Generation Luxe Analysis Report

*Popularity, Fashion Critics & Attitudes*

* Which brands are the most popular?
  + This question is feasibly able to be answered through sentiment analysis. What I would start with is to count the number of times a brand’s name is mentioned in an article. If I stopped there however, there could be an error due to simplicity due to the fact that the brand could be popular in a bad way. The brand may be mentioned with high frequency, but that doesn’t mean that every time it is mentioned, it is mentioned for something positive. Therefore, the next step I would take, would be to rate the sentiment of a page towards the brand mentioned using sentiment lexicons made for fashion. This will allow for a sentiment to be attached to each article. If a brand is mentioned and the sentiment is rated to be positive, then the page will count towards the tabulated popularity score. In this case, a tabulated score is sufficient to provide a reliable popularity score, because popularity is measured in numbers. The popularity rating could then translate to an exact number of clothing pieces Generation Luxe will stock in their inventory; the higher the popularity rating, the higher the number of clothing pieces Generation Luxe will have from that brand.
* Which brands are our customers more likely to buy based on their attitudes toward the economy?
  + This question is going to be harder to answer with sentiment analysis. This is because it would be very unusual for a fashion article to also discuss the economic views of the writer. This would lead to a very low amount of data, and if we do not have data, it will be very hard to train a model well enough to output accurate and reliable data. A way this question could be easier to answer, would be to change the economic attitude for an environmental one. It is much easier to collect data regarding the sourcing of materials of the brand. For example, if a brand makes fully recyclable clothing, we could add a feature that specified the fact that the clothing is recyclable. After gathering different brands’ clothing material, we could run a correlation plot to see if there is any correlation between the material and the likeliness of the brand.
* Which brands are trending upward in popularity?
  + This question is an extension of the first question on popularity. The only difference would be that now I would add a feature that captured the date the article was written on. A plot that had time of writing on its x-axis and tabulated popularity score on the y-axis, could show an upward trend in the number of positive mentions a brand was in. I don’t believe a text analysis looking for words like “recently” or “lately” would be much help due to the fact that the article containing those words could have been written years ago. Therefore, a feature of just the date of the article written would suffice in plotting the popularity trend of certain brands.
* Which brands are trending downward in popularity?
  + This question could be answered in the exact same way as the question regarding the upward trend in popularity. The only difference would be that we would be looking for a downward trend in the tabulated popularity score vs. article date plot. These brands would not be a good recommendation as they have a reputation of constantly declining in popularity.
* Which brands have an inconsistent trend in popularity?
  + This could be answered in a similar fashion to the upward and downward trends in popularity. However, what we would see in the popularity v. time plots of brands that have an inconsistent trend of popularity are sudden spikes of popularity followed by a rapid drop back to or lower than the popularity before the spike. These brands would be very hard to recommend since they would be very volatile, and hard on the company to plan for future decisions respectively.
* Which of these brands look best on our customers?
  + This question is ambiguous, because “look best” could mean many different things. By best you could be talking about a modern look; in that case we would look for words related to modernism and rate the sentiment on a scale of very modern to very old fashioned. Further specifying what “best” means in this question could help a lot in determining what phrases, words and features to capture from pages in order to give a recommendation as to what brand would look the “best” on the customers.
* Which brands are the most popular among fashion critics?
  + What we could do in this question is combine the methods used to answer the first question of popularity with some additional features. A list of fashion critic names could be compiled. Using those fashion critics’ names, we could scrap the web for pages written specifically by the fashion critics. Even looking for mentions of the fashion critics names within the article would be a feasible idea. Further, weights could be implemented in order to weigh a fashion critic’s review stronger than a random blogger’s review. This could allow for a more professional selection of brands popular among both critics and the general population.

*Different Brand Popularity Among Different Product Categories*

* For each product category (dresses, skirts, tops and pants) which brands carry the most popular items?
  + Once an article is certified to be discussing a target brand, we could include features that would collect the number of times that brand’s dress, skirt, pants, etc. is associated with positive, negative or neutral keywords. The product that constantly has the most positive mentions of a specific product they carry, could be ordered by Generation Luxe at a higher quantity than another product from the same brand that received fewer positive or more negative associations. In order to count the associations, we could choose to count the times that a specific product, i.e. skirt, was mentioned in the same sentence as a sentimental word, i.e. tacky; that example would count towards a negative association of the brand’s skirts, due to people referring to it as tacky.

*Color Combinations*

* Which retailer will be carrying the most exciting color combinations next season?
  + This is another ambiguous question, because I do not know what Julia Chan means by “most exciting colors”. Not only that, but this question would be very hard to obtain as there is no data available for the color combinations of next season since it has not happened. What we could do, however, is after Julia Chan specifies what “most exciting color combinations” means, we can collect features and tabulate what retailers are usually known for carrying the “most exciting colors” and narrow the list down to a couple retailers. We can do this by text analyzing the pages for sentiment regarding the colors of the brand being discussed in the article. Words and phrases that could relate to color could be “bright”, “contrast”, “classical”, to name a few.

*Qualities, Values & Characteristics*

* What qualities do customers like about each brand?
  + This is a tougher question to answer due to the vagueness of the word qualities; knowing what qualities Generation Luxe is specifically interested in would help make this question a lot easier and faster to answer. However, a solution that could help answer this question is to do a sentiment analysis on the pages referring to the target brands and compiling a set of words or phrases that accompany the positive, neutral, or negative sentiment expressed in the pages. From there we can analyze the most common words or phrases used in close proximity to the sentiment, and check if there is an observation or conclusion to be made regarding general sentiment in the papers that we weren’t specifically looking for. For example, a phrase that could repeatedly come up could be “animal testing”. This could lead us to observe what sentiment is associated with certain aspects of animal testing products and brands.
* What qualities do customers dislike about each brand?
  + This can be answered in the same way as we would try to answer the qualities customers do like. However, to answer what qualities customers do not like, we would focus on common negative sentiment associations with certain qualities. If Generation Luxe specifies what they mean by “qualities”, we can give further insight by focusing on words and phrases that would relate to what they mean by “qualities”.

*Celebrity Influence*

* Which of the brands are popular because they are well liked by celebrities?
  + This would be hard to answer due to the inaccessibility of the data needed to do this type of sentiment analysis. The most common way that the population sees what brands celebrities like is through visual images or videos. For example, if you see a celebrity post on their Instagram a picture of them wearing Reebok shoes, you may be influenced by the image, but there is no way that the influence the image had on you can be captured. Celebrities do not usually write articles describing what brands they like; instead, they get free clothing in order for people to see them wearing it in their daily life. Due to the nature of celebrities’ brand sponsorship, it would be hard to conduct a sentiment analysis on what brands are being worn by celebrities.

*Alternative Questions*

* Are there any brands that contain a very high percentage of very positive sentiment even if they are not as popular?
  + This question could lead to Generation Luxe finding brands that are not currently known by a large number of people, but due to the high percentage of positive reviews, the brand could easily gain popular attention if given the chance to be put on an established platform such as Generation Luxe. This could be done with text sentiment analysis by basing the performance of a brand, not by the tabulated popularity, but by the ratio of positive to negative sentiment count the brand has. These brands might be a bigger risk than established brands, but the reward for discovering such brands could lead to an even higher reputation for Generation Luxe being on the cutting edge of high-end fashion.