

Problem Statement: Customer Behaviour and Satisfaction in the Cosmetic Industry

The purpose of this analysis is to examine the key drivers of customer behaviour and satisfaction in the cosmetic industry, with a focus on comparing the markets in the United States and India. By analysing various product attributes such as form type, category, subcategory, price, and customer ratings. We aim to gain insights into how these factors influence consumer preferences and satisfaction in both countries.

The analysis seeks to determine which product characteristics are most strongly associated with customer satisfaction across these distinct markets.



Assumptions

1. The Cosmetic Brands are not considered one of the parameters for the change in the ratings.
2. The product names are also not considered one of the parameters for the change in the ratings.
3. The analysis will help to understand the customer's choices and behaviour.

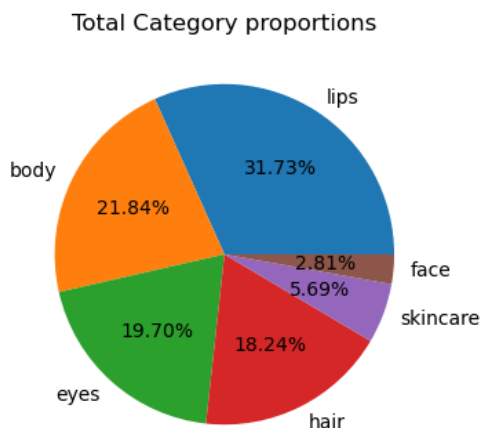
Research Questions

1. Which product types are preferred by customers, based on satisfaction ratings?
2. Does the form of a product (e.g., cream, lotion) impact customer satisfaction?
3. Is there any significant difference in customer satisfaction across countries?
4. What product characteristics are most strongly associated with high customer satisfaction?
5. How does product pricing affect customer satisfaction?

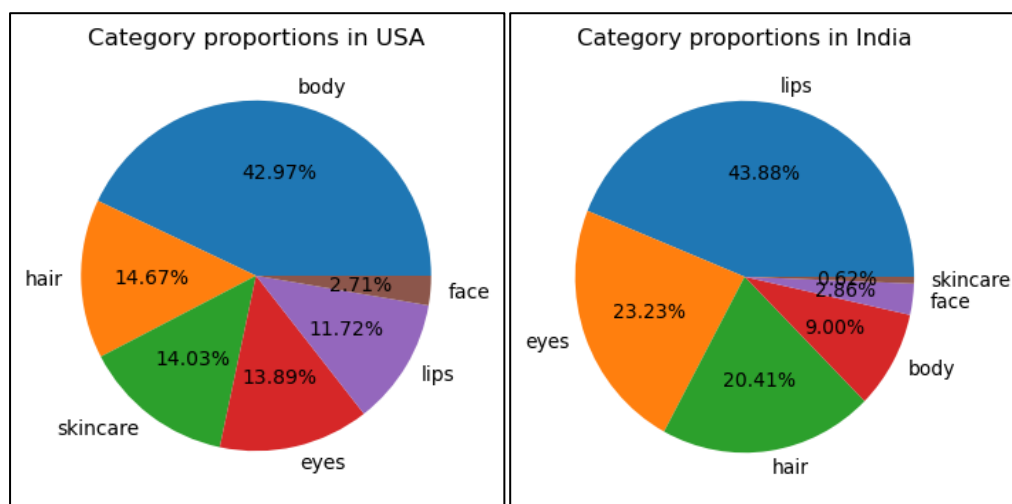
Hypothesis

1. Prices may affect the customer choices.
2. Category and Subcategory may help us understand the customer behaviour and what type of product they prefer.
3. Every country has distinct beauty standards, and societal preferences may vary based on cultural influences and individual desires.
4. The analysis may reveal the distribution of various skin types within the society.

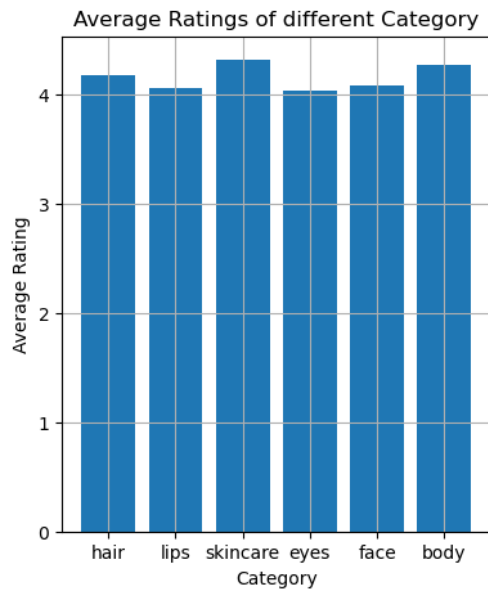
Analysis and Findings



The respective pie chart shows us that people (of USA and India) tend to prefer cosmetics for certain body parts more than others, indicating which areas they prioritize the most and the least. This also highlights their focus on specific body parts, showing which receive more attention and which are given less emphasis.

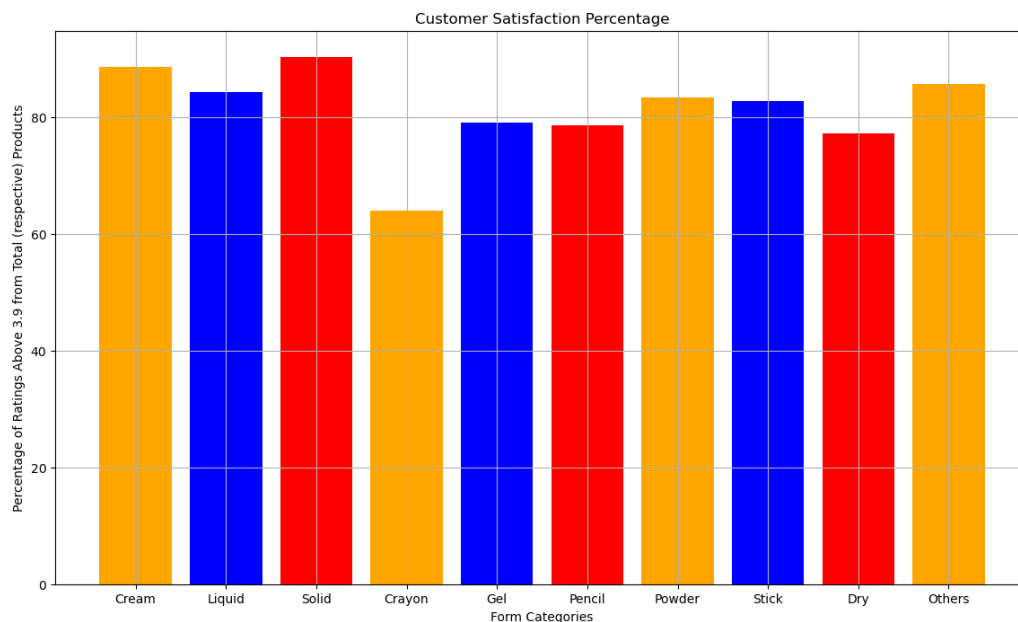


These two pie charts more accurately illustrate the types of products preferred by people of USA and India respectively. In the USA, body products are more popular, while in India, lip products are favoured over others.



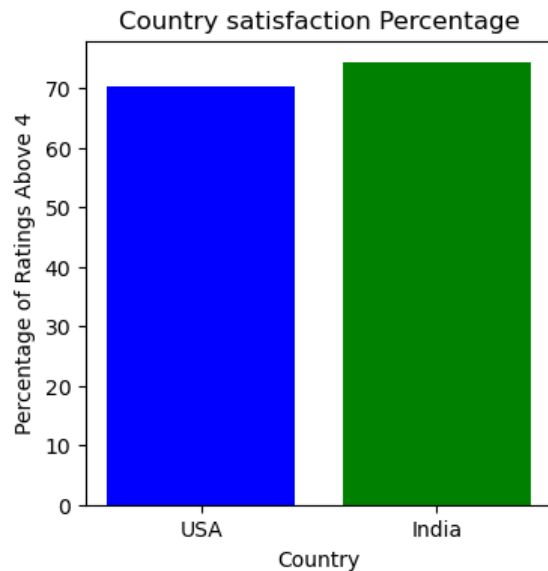
The bar graph has given us a general overview of the rating distribution. The average ratings of skincare products are better than other category products. The average rating order are: Skincare > Body > Hair > Face > Lips > Eyes.

The people are satisfied with the skincare products more and least with the eye's products.

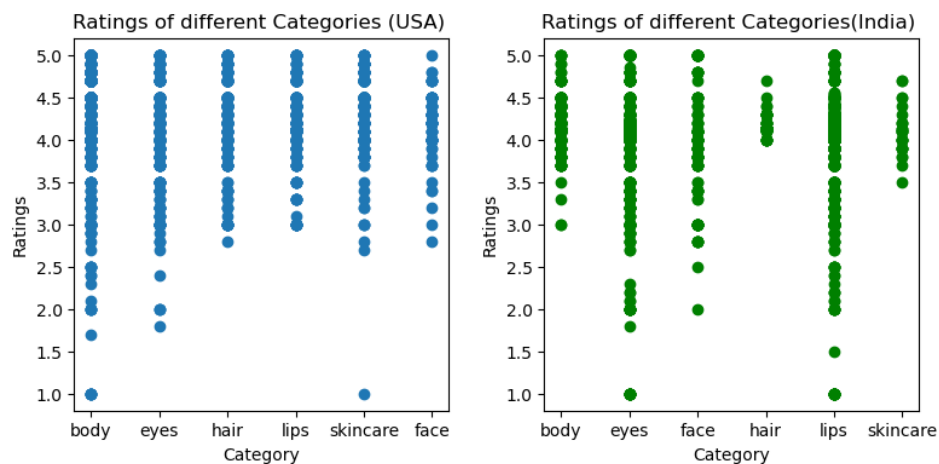


By looking at the bar graph, it is clear that solid in foams are given the most ratings above the 3.9 whereas the crayon in foams is given the

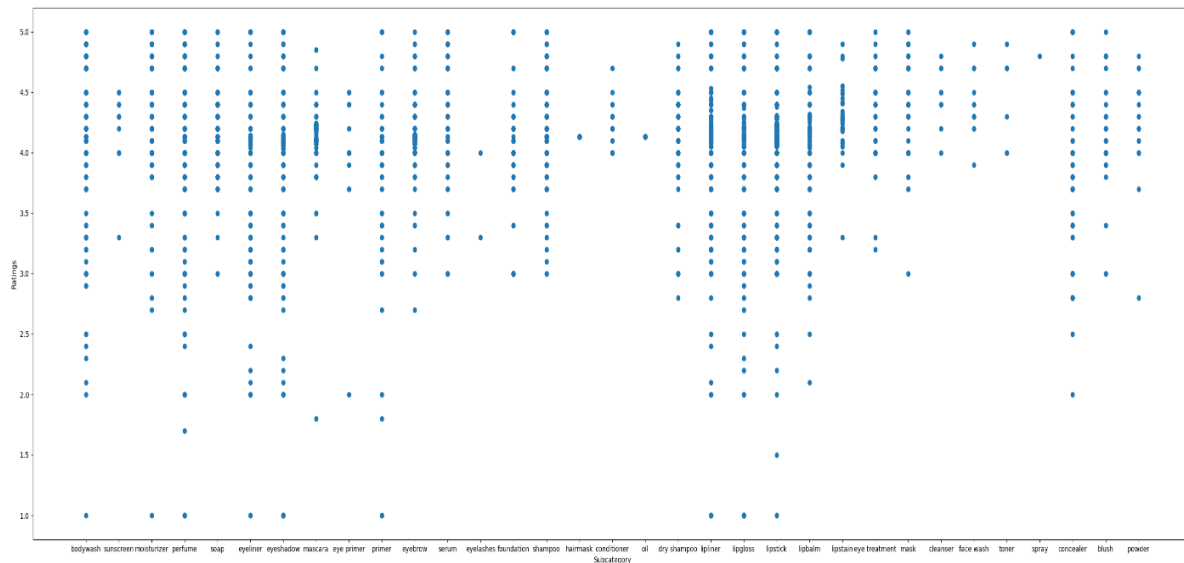
least. Thus, it tells us that foam also affects the customer ratings (or customer satisfactory level).



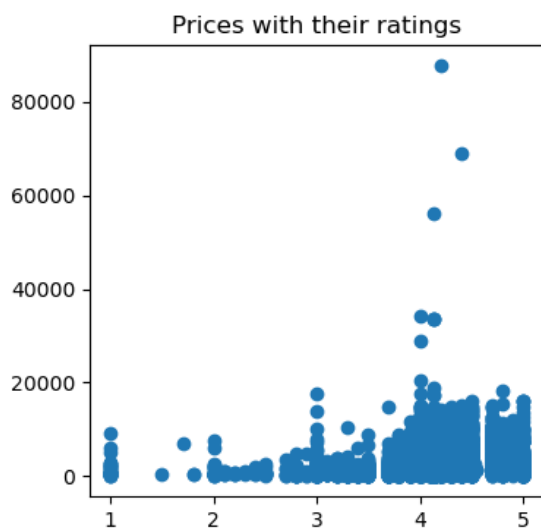
After reviewing the bar graph, it is evident that customer ratings show greater satisfaction with cosmetic products among consumers in India compared to those in the USA.



Here, the differences in ratings across various categories for customers in the USA and India are clearly visible. Plus, it also tells us the consumption rate of each category product. For example – In India, hair products are consumed less than in USA.



The scatter plot shows us the correlation between the subcategory and its ratings. There are 33 subcategories. The analysis reveals that the proportion of perfumes is higher than other subcategories, second only to lipsticks.



The scatterplot does not provide any insight into a correlation between prices and ratings. Further analysis confirms that there is no significant relationship between the two, indicating that prices do not influence ratings.

In conclusion, we can assert that category, subcategory, and country significantly impact the ratings.

Suggestions

1. Develop products in solid and/or cream formulations for foam type, as these are associated with higher customer satisfaction.
2. Develop body and hair care products tailored for customers in the USA, while concentrating on lip and eye care products for customers in India.
3. Develop skincare and body products, as overall customer satisfaction in these categories is notably high.
4. The price does not influence the ratings.