

## Case Study with Image Data: Predicting Sephora Lip Product Popularity



Factors like the colors or shades of lip products are unique characteristics of lip products that matter to all consumers of makeup. The popularity of products can go viral or trend based on new or rare shades brought back to the market.

When it comes to lip product shades, certain colors consistently receive more attention and appeal than others. According to Today.com, the most popular colors of lip products are Red, Pink, Nude, Coral, and Brown. These colors allow for a more natural or vibrant highlight of the lips which can pair well depending on an outfit or skin tone. Given the influence of color on consumer preferences, companies invest heavily in crafting effective advertising strategies that not only showcase these shades visually but also emphasize their benefits through persuasive messaging. For many lip product companies, it is key that their consumers “judge their products by their cover”.

As a beginner data scientist, your task is to conduct an analysis of potentially predicting the correlation between the shades of lip products and their popularity, as measured by rating scores and quantity of ratings. To achieve this, you will employ image analysis techniques that focus on the colors, visual patterns, and other design features that define the lip products. By analyzing visual aesthetics, you can help the brands tailor their offering to consumer preferences, align with the market trends, and improve their promotion strategies.

Github Link: [https://github.com/Lisabyy/DS4002\\_CS3\\_SephoraLipProducts/tree/main](https://github.com/Lisabyy/DS4002_CS3_SephoraLipProducts/tree/main)