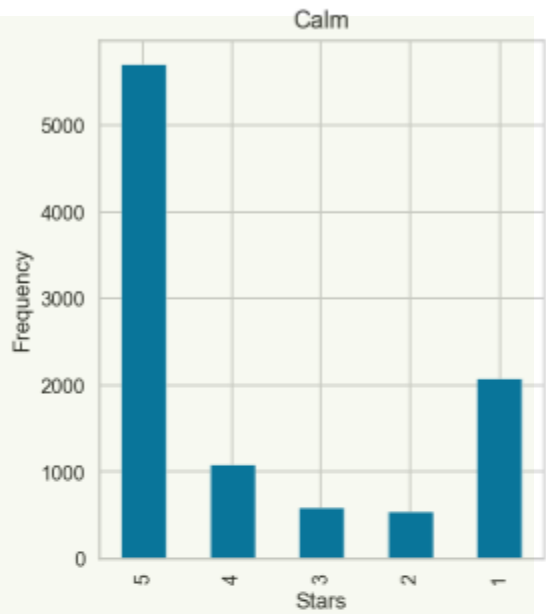


Top 5 Wellness Apps Star Rating Counts



ACROSS THE BOARD,
REVIEWERS
RATE WELLNESS APPS
5 OR 1 STARS MOST
FREQUENTLY WHEN
IT COMES TO MOST
RELEVANT REVIEWS:

Comparative Ratings Across Top 5 Wellness Apps

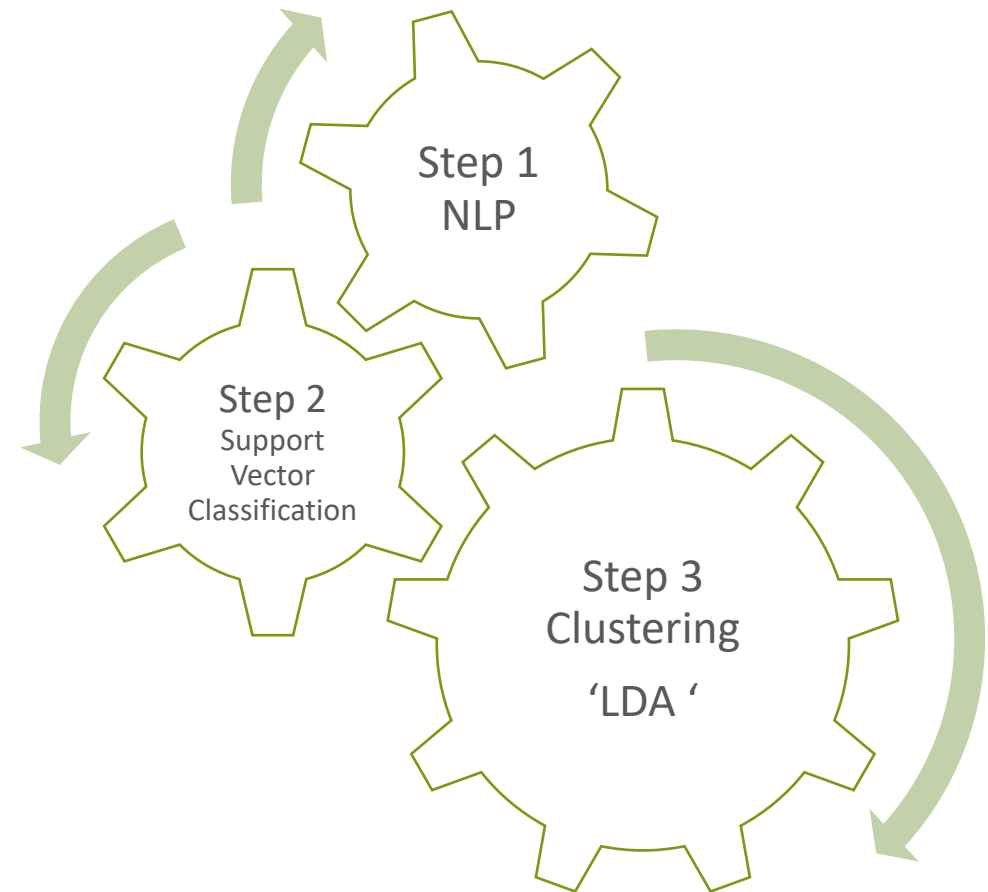


Surprising that FitBit rendered more one-star reviews than 5s by more than 2X

THE SAME PATTERN CARRIED THROUGH EACH INDIVIDUAL APP, WITH ONE EXCEPTION.

THE PROCESS OF EXAMINING REVIEW CONTENT

- Natural Language Processing:
 - Makes words → 'Vectors'
- Support Vector Machine Classification
 - Vectors → Classification
 - 'Positive', 'Negative' or 'Neutral'
- Clustering
 - Looks for patterns in terms based on how they 'relate' to each other.
 - LDA: Latent Dirichlet Allocation

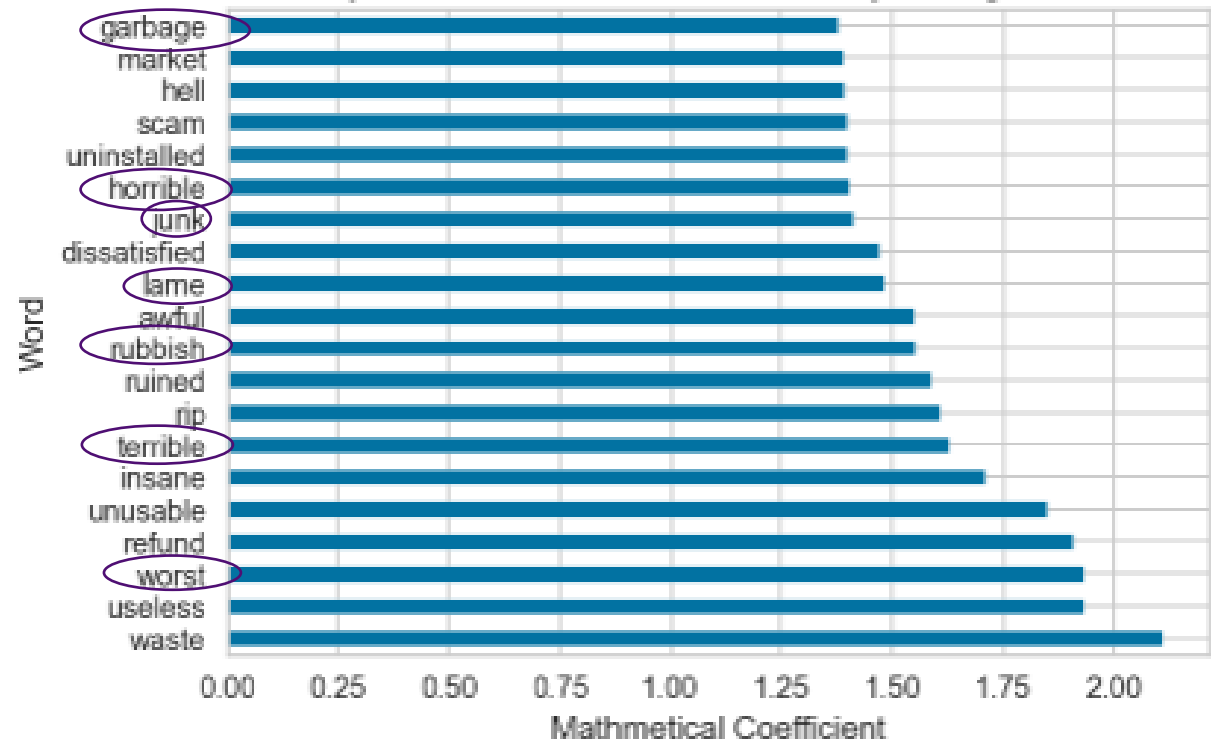


RESULTS:

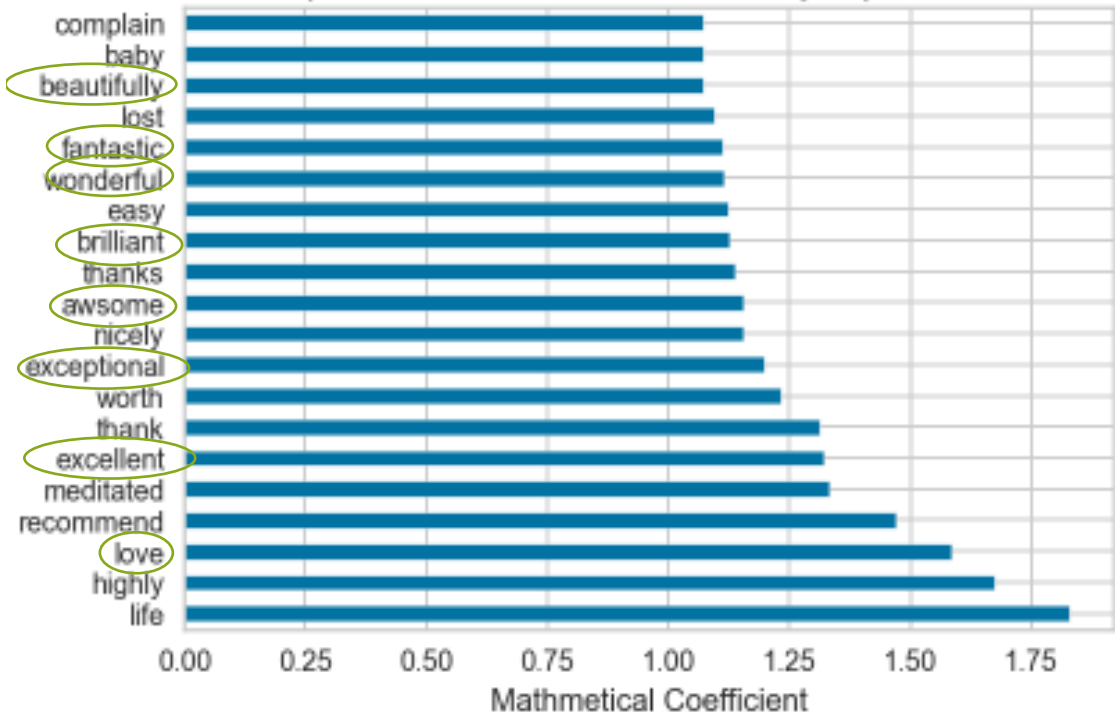
ISVC: Linear Support Vector Classification

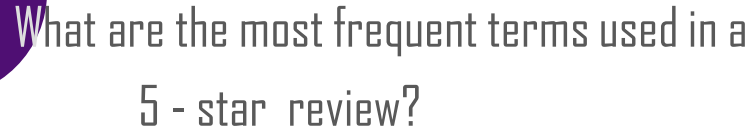
Class	Baseline Values:	ISVC Values:
Positive Sentiment	41%	92%
Negative Sentiment	31%	85%
Neutral Sentiment	28%	43%

Most important words used to classify a negative review:



Most important words used to classify a positive review:





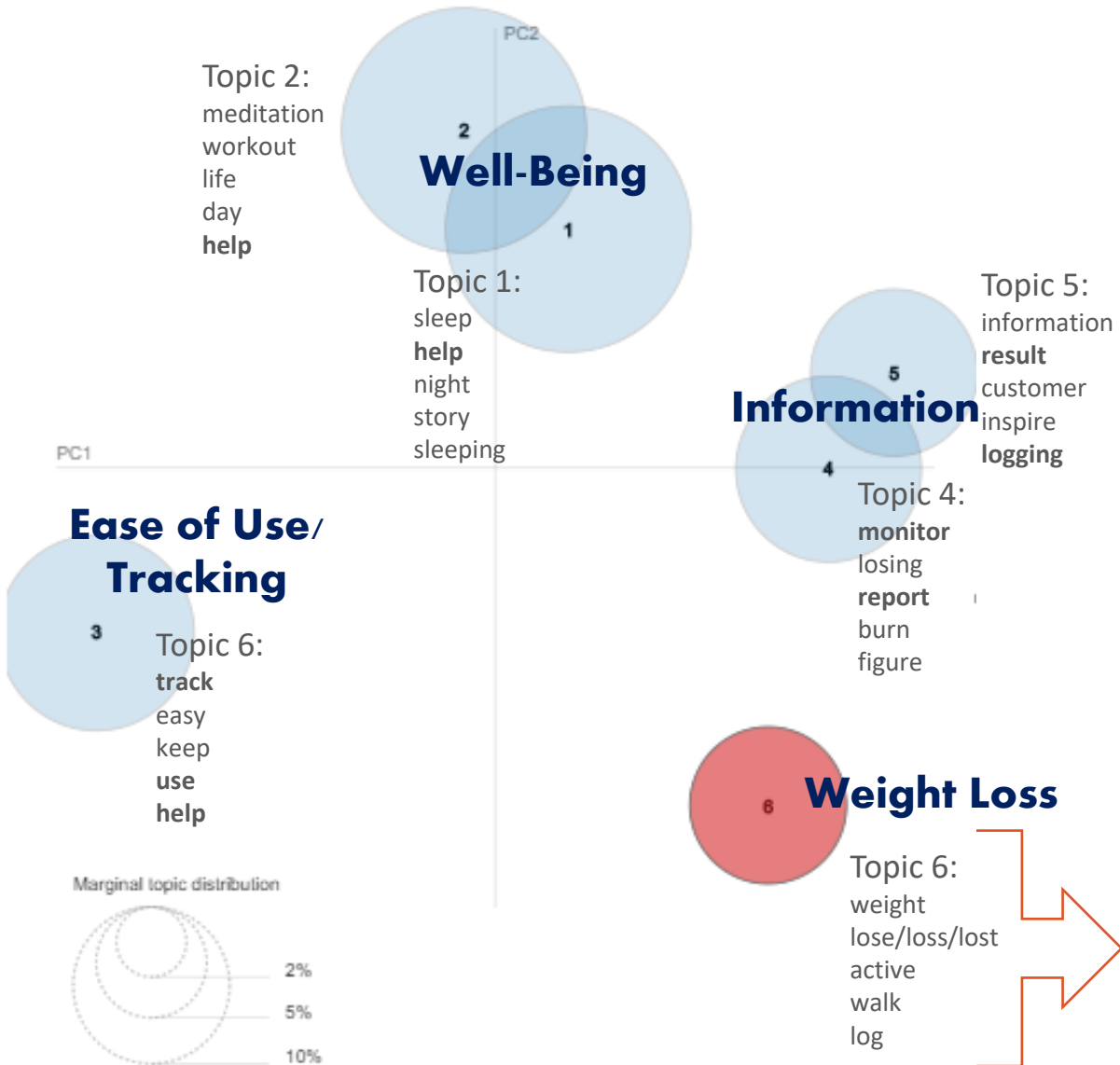
What trends are observed by comparing words used in relation to the rating?

POSITIVE SENTIMENT CLUSTER ANALYSIS USING

LATENT DIRICHLET ALLOCATION – L.D.A

Selected Topic:

Intertopic Distance Map (via multidimensional scaling)



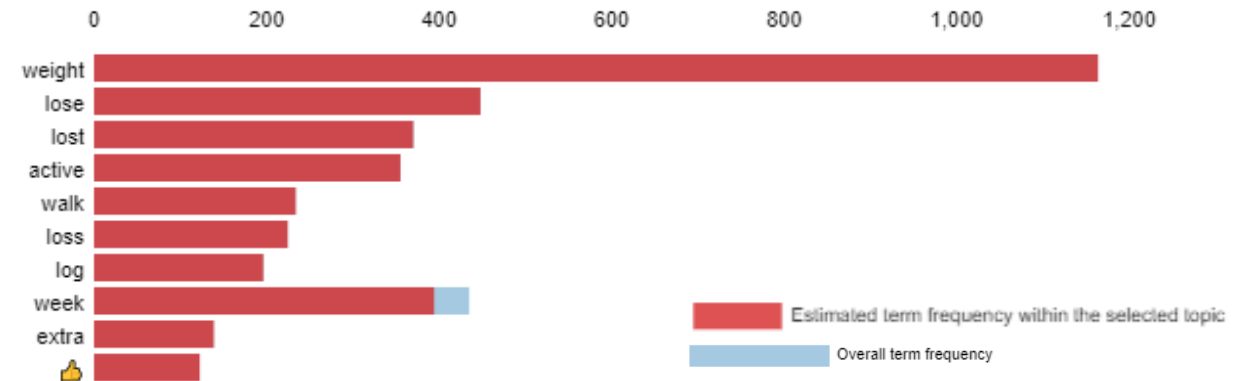
5-Star LDA Model Results

6 Topics

4 Areas

Cross- topic terms:
Tracking/logging, use, help

Top 10 Most Relevant Terms for Topic 6 (10% of tokens)





NEGATIVE SENTIMENT ANALYSIS USING

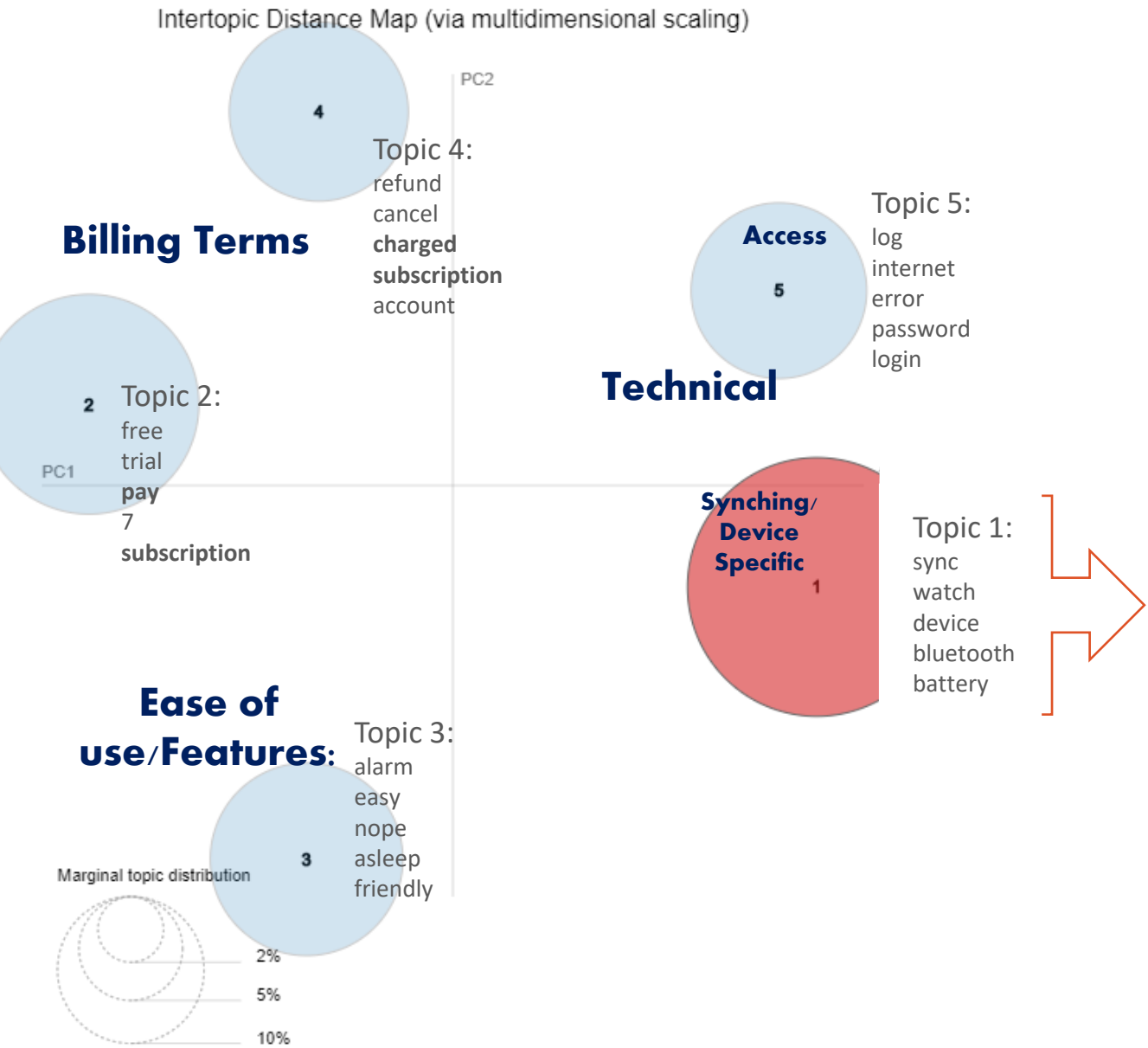
LATENT DIRICHLET ALLOCATION – L.D.A.



What are the most informative terms used in a 1 - star review?



What trends are observed by comparing words used in relation to the rating?

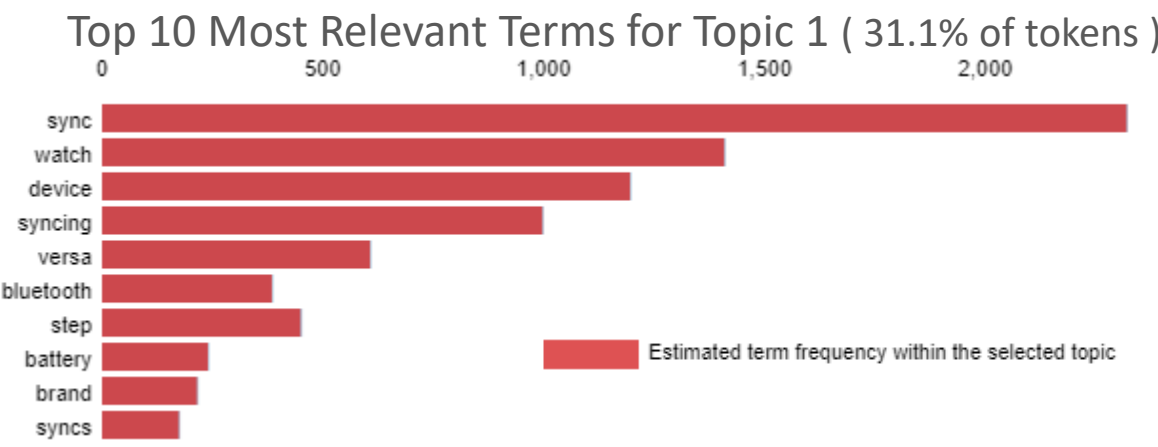


1-Star LDA Model Results

5 Topics

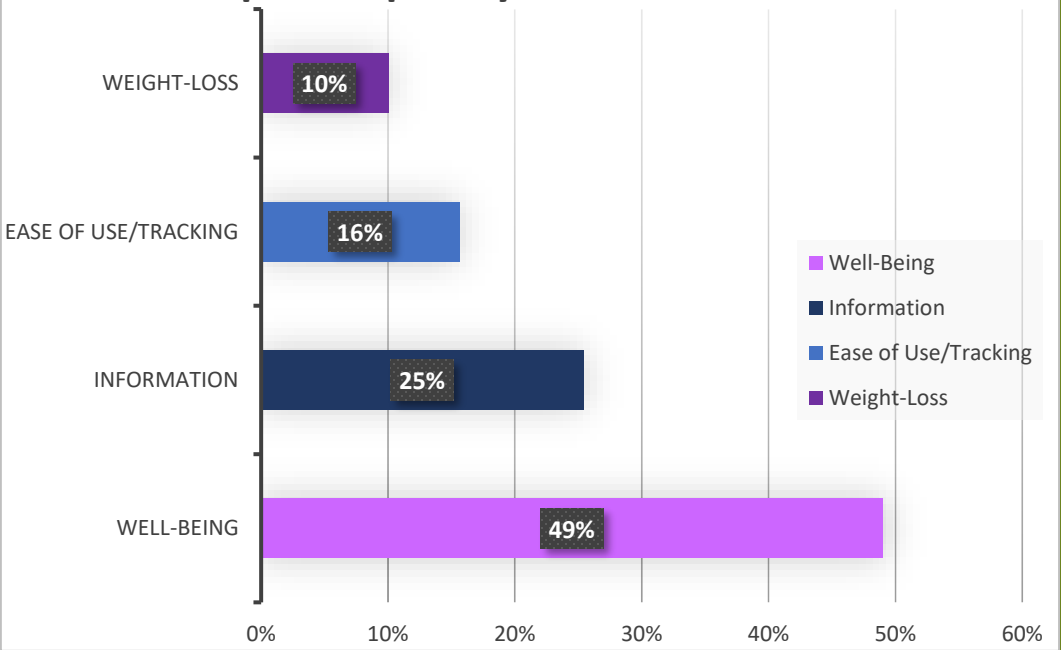
4 Areas

Cross- topic terms:
Subscription, payment

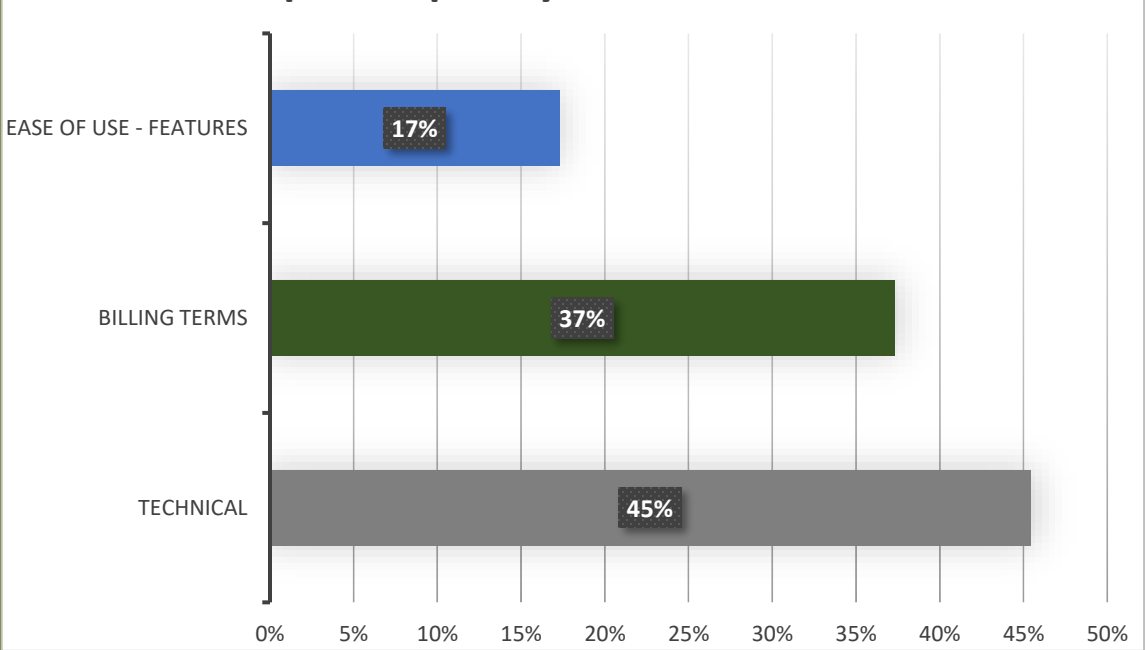


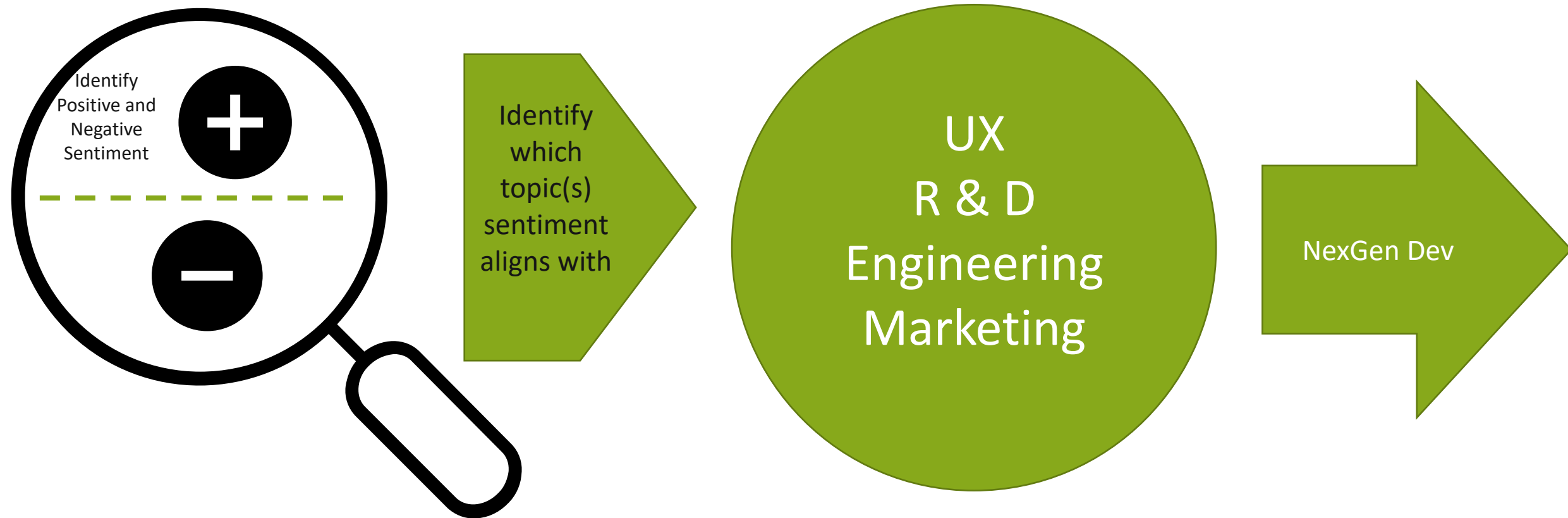
5-STAR VS 1-STAR REVIEW COMPOSITION COMPARISON:

Topic Frequency in 5 Star Reviews



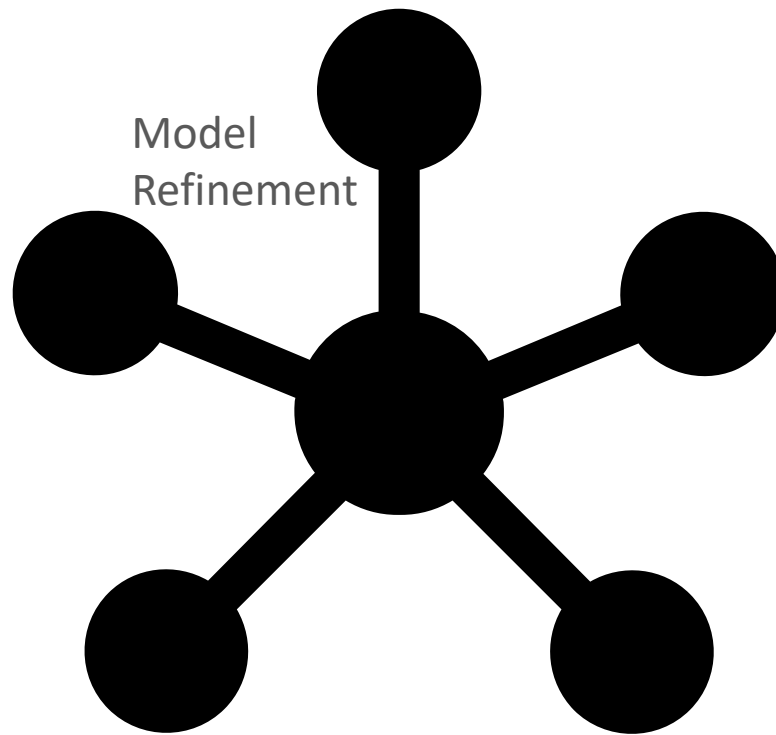
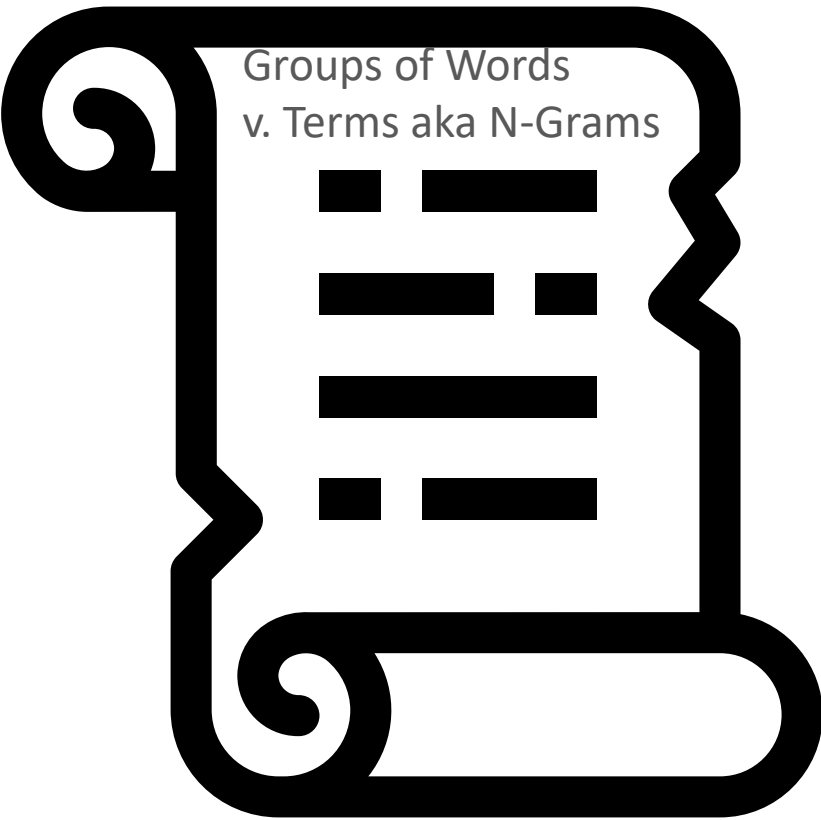
Topic Frequency in 1 Star Reviews





RECOMMENDATIONS

- MAKE EASE OF USE A PRIORITY
- IMPROVE ACCESS TO RELEVANT INFORMATION
- EXPLOIT APP-SPECIFIC FEATURES
- RESOLVE SYNCING ISSUES
- BE CLEAR ON TRIAL AND PAYMENT TERMS



FUTURE WORK:

THANK YOU

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