

Emotional Engagement Analysis by Razor Brand

This document presents a visual and statistical comparison of emotional engagement across various razor brands. The analysis combines facial emotion recognition data and verbal sentiment scores from participant feedback. The objective is to test the hypothesis that Gillette elicits stronger emotional engagement compared to other brands.

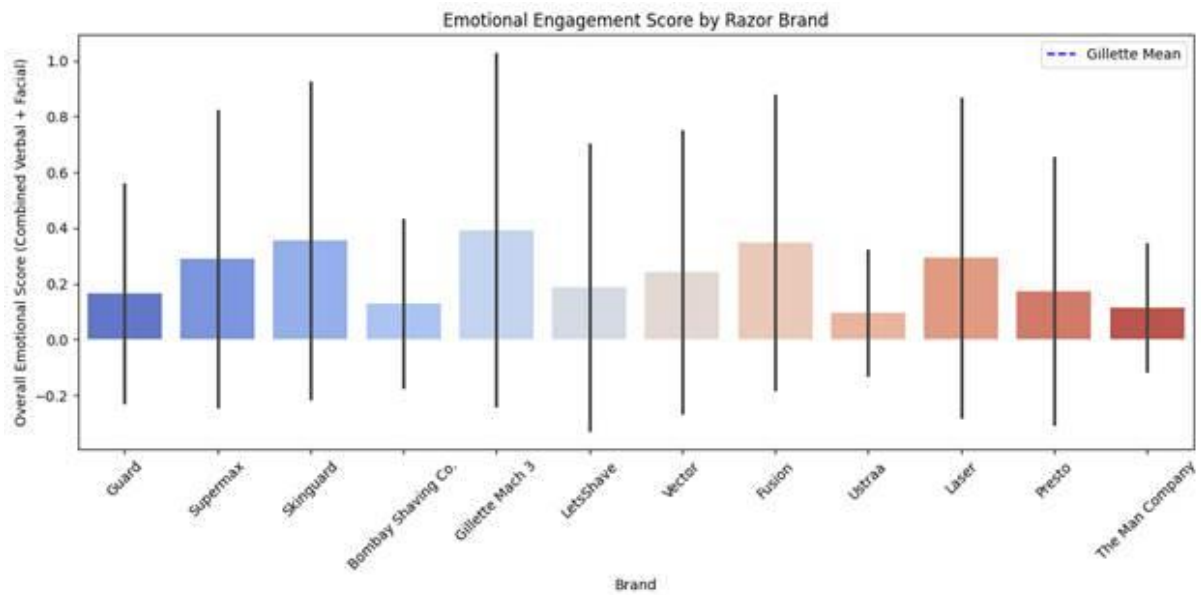
Methodology

The following steps were followed to generate the emotional engagement chart:

1. Facial emotion data (e.g., Happy, Sad, Neutral) from video analysis was mapped to an intensity score.
2. Verbal feedback responses were processed using TextBlob sentiment analysis to calculate polarity scores.
3. An overall emotional engagement score was computed by averaging the facial intensity and verbal sentiment polarity.
4. Data was grouped by the razor brand participants had purchased in the past two months.
5. The Kruskal-Wallis H-test was applied to assess the statistical significance of emotional engagement differences across brands.
6. A bar plot was generated using Seaborn to visually compare the mean emotional scores by brand, with Gillette's mean score highlighted.

Emotional Engagement Score by Razor Brand

The chart below displays the average emotional engagement score (combination of facial and verbal emotion) for each razor brand. Error bars represent standard deviation. A dashed line indicates the average score for Gillette.



Interpretation

From the chart, Gillette (Mach 3 and Fusion) shows a relatively higher average emotional engagement score compared to many other brands. This supports the hypothesis that Gillette evokes stronger emotional responses post-grooming. However, wide standard deviations suggest emotional responses vary significantly among participants, and further segmentation may be required.