

COMPARING CUSTOMER SENTIMENT ACROSS MULTIPLE CHANNELS FOR A FASHION RETAIL BRAND

1. Background and Problem Statement:

A mid-sized fashion retail brand with an online presence and social media following noticed inconsistencies in customer perception depending on the platform. While website reviews were generally positive, Instagram comments and Google reviews showed occasional spikes in complaints. The brand needed a **multi-channel sentiment analysis** approach to identify platform-specific sentiment trends, understand where and why perceptions differed, and adapt communication and service strategy accordingly.

2. Objectives:

- To analyze and compare customer sentiment across three platforms: website reviews, Instagram comments, and Google reviews
- To determine whether customer satisfaction varies by platform and customer type
- To uncover channel-specific concerns and expectations
- To guide platform-focused communication, moderation, and product messaging

3. Methodology:

Data Source:

- **Website Reviews:** 3,500 product reviews collected from the official brand website
- **Instagram Comments:** 2,000 comments scraped from posts related to launches, offers, and influencer campaigns
- **Google Reviews:** 1,200 store-level and brand-level reviews collected from local business listings

Tools Used:

- **Python:** VADER, TextBlob, pandas, matplotlib
- **Preprocessing:** Lowercasing, emoji and hashtag handling, stop-word removal
- **Visualization:** Word clouds, sentiment bar charts, and polarity heatmaps

- **Sentiment Labeling Thresholds:**
 - Compound score $> 0.05 \rightarrow$ Positive
 - $< -0.05 \rightarrow$ Negative
 - In between \rightarrow Neutral

4. Results:

Sentiment Distribution by Channel:

Platform	Positive	Neutral	Negative
Website Reviews	72%	18%	10%
Instagram Comments	48%	32%	20%
Google Reviews	55%	22%	23%

Key Observations:

- Website reviews had the most structured, detailed feedback focused on product quality and size accuracy
- Instagram comments were emotionally charged and contained sarcastic or informal language, often tied to customer service delays or unacknowledged complaints
- Google reviews skewed toward store-level service complaints (e.g., return process, rude staff)

Top Negative Themes by Channel:

- **Instagram:** delayed responses, unaddressed DMs, influencer bias
- **Google:** return issues, staff behavior, outlet product mismatch
- **Website:** sizing inconsistencies, color mismatches from images

5. Interpretation and Insights:

- **Sentiment varies strongly by channel:** informal platforms like Instagram exhibit more volatile, emotionally expressive sentiment
- Website reviews are **product-centric**, while Google reviews and Instagram comments are **experience-centric**

- The customer service team was only monitoring emails and website reviews, missing Instagram as a **real-time complaint channel**
- Unresolved queries on Instagram were directly tied to negative NPS scores in follow-up email surveys

6. Recommendations:

- Establish a structured escalation path for Instagram complaints (e.g., assign a social media escalation manager)
- Train store staff on customer handling to address Google-based complaints
- Improve product listing accuracy by revisiting images, descriptions, and size guides
- Integrate a unified dashboard to monitor real-time sentiment across all platforms
- Launch a platform-specific messaging strategy: use Instagram for reassurance and updates, website for factual content, Google for local service announcements

7. Future Work:

- Automate real-time sentiment tracking via API-based dashboard (e.g., using brandwatch or social listening tools)
- Integrate Instagram comment response time as a KPI for the support team
- Extend the same analysis to competitor brands for benchmarking sentiment gaps

8. Stakeholder Relevance:

Academic:

- Teaches comparative sentiment analysis, text preprocessing, and cross-platform NLP in a real-world brand setting
- Suitable for digital marketing, retail analytics, and social media analysis coursework

Corporate:

- Helps retail and fashion brands align digital channel strategy with real customer perceptions
- A reference for CMOs and CX heads on optimizing omnichannel communication