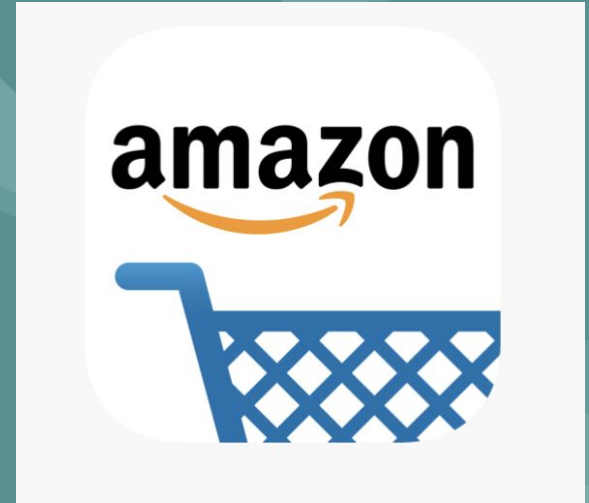


Analysis of Amazon Product Ratings and Reviews

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Haoyuan Meng
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Motivation and Objective

- More and more people shop and sell on Amazon (\$141b in 2019)
- Text analysis shows what people really care about
- Analysis helps retailers market their products



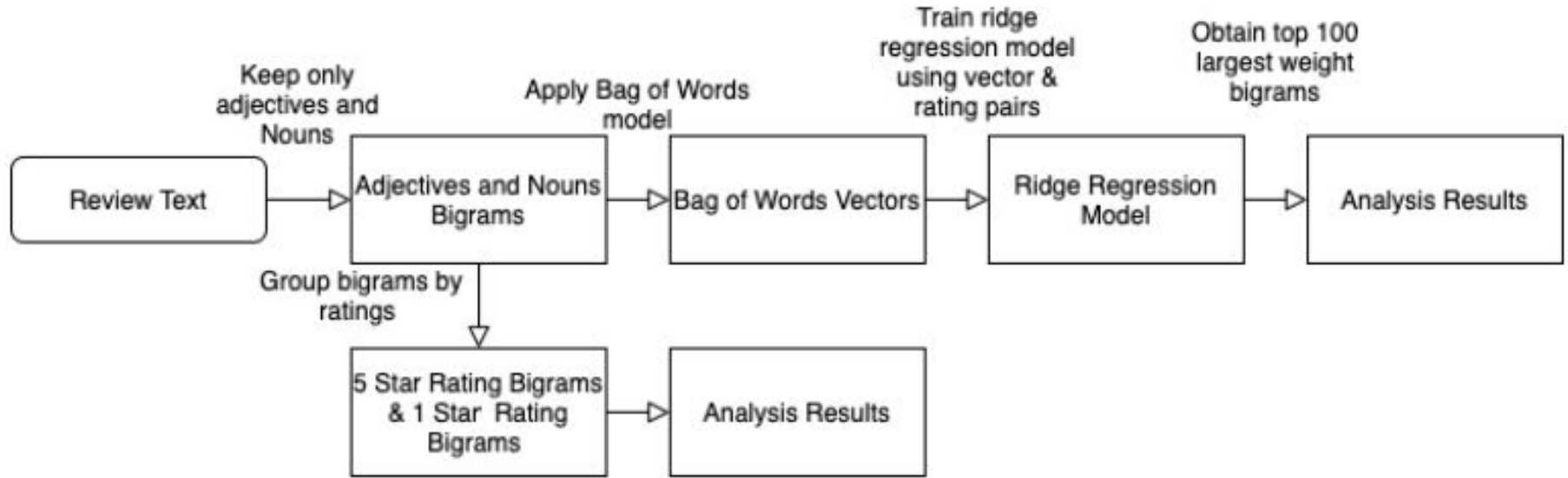
Dataset



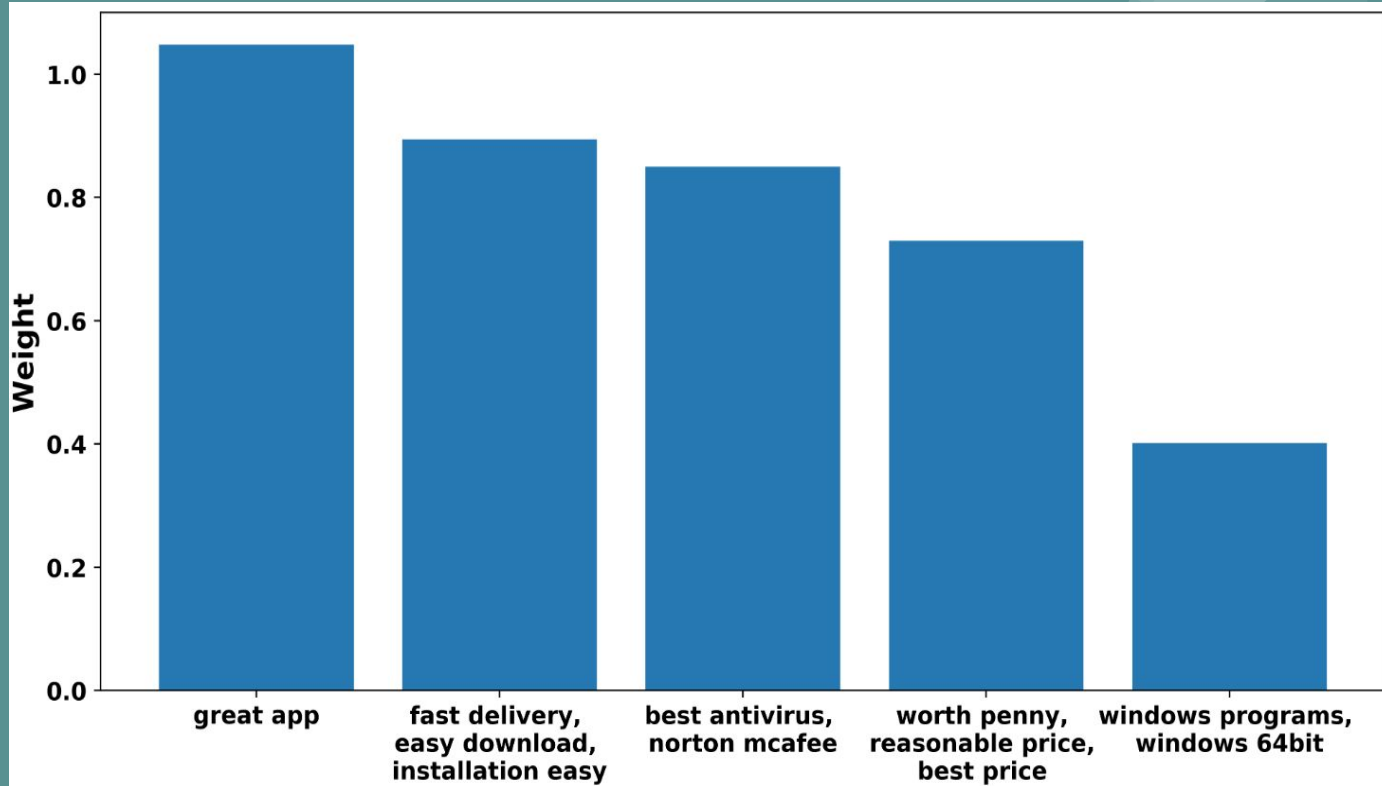
Categories:

- Sports and outdoor
- Electronics
- Softwares
- Prime Pantry

Methodology

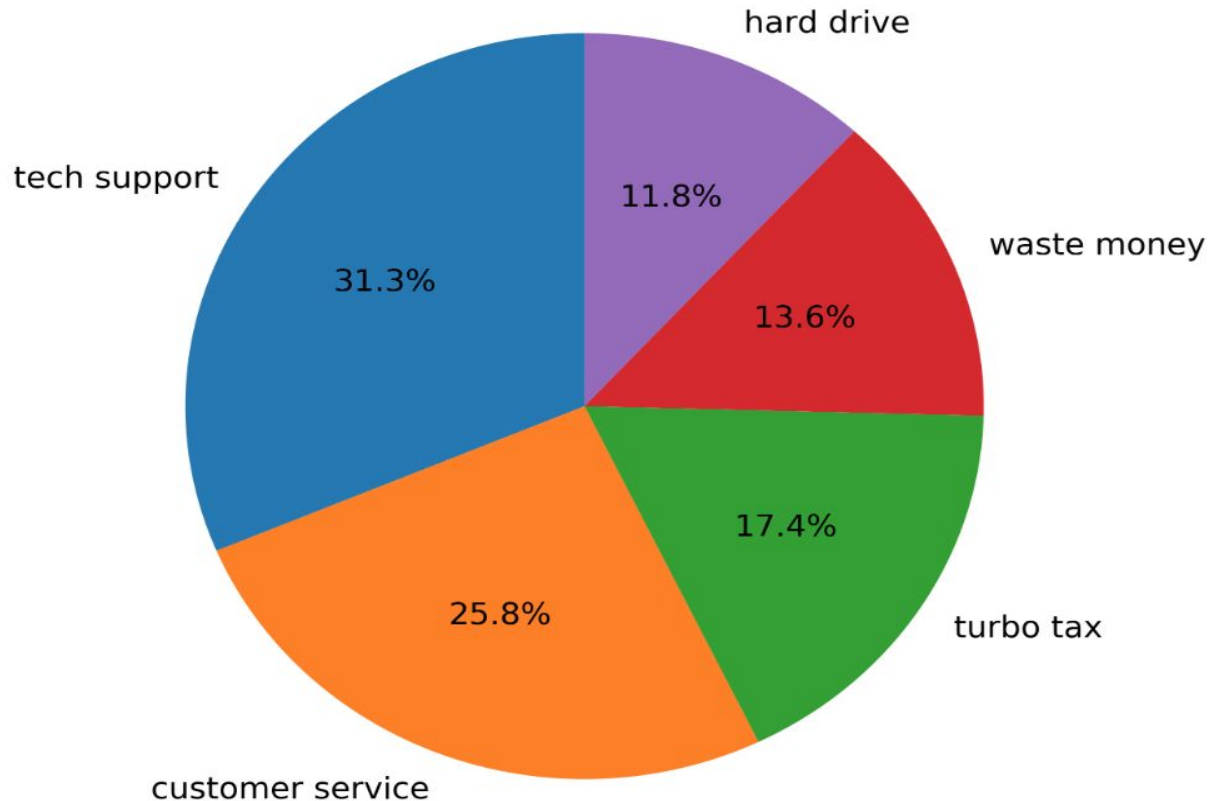


Top 5 weighted Bigrams - Software



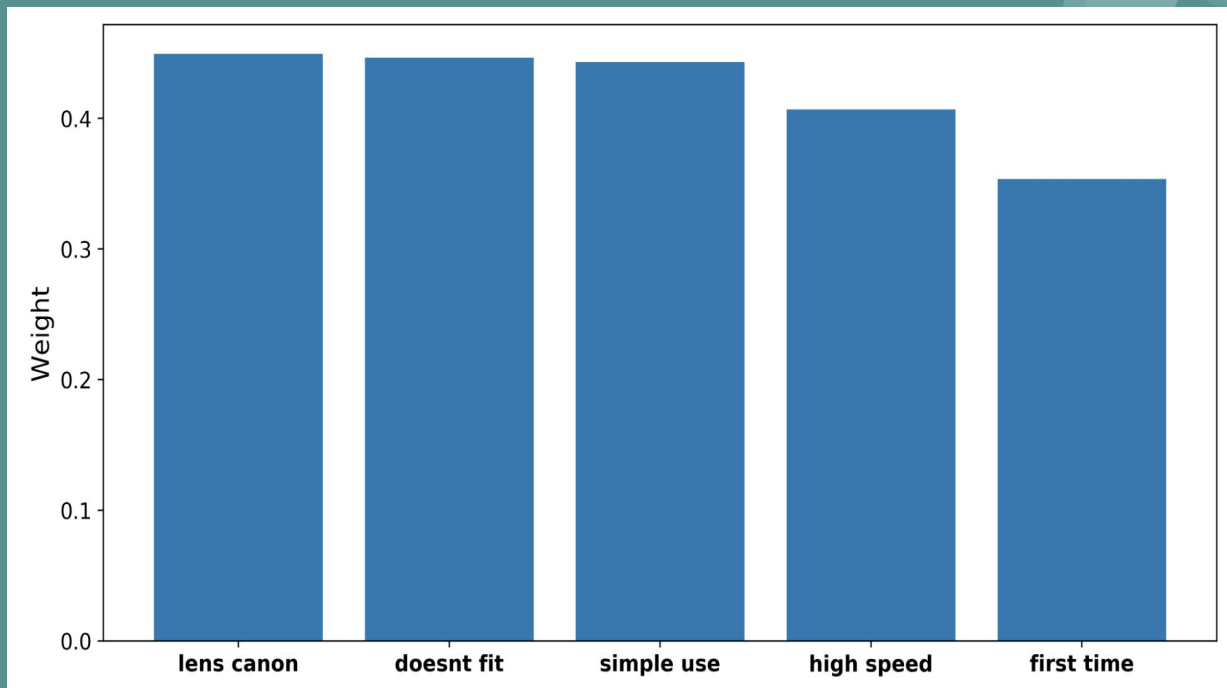
- Customers like to comment on user experiences.
- The most popular products are antivirus softwares.

Bigrams with 1 star ratings - Software



- Customers are more likely to give low ratings to products that have bad customer services.
- Hard drive compatibility issue seems to bother customers.

Top 5 weighted Bigrams - Electronics



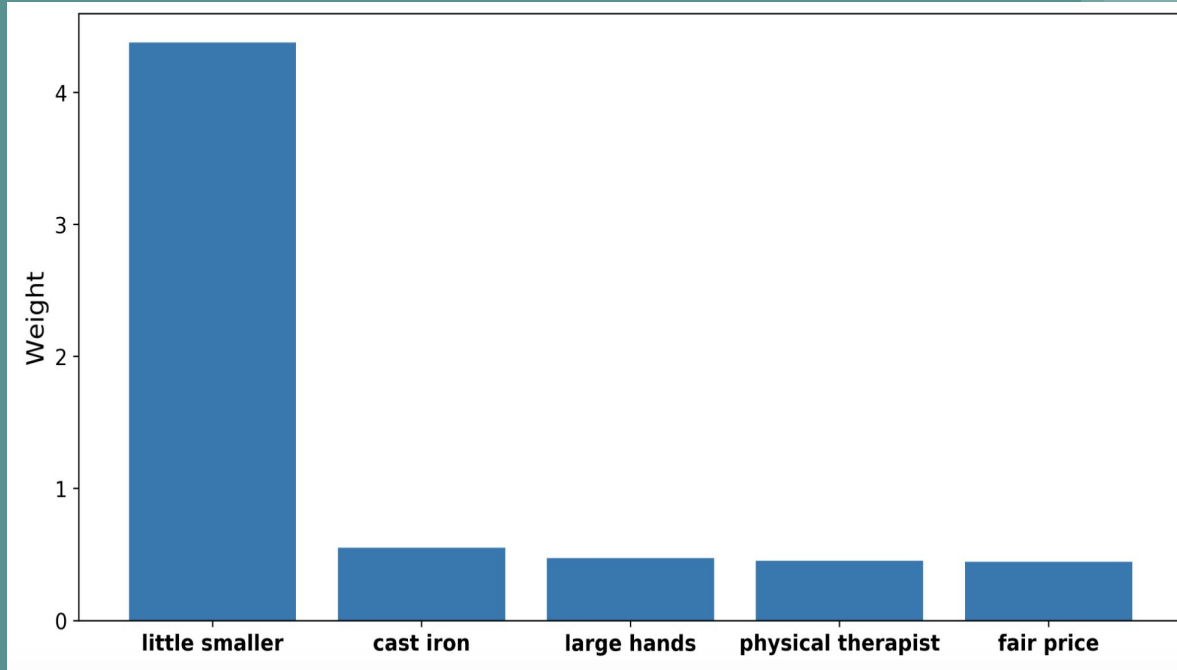
- “Lens Canon”: Customers like Canon more than other cameras.
- “First time”, “Simple use”: The simplicity to use the electronics is pretty important.

Customer ratings -

“Customer service”, “tech support”: customers service and better tech support may be much more important than manufacturers think.



Top 5 weighted words - Sports and Outdoors



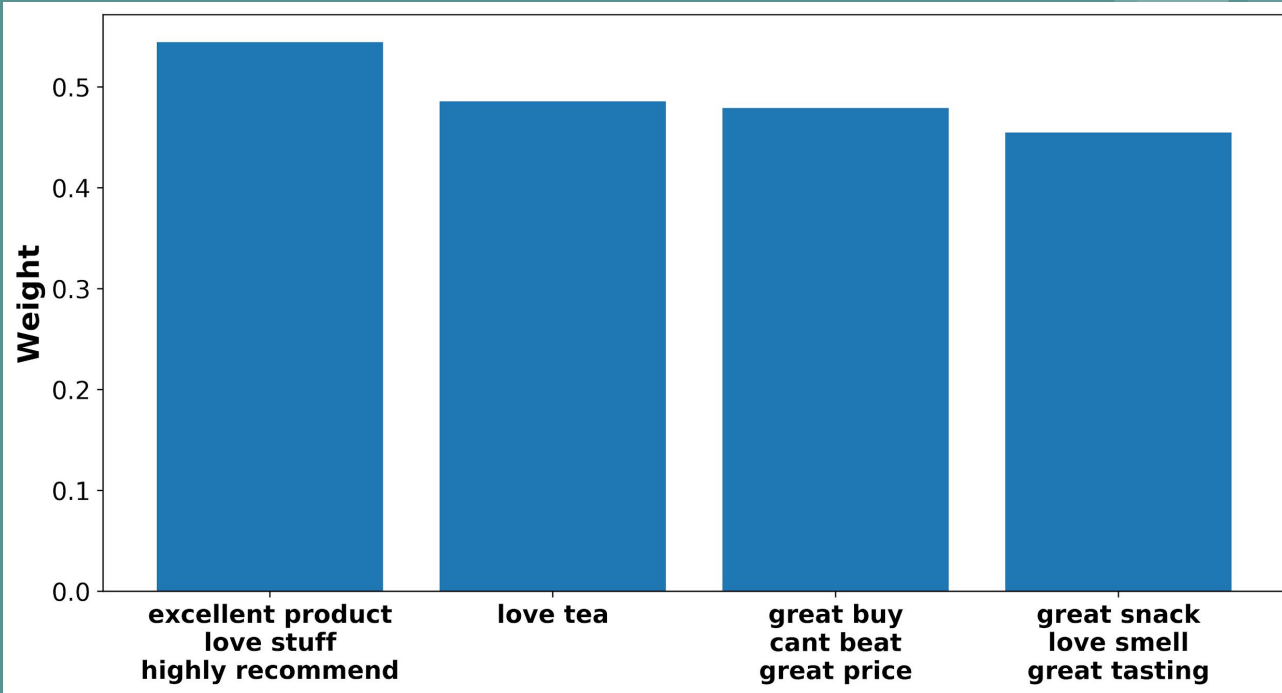
- “Little smaller”, people usually feel the product smaller than expected. Amazon should recommend customers to order a larger size.
- “Physical therapist” is important reason to choose products.

Frequency of words with 5 star ratings - Sports and Outdoors



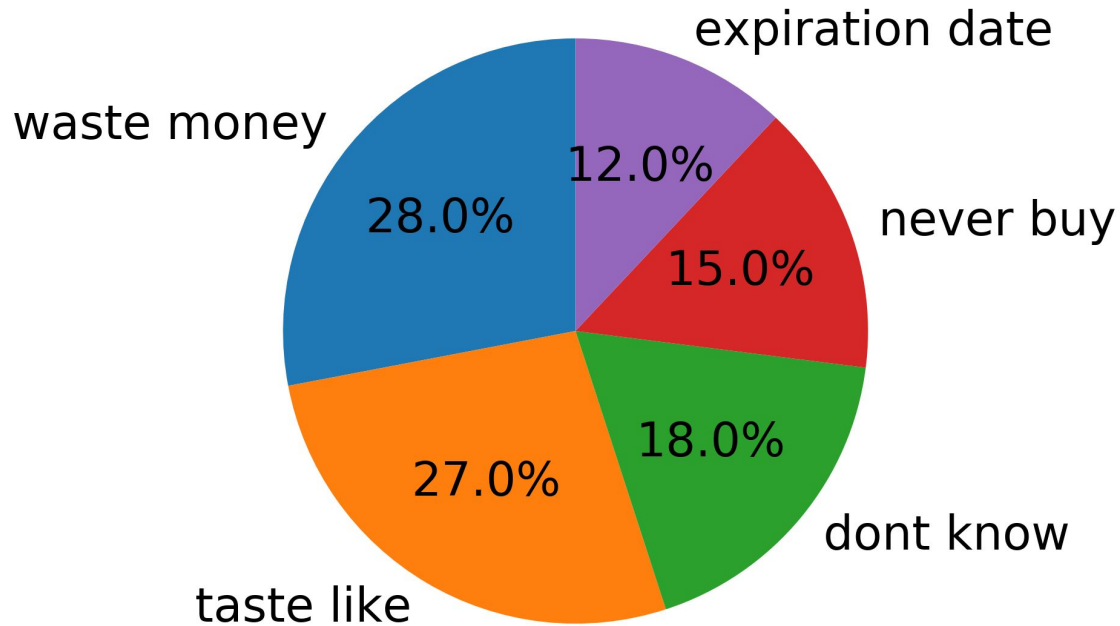
- “Would recommend” decrease: Sadly, people tend to not recommend the products.
- “Great price” increased, “well made” decreased: people tend to buy some relatively low-quality and low-price products in 2018.

Most impactful words for ratings - Prime Pantry



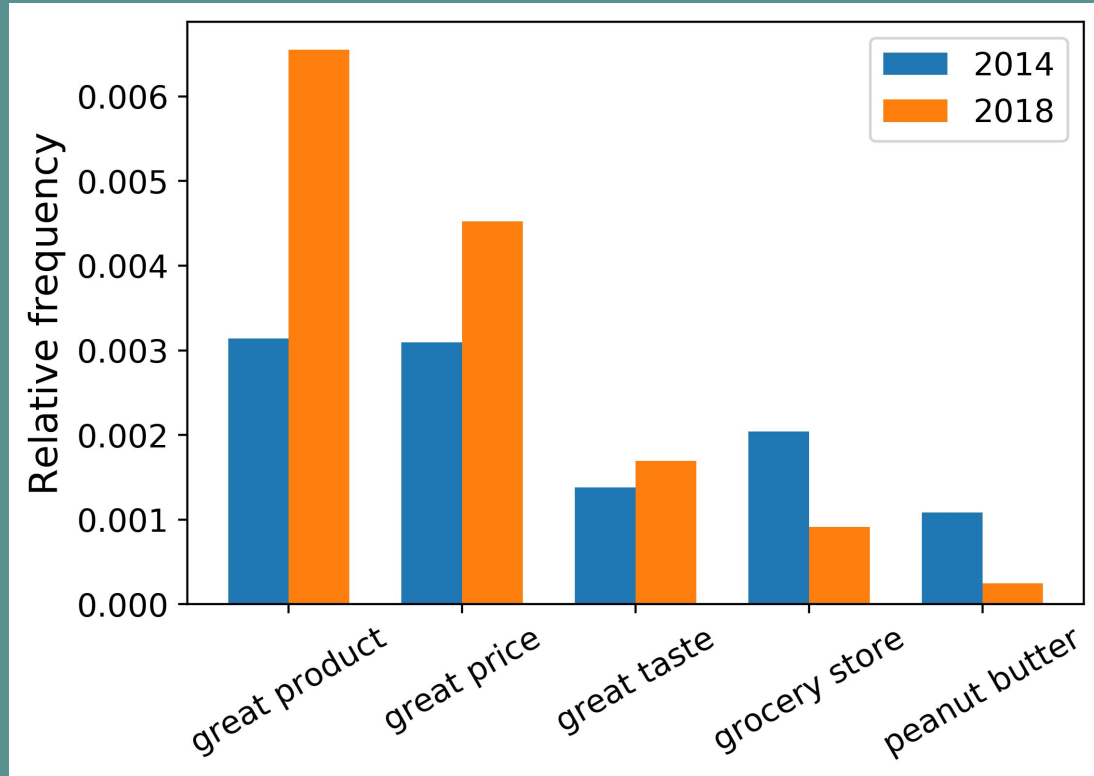
- People want the best quality
- People “love tea”
- Value is a key factor in product rating
- Senses are important

Frequency of words with 1 star ratings - Prime Pantry



- Value is still important
- Customers warn others of bad products

Frequency of words with 5 star ratings - Prime Pantry



- Customers impressed with the new service
- As time has gone on, quality and price have become more important
- Peanut butter was hot in 2014

Future Implementation

- The analysis can help:
 - Retailers to better market their products
 - Manufacturers improve their products



Thank you !!!

