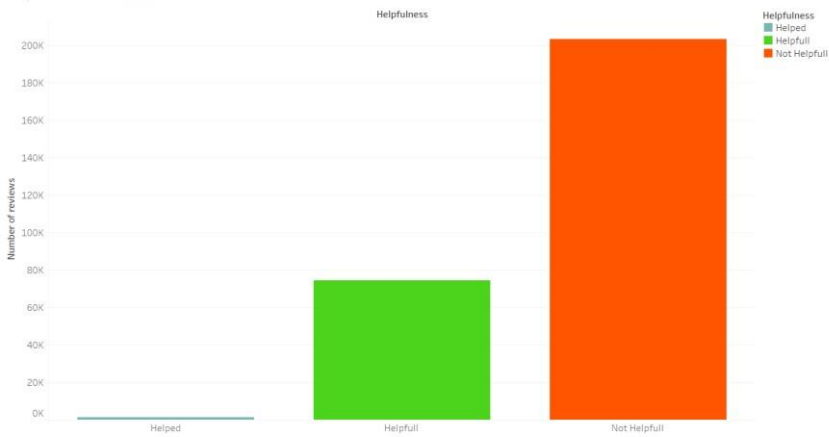


Amazon Review Analysis

- 73% of reviews are considered not helpful and only 27% falls in helpful and helped.

Helpfulness and Number of Review



Number of reviews for each Helpfulness. Colour shows details about Helpfulness.

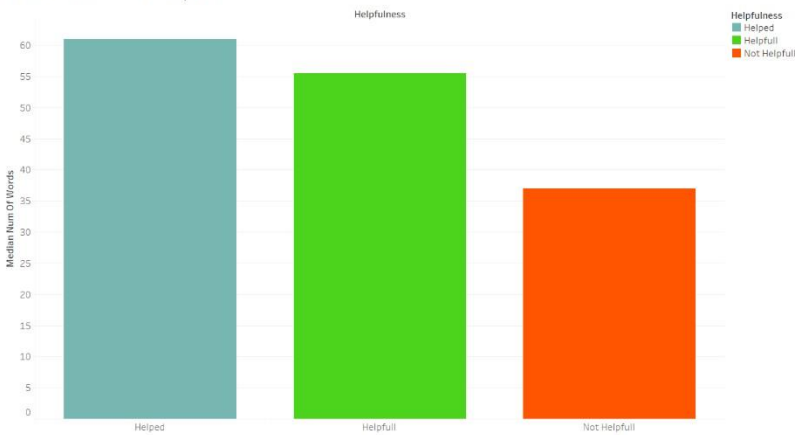
Helped	0%
Helpful	27 %
Not helpful	73%

- Reviews considered not helpful have an average of 52 words while reviews considered helpful and helped have an average of over 80 words.

< 500	
Helped	1%
Helpful	26%
Not Helpful	73%

> 500	
Helped	1%
Helpful	79%
Not Helpful	19%

Number of words and Helpfulness



Median of Num Of Words for each Helpfulness. Colour shows details about Helpfulness.

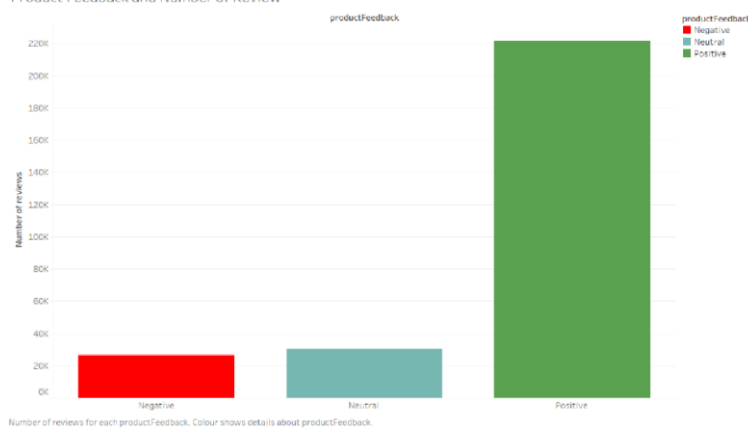
The relationship between reviews and helpfulness is the number of words and rate of reviews.

Reviews with word count over 500 have the highest percentage of helpful reviews count over 500. Reviews with word count less than 500 have a helpfulness percentage around 25%.

500 was considered for having a higher percentage of helpful review but reviews over 200 words have a good percentage and can be considered.

- Percentage of reviews in products with a positive rating is 80% and products with neutral and negative is 20%.

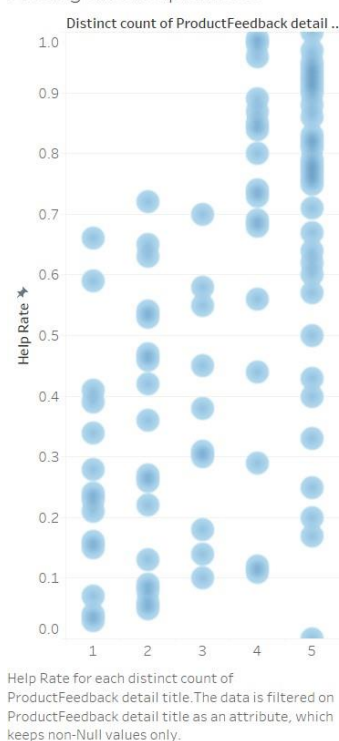
Product Feedback and Number of Review



Negative	9%
Neutral	11%
Positive	80%

- A high number of reviews of products with high positive rating are considered helpful.

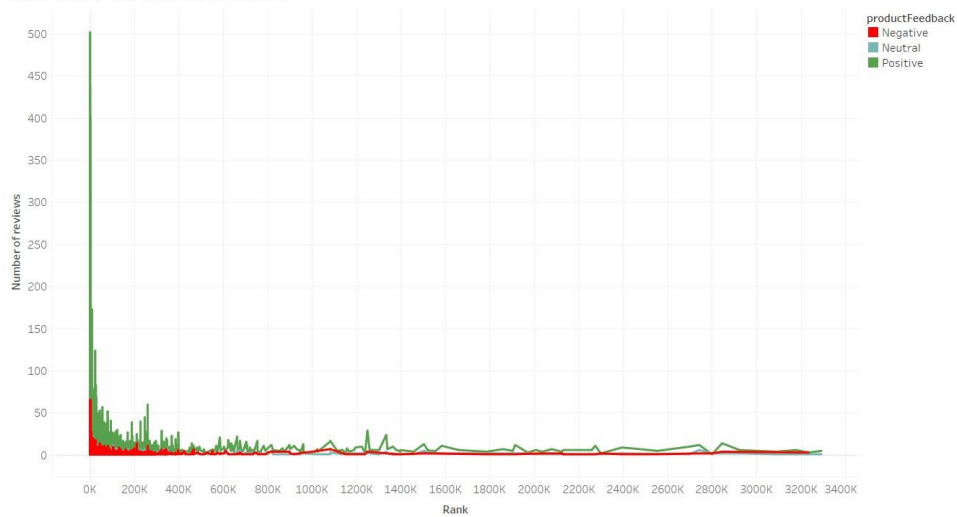
Rating and Helpfulness



It is possible to see that there is a higher number of reviews in product rating as positives. Here we are looking for a relation between Helpfulness and Rating.

- The view below shows that products with positive reviews are in the top 100 of the rank.

Sales Rank and number of review



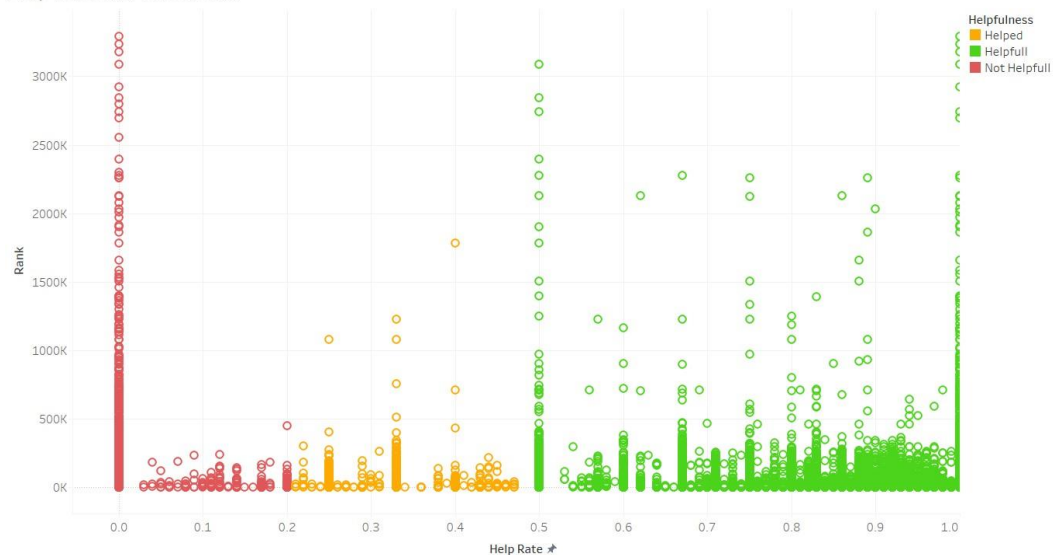
The trend of Number of reviews for Rank. Colour shows details about productFeedback. The data is filtered on Top 10 Categories reviewed, which keeps 10 members.

Feedback of products ranked above #100

Negative	8%
Neutral	9%
Positive	83%

- Products with helpful review classifies better in the sales rank.

Help Rate and Sales Rank



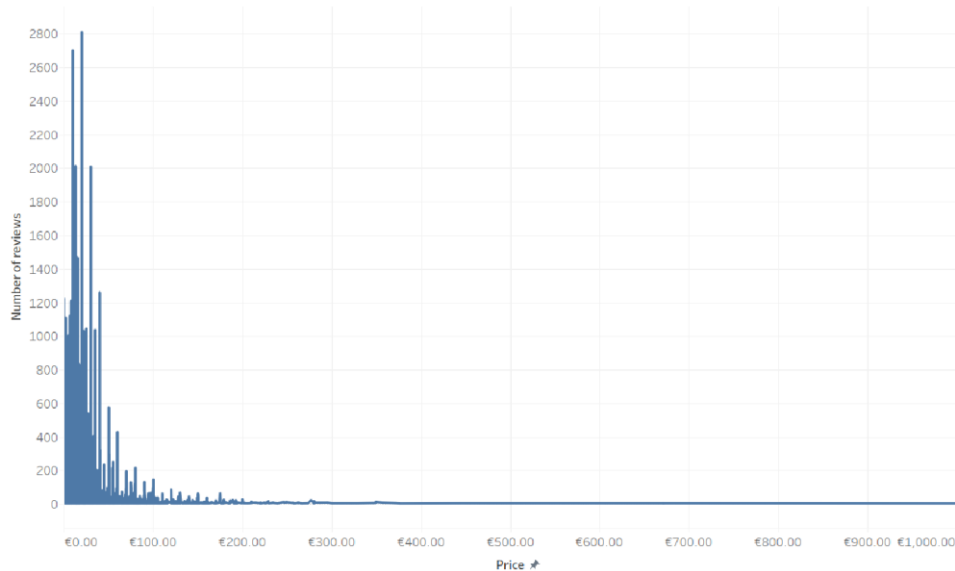
Help Rate vs. Rank. Colour shows details about Helpfulness.

The graphs above shows that products with high positive rate and reviews classified as helpful are in a better position in the Sales Rank.

Assuming that exists a relationship between these three variables, once product reviews are often the deciding factor for many customers

- Almost 90% of the reviews are of products that cost up to **€50**

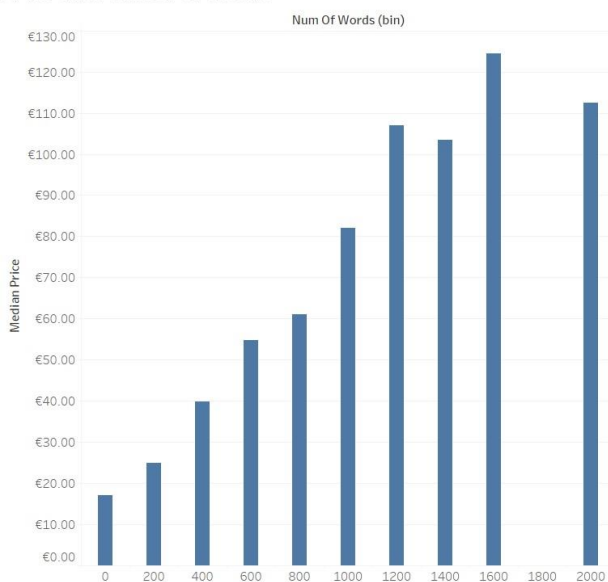
Price and Number Of Review



The trend of Number of reviews for Price. The data is filtered on Exclude Null Price, which keeps Include.

- As observed higher priced products have more word counts in reviews, and lower priced products are reviewed more.

Price and Number Of Words

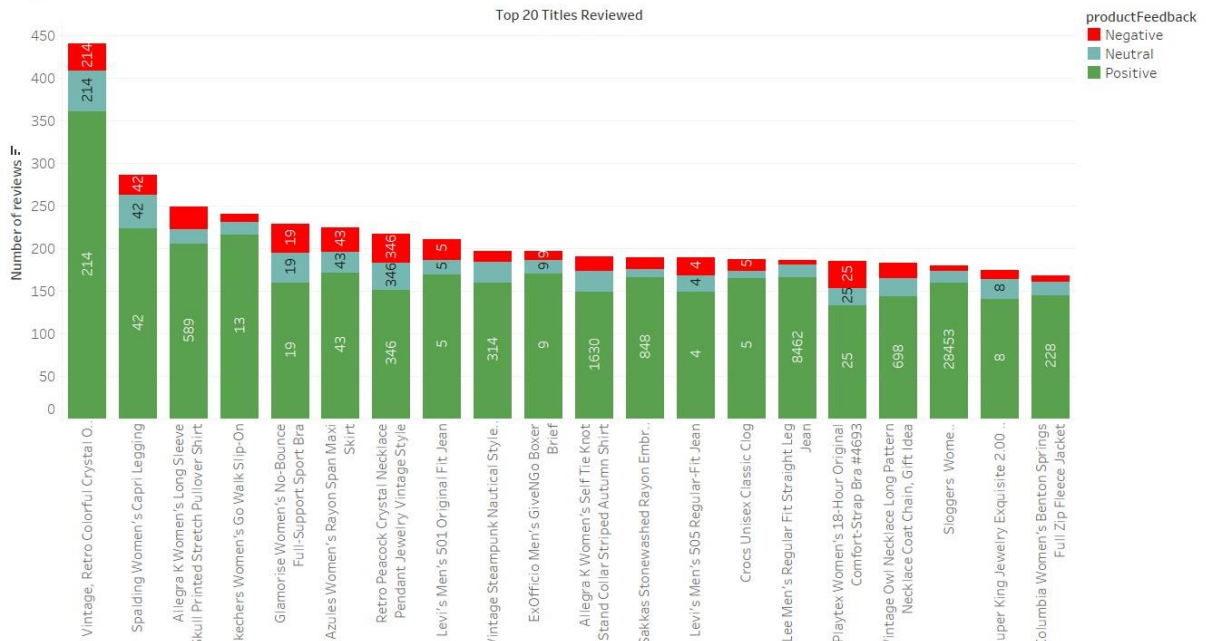


Median of Price for each Num Of Words (bin). The data is filtered on Exclude Null Price, which keeps Include.

As observed lower priced products have a higher number of review and higher priced product have more word counts in reviews. The observation is important to understand the price relation with reviews.

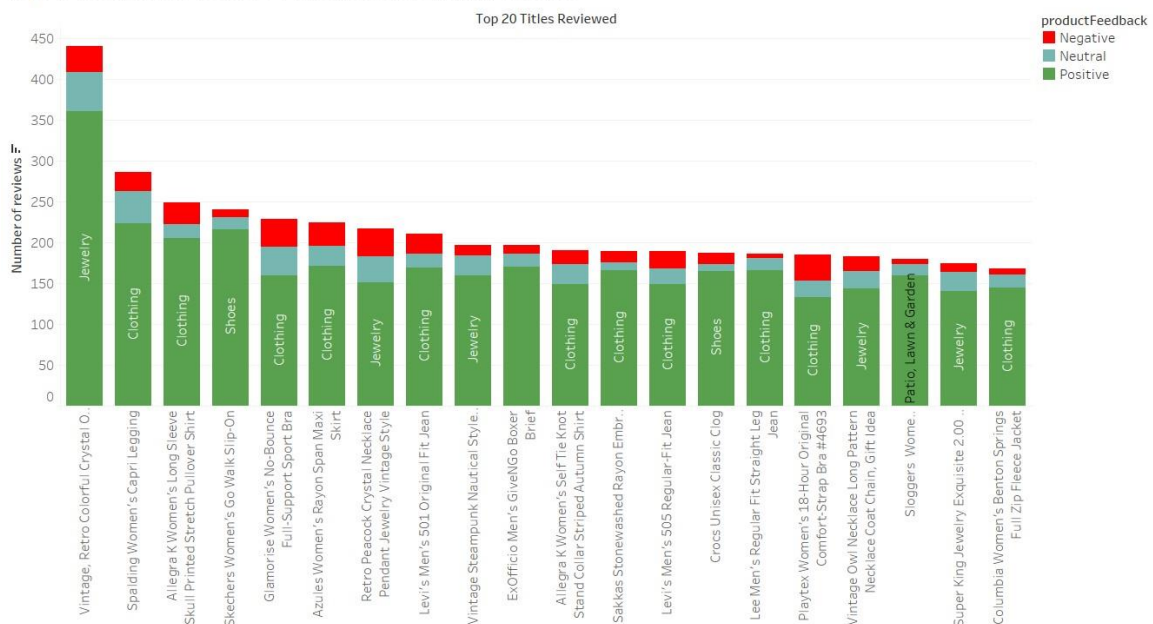
- The graph allows us to see which titles and categories are trending and their position in sale rank of that category.

Top 20 Reviewed Products Title and Sales Rank Position



Number of reviews for each Top 20 Titles Reviewed . Colour shows details about productFeedback. The marks are labelled by Rank.The data is filtered on Exclusions (mainCategories,Title), which keeps 21.706 members.The view is filtered on Top 20 Titles Reviewed andTitle.The Top 20 Titles Reviewed filter keeps 22 members.The Title filter keeps 21.697 of 21.926 members.

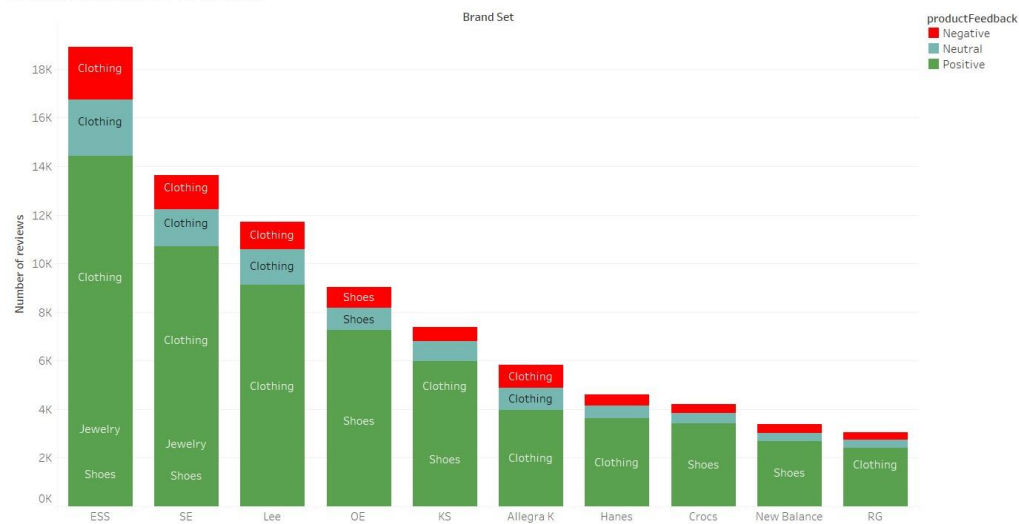
Top 20 Reviewed Products Title and Sales Rank Position



Number of reviews for each Top 20 Titles Reviewed . Colour shows details about productFeedback. The marks are labelled by mainCategories.The view is filtered on Top 20 Titles Reviewed,TitleandExclusions (mainCategories,Title).The Top 20 Titles Reviewed filter keeps 22 members.The Title filter keeps 21.697 of 21.926 members.The Exclusions (mainCategories,Title) filter keeps 21.706 members.

- The graph bellow shows the top reviewed 10 brands and the product feedback which we can see is proportional among them.

Brand and Number Of Review



Number of reviews for each Brand Set. Colour shows details about productFeedback. The marks are labelled by mainCategories. The data is filtered on Exclusions (Brand, Helpfulness), which keeps 2.280 members. The view is filtered on Brand Set, which keeps 10 members.

Explaining hypothesis

The analysis aimed to observe the relationship between review, sentiment of helpfulness and Rating of products. It is believed that this way it is possible to understand how the public feels about products and brands. The biggest observation was that the number of words significantly impacts the product rating and the sentiment of help that the review can bring to the potential customer, factors that we assume can contribute to the position of a product in Sales Rank, once reviews are often a key point on customer decision to buy. For clothing and shoes, reviews will inform if it is true size, if the customer that usually buys M should buy one measure up or down, if the material is as it looks on the picture etc...

This analysis also helps us to understand which titles and brands are most reviewed. Clothing being the biggest category reviewed and with titles in better positions in Sales Rank as said before it leads us to the conclusion that customers who buy clothes online need reviews to make this decision.

In conclusion the dataset has a large number of positive reviews, and these products usually have high rate of helpful reviews that rank better within the sales rank. The customer needs to be stimulated to write more words, useful words, which helps the public's decision to buy that product or not.