

Project Title: Amazon Product Review Analysis

Overview:

Analyzed an Amazon product dataset to understand how discounts and product categories influence customer ratings. Focused on real-world business insights using Python, Pandas, and Seaborn in a Google Colab notebook.

Problem:

Do deeper discounts actually improve customer satisfaction (as measured by ratings)?

Which categories consistently earn high reviews, and how should businesses respond?

Approach:

- Cleaned raw product data with inconsistent formats (e.g., "64%" → float)
- Created new features: `high_discount`, `rating_bucket`
- Grouped and visualized data to find review trends
- Measured correlation between discount % and ratings

Key Insights:

- Electronics and Fashion are the most reviewed categories
- Books and Home Decor receive the highest ratings
- Correlation between discount and rating: **-0.16** (slightly negative)

Business Impact:

- Discounting doesn't improve customer satisfaction — quality matters more
- Prioritize post-sale care for discounted items to prevent negative reviews
- Invest in top-rated categories for marketing and restocking

Tech Stack:

Python, Pandas, Seaborn, Matplotlib, Google Colab

Links:

GitHub: <https://github.com/suryaprakash737/amazon-product-review-analysis>