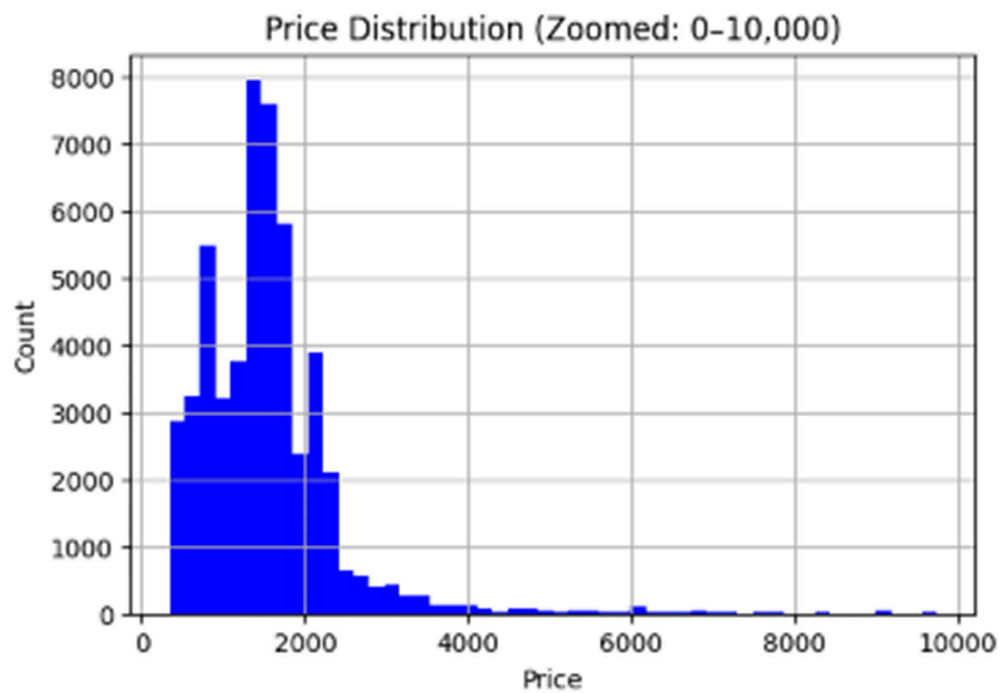
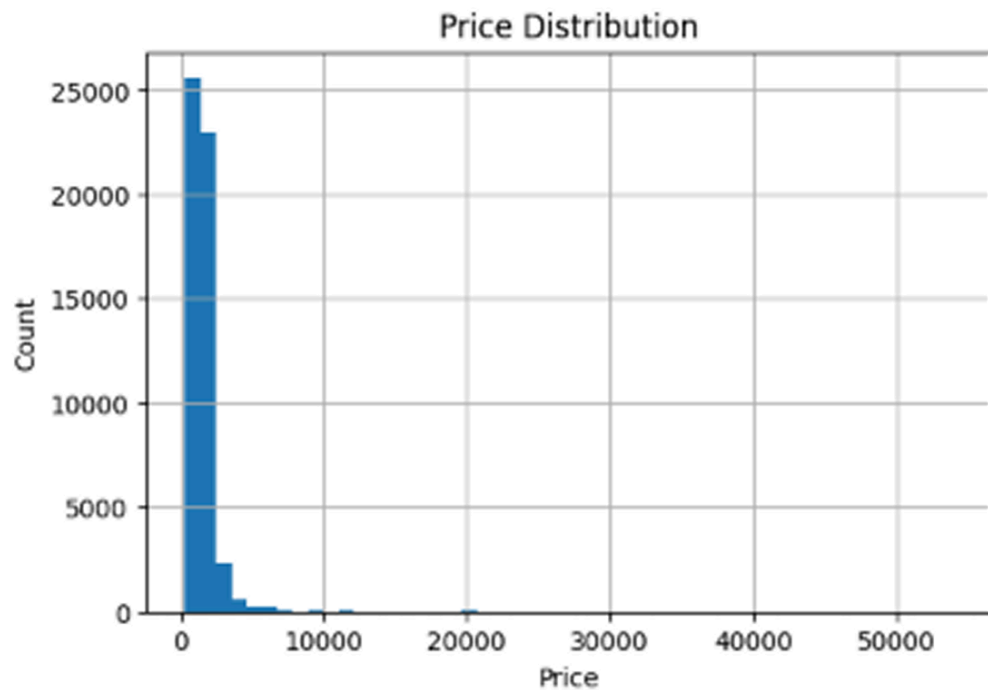
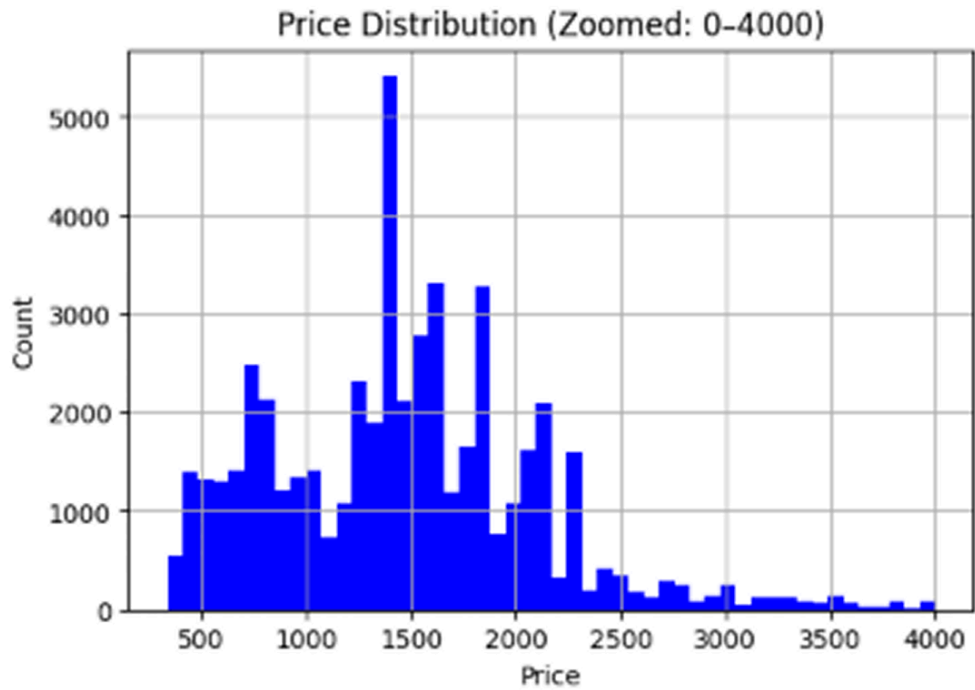


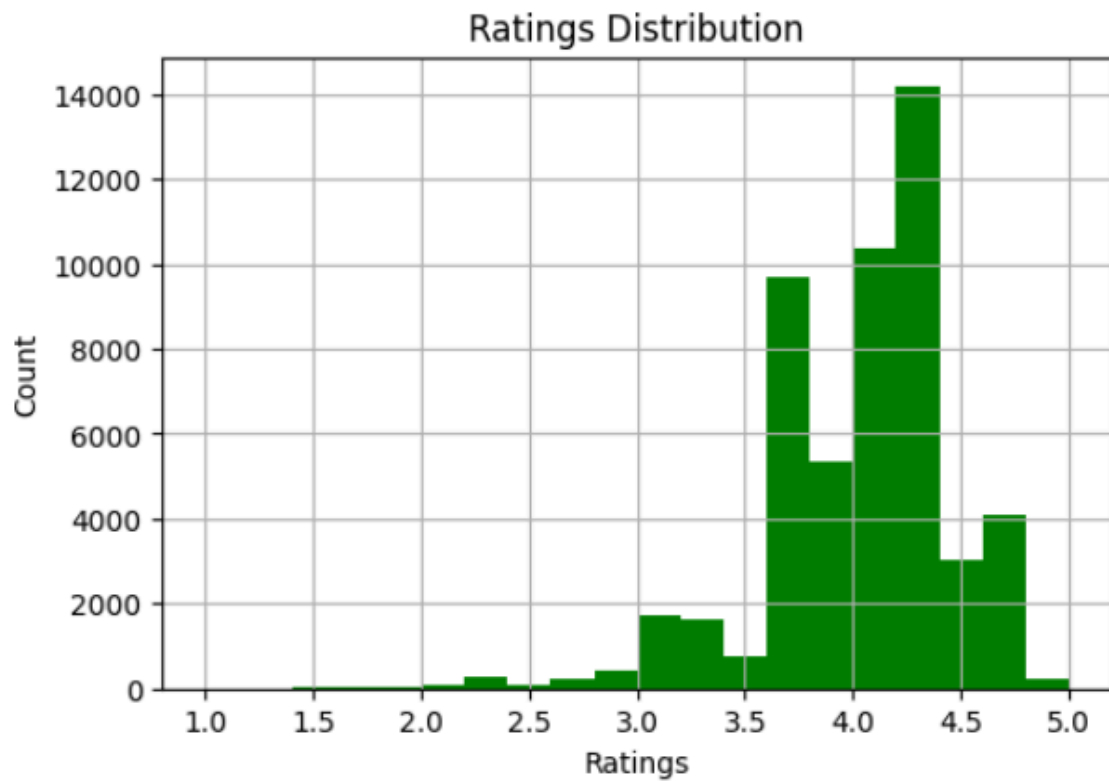
Results

1. Price & Discount Distribution



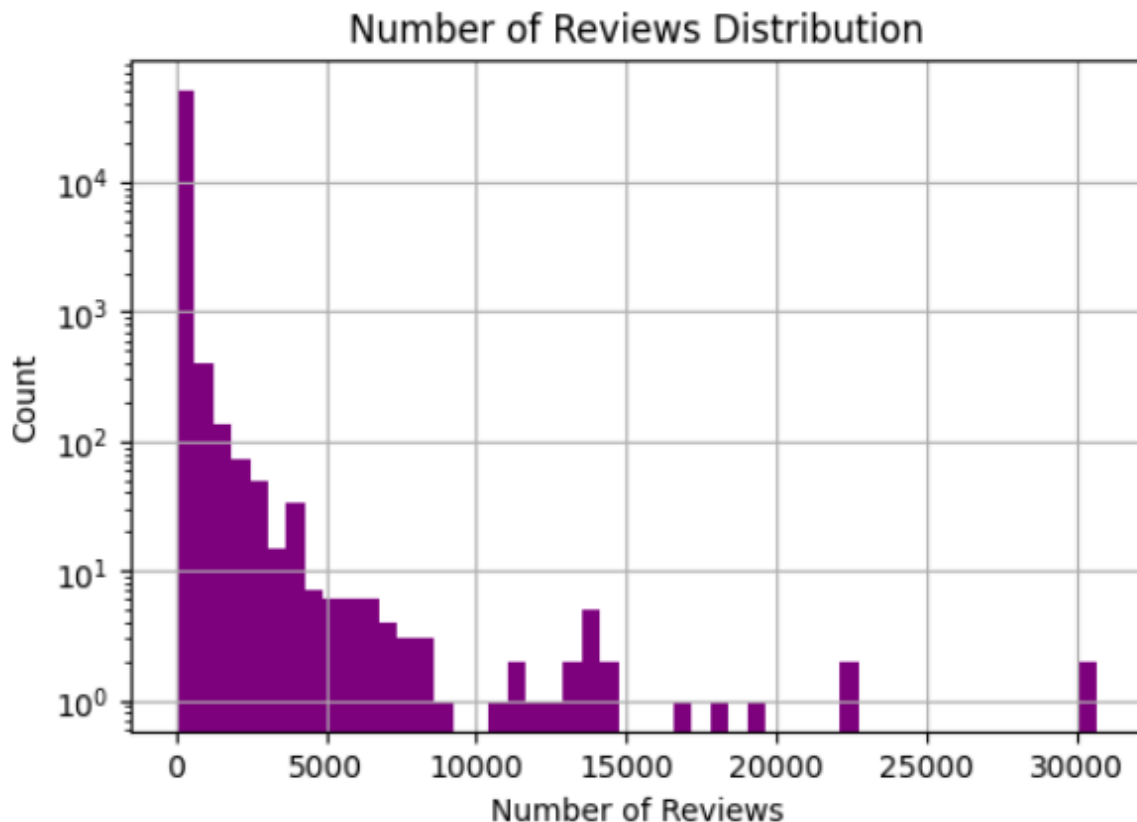


2. Ratings & Reviews Analysis



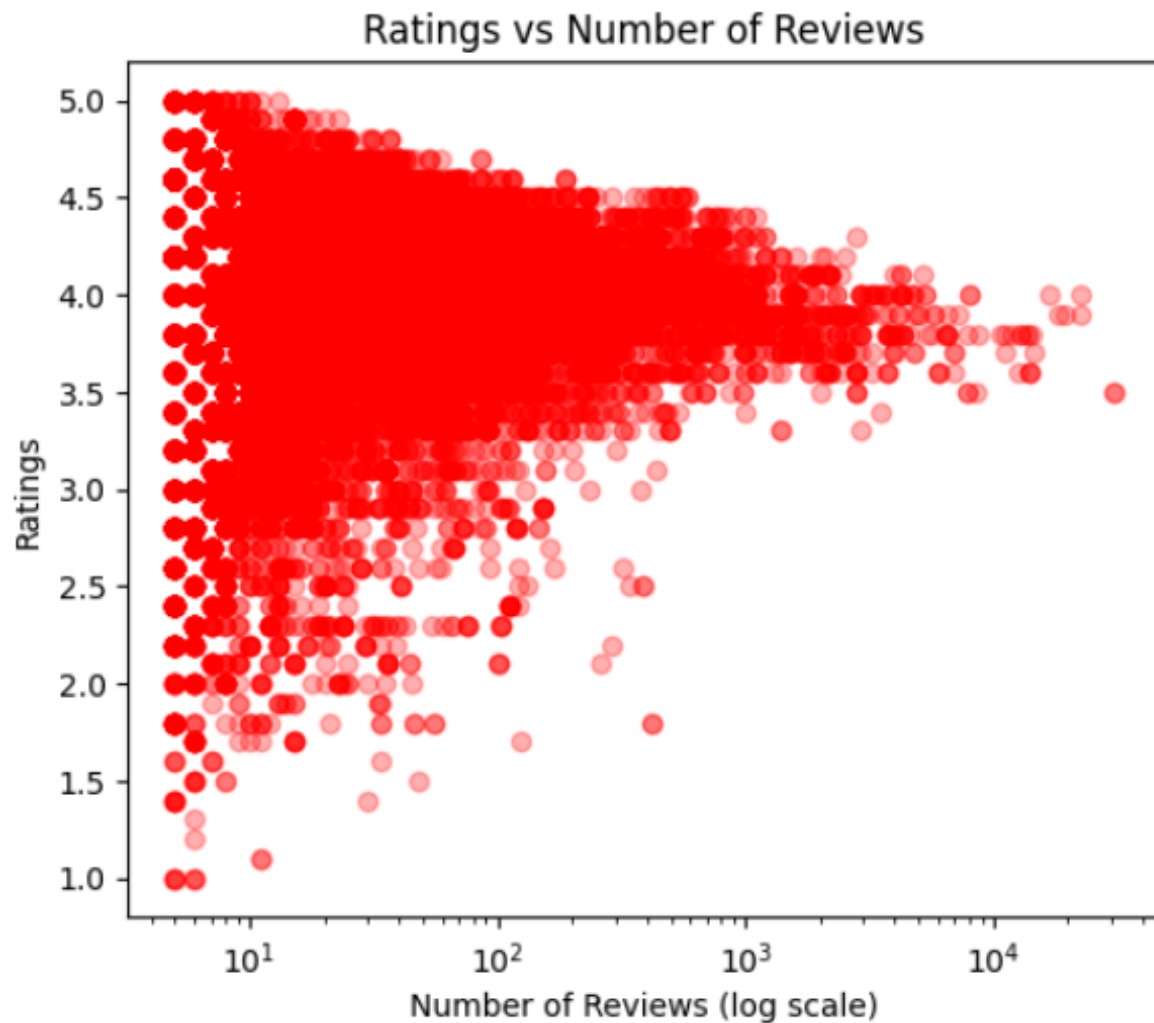
- Most products have ratings in the **3.5–4.5 range**.
- Very few products are below 3.0 (customers rarely buy poorly rated items).
- There's a peak around **4.2–4.5**, which is typical for e-commerce (positive bias).

Insight: Ratings are generally favorable, so they don't differentiate products much unless combined with reviews.



- The distribution is **heavily skewed**:
 - Majority of products have **very few reviews (0–100)**.
 - A small minority have **thousands of reviews**.
- Using log scale exposed the long tail more clearly.

Insight: Most products struggle to gain reviews → social proof is scarce.



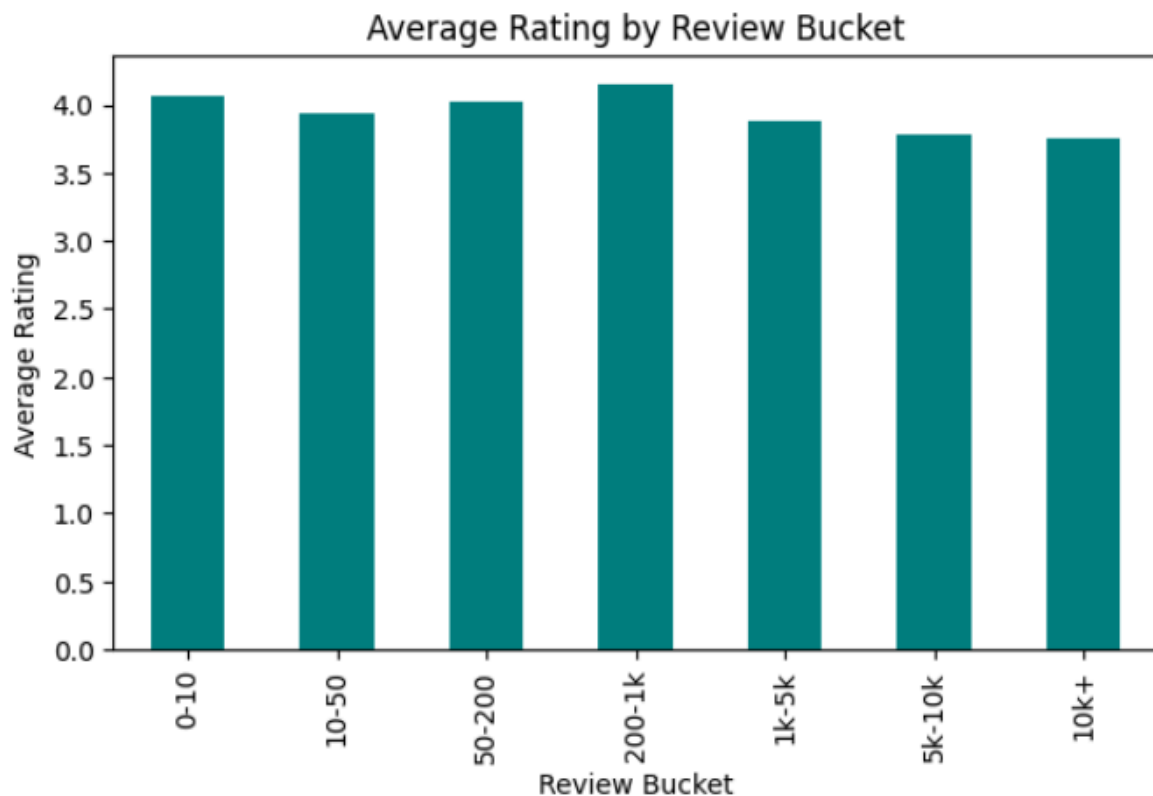
- Products with **very few reviews** can have extreme ratings (perfect 5★ or very low).
- As review count increases, ratings **stabilize around 4.0–4.3**.

Insight: Ratings are unreliable for low-review products → review **volume** matters more than raw rating.



- Strong linear relationship (on log scale): more reviews → higher popularity score.
- This validates our **popularity proxy formula (ratings × log(reviews))**.

Insight: Popularity is driven by **review volume** more than price or discount.

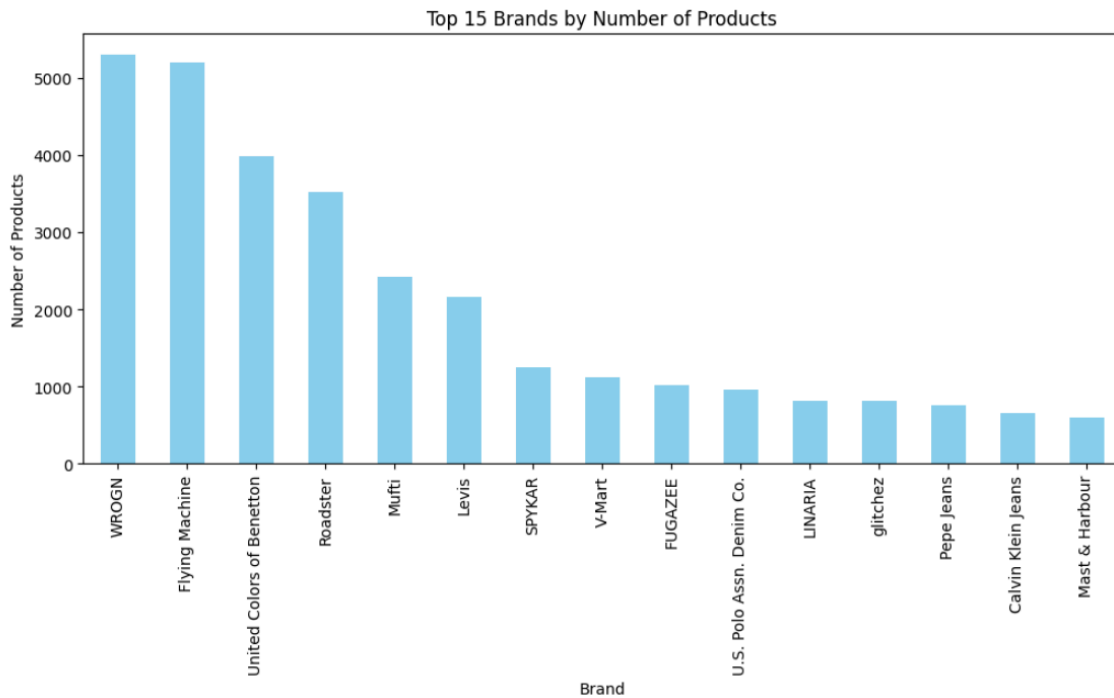


- Products with **0–10 reviews** have inflated average ratings (close to 4.2–4.3).
- As reviews grow, average rating slowly declines and stabilizes around **3.8–4.0**.

Insight: High review volume tends to reveal more balanced (and slightly lower) ratings, reflecting real customer sentiment.

Overall Takeaway from Ratings & Reviews

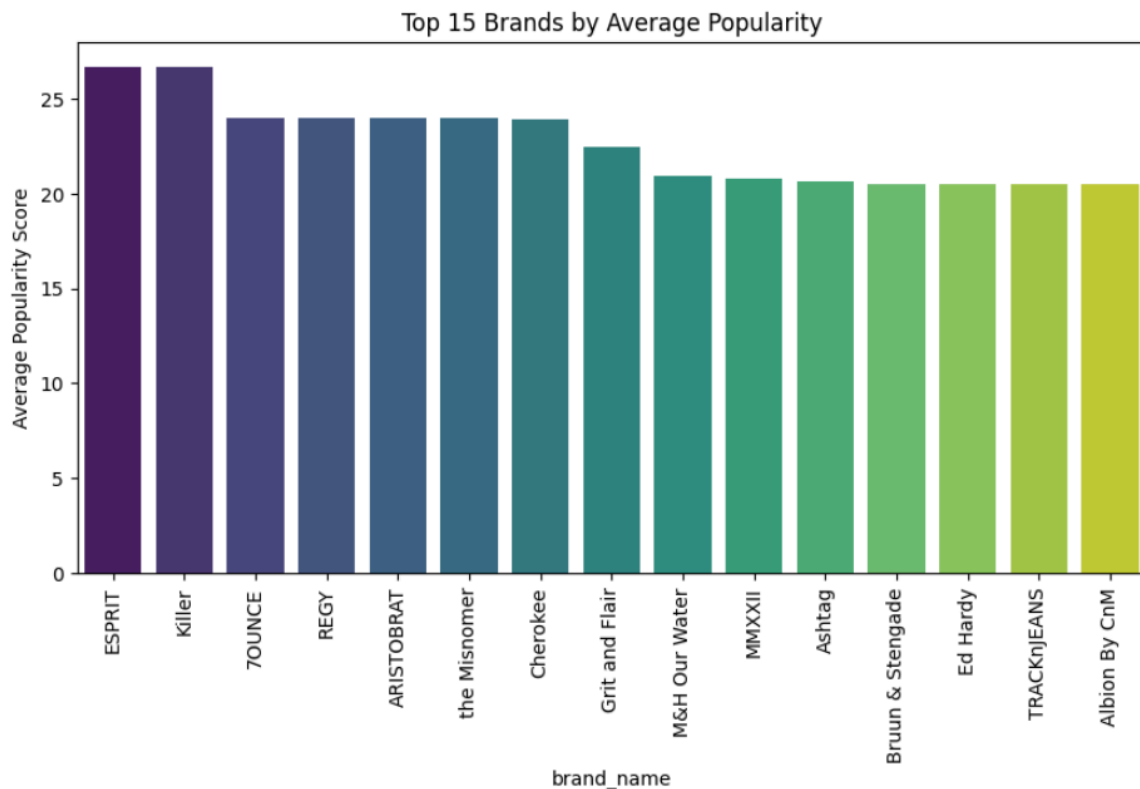
- **Social proof (reviews) is king:** Customers trust products with many reviews more than those with high ratings but few reviews.
- Ratings alone are **misleading**, especially for low-review products.
- To boost trust in new products, Myntra should **incentivize early reviews** (campaigns, badges, offers).



Top 15 Brands by Number of Products

- **WROGN, Flying Machine, Roadster, United Colors of Benetton** dominate Myntra's catalog with **3k–5k products each**.
- Smaller brands contribute far fewer products.

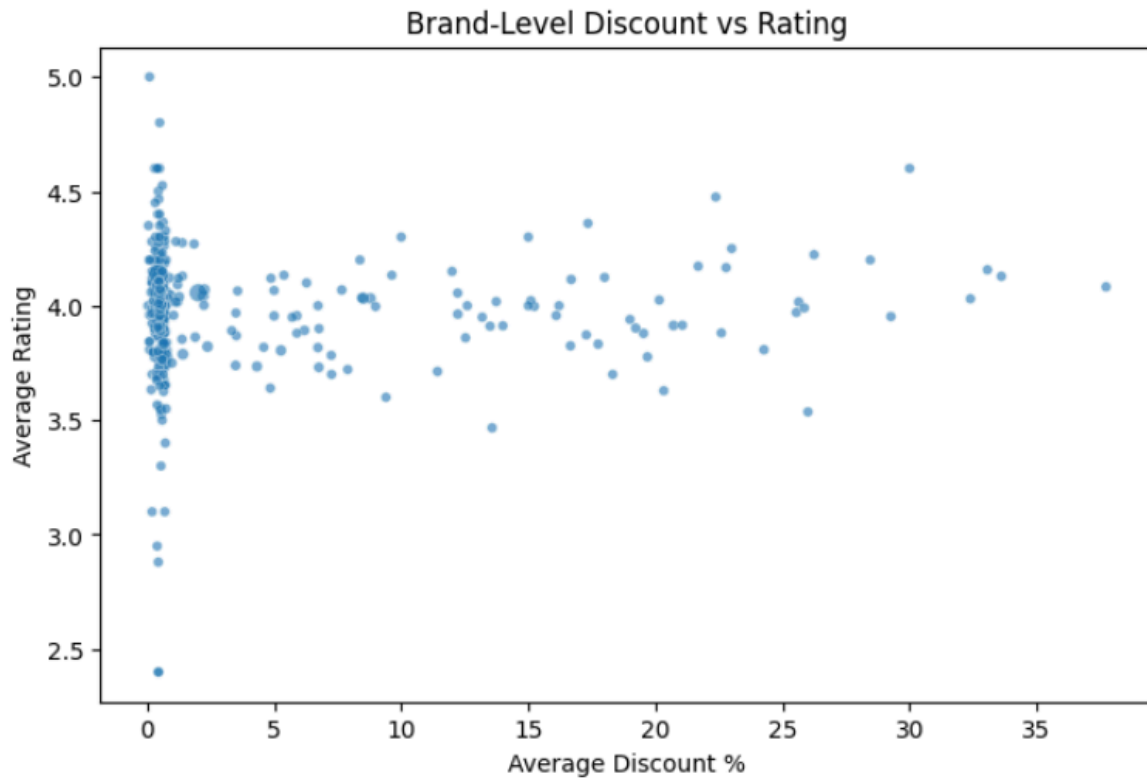
Insight: Myntra's jeans collection is **highly concentrated** among a few brands
→ catalog strategy depends heavily on them.



Top 15 Brands by Average Popularity

- **ESPRIT, Killer, 7OUNCE** have the **highest average popularity scores**, even though they have fewer products.
- Big brands (like WROGN, Flying Machine) don't appear here → they dominate in quantity, not necessarily in popularity.

Insight: Smaller but consistent brands often **outperform larger brands in popularity**. This means Myntra could promote these "hidden winners."



Brand-Level Discount vs Rating

- Most brands cluster around **low to moderate discounts (<15%)** with ratings in the **3.8–4.3 range**.
- No clear positive correlation between **higher discounts and better ratings**.
- In fact, brands offering **very high discounts (>25%)** don't necessarily achieve higher ratings.

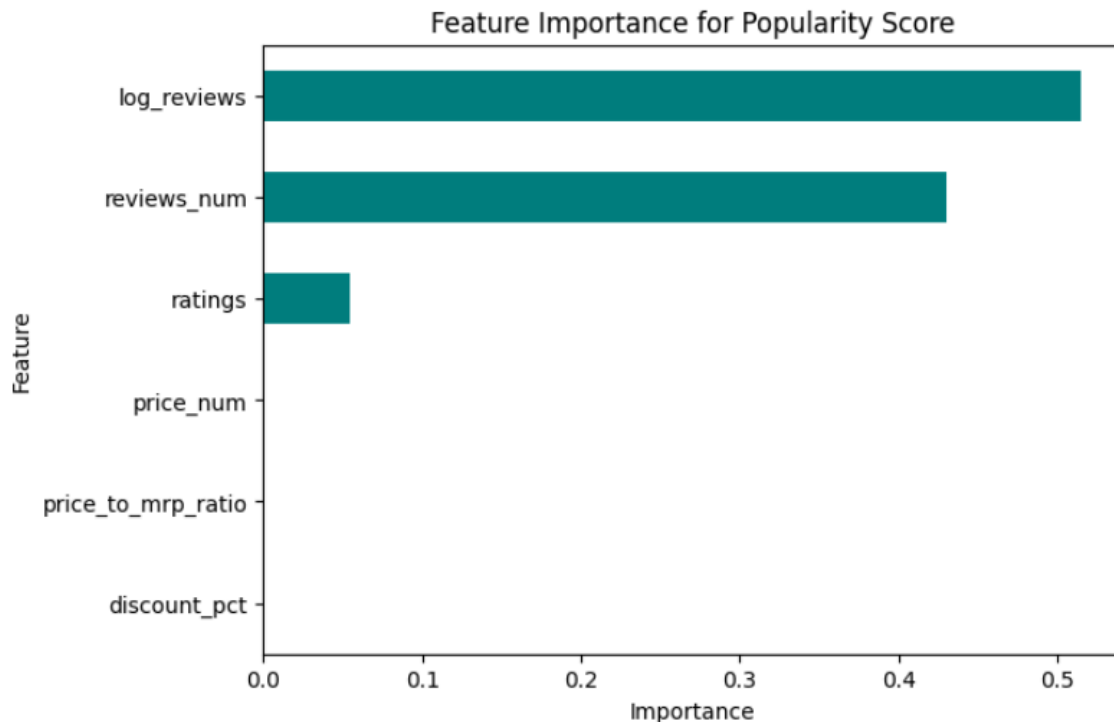
Insight: Deep discounts don't guarantee higher customer satisfaction; **product quality and consistency matter more**.

	brand_name	avg_rating	rating_variance	n_products
1	7OUNCE	4.3	0.0	3
117	FIBONACCI	3.7	0.0	3
110	ESPRIT	3.9	0.0	2
230	MR BUTTON	3.7	0.0	4
20	Albion By CnM	4.2	0.0	2
416	the Misnomer	4.3	0.0	3
193	Killer	3.9	0.0	2
347	The Dance Bible	4.2	0.0	2
14	ARISTOBRAT	4.3	0.0	2
342	TRACKnJEANS	4.2	0.0	2

Consistent Brands (Low Rating Variance)

- Brands like **7OUNCE**, **ESPRIT**, **MR BUTTON**, **Albion By CnM** show **low variance in ratings** (ratings stable across all their products).
- Even with few products, their **consistency** stands out.

Insight: Myntra can **promote these brands as “Trusted Sellers”** → reliability attracts customers who care about quality.



Conclusion

1. log_reviews (~52%)

- The most important feature.
- Taking the log of reviews smooths extreme values, and it captures the fact that **popularity grows rapidly with more reviews, but the effect tapers off**.
- Meaning: products with many reviews are far more likely to be popular.

2. reviews_num (~42%)

- The second most important feature.
- Raw number of reviews is also highly predictive.
- Confirms that **review volume (social proof)** drives popularity.

3. ratings (~6%)

- Ratings help, but they're much less influential than reviews.
- Example: A 4.2★ product with 5,000 reviews is more trusted than a 4.8★ product with only 10 reviews.

4. price_num, price_to_mrp_ratio, discount_pct (~0%)

- Pricing and discounting have almost **no effect** on predicting popularity.
- Customers are influenced more by **what other people say** (reviews/ratings) than by how cheap the product is.