Amazon Fashion Product & Sales Analysis Summary

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Overview

This project applies Exploratory Data Analysis (EDA) to an Amazon Fashion dataset with 13,000 rows and 8 columns. The goal is to uncover the key trends and patterns in product brands, pricing, categories, and ratings for both fashion sellers and buyers on Amazon.

Key Findings

- **Ratings Per Brand:** Six of the top ten highest-rated brands are bag companies - bags consistently earn stronger customer reviews than other fashion products on Amazon.
- **Product Pricing:** The majority of Amazon fashion products are priced below the high-end mark; only a single item in the dataset reaches $26,000, making it a clear outlier.
- **Further Ratings Analysis:** Most fashion products on Amazon receive high ratings, between 4.0 and 5.0 stars.
- **Price vs. Rating:** Correlation ≈ 0.03, showing no relationship between price and customer rating.

Business Strategies for Amazon Fashion Sellers

- Bag companies should treat Amazon as a primary sales channel, given their consistently strong customer reviews and growing popularity.
- Sellers should prioritize the Most-Loved Fashion category, which holds the highest average customer rating on Amazon.
- All fashion sellers should maintain competitive, mid-range pricing, since the market is dominated by non-luxury products and higher prices do not drive higher ratings.
- Fashion sellers should maintain consistently high ratings on Amazon, since the marketplace is already saturated with well-rated competitors.

Data & Methods

- Dataset: 1,787 cleaned rows, 4 key variables used (brand, price, category, rating)
- Tools: Python, Pandas, NumPy, Matplotlib, Seaborn

Next Steps

- Rather than only visual analysis, I will extract direct KPIs, including growth rates, review volumes, and price-rating relationships, to measure the trends discovered in the initial EDA.
- Perform EDA on other e-commerce platforms (Walmart, eBay) to compare category performance, brand performance, and pricing strategies.