Sentiment Analysis of Sephora Product Reviews

A DS4002 Case Study by Randa Ampah

Have you ever purchased a product online? If so, then you have probably looked at an online product review at least once in your life. In a world that is becoming increasingly reliant on technology, today's consumers more frequently utilize online shopping rather than shopping in-person, and thus often have to buy products without interacting with them in person. When we narrow down this experience to skincare products, consumers often purchase products such as skincare not knowing exactly how these products may work for them. Within the beauty realm, Sephora is one of the most popular and profitable companies that engages in e-commerce, garnering over 3 billion U.S dollars in global net sales in 2023 [1]. This makes Sephora a vital supplier of products, as well as a source of extensive consumer feedback information.

Suppose you are a data scientist within Sephora tasked with deciding whether or not the company should sign on to launch a new skincare product. You need to assess how people might react to the product as it is completely new to the market. To do this, you have to look at current demands for products that are similar to the one that is being launched, namely other skincare products.

Your role as a data scientist within this project will be to perform a sentiment analysis on Sephora skincare products using the VADER analysis tool. You will then visualize the results of your analysis and provide a meaningful interpretation of these results. Think in terms of what you would present to a room of Sephora executives to plead your case of why a new skincare product should or shouldn't be integrated into Sephora's market.

GitHub Repository: https://github.com/randaama/DS4002_CS3/

References

[1] "ecommerceDB.com," ecommercedb.com. https://ecommercedb.com/store/sephora.com

[2] L. Geetha, "Vader: A Comprehensive Guide to Sentiment Analysis in Python," Medium, Feb. 28, 2023. https://medium.com/@rslavanyageetha/vader-a-comprehensive-guide-to-sentiment-analysis-in-python-c4f1868b0d2e