Amazon Product Review Analysis - Insight Report

✅ **Executive Summary**

This report presents insights from the Amazon Product Review dataset, focusing on product categories, pricing, discount patterns, ratings, and customer engagement, aimed at guiding decision-making for product promotions, pricing strategies, and customer satisfaction improvement.

Dataset Overview

- Products ID Analysed: *[1,348]*

- Categories Covered: *Electronics, Computers & Accessories, Home & Kitchen, Home Improvement, Toys & Games, Car & Motorbikes, Health & Personal Care and Musical Instruments*

- Data Fields: Product details, prices, discounts, ratings, reviews, revenue estimation

Key Insights by Task

Task	Analysis Performed	Insight Summary
1. Avg. Discount% % by Category	Pivot Table Avg of discount_percentage	Highest avg discounts in *Home Improvement* and *Computers & Accessories*
2. Product Count by Category	Distinct count of product_name	*Electronics*, *Computers & Accessories*, and *Home & Kitchen* dominate product variety
3. Total Reviews per Category	Sum of rating_count	*Electronics* has the highest customer engagement
4. Top-Rated Products	Avg rating sorted Desc	Several products achieved perfect or near-perfect ratings
5. Price Comparisons	Avg of actual_price vs discounted_price	Discounts significantly reduce prices, notably in high-value electronics
6. Most Reviewed Products	Sum of rating_count	Top products reviewed over *[Insert Count]* times, strong customer feedback loop
7. Products with ≥50% Discount	Count of High Discount = Yes	*[Insert % or Count]* of products enjoy major discounts
8. Rating Distribution	Count by rating	Majority of products fall between *[Insert common rating bands]*

9. Revenue Potential by Category	Sum of Potential Revenue	High revenue concentration in *Electronics* and *Computers*
10. Price Range Product Count	Count by Price Range Bucket	*[Insert %]* of products priced below ₹500, accessible to mass market
11. Discount vs Rating	Scatter Plot trend	No clear correlation between higher discounts and better ratings, suggesting product quality matters
12. Low Review Products	Count of products with < 1,000 reviews	*[Insert %]* of products have low visibility, marketing opportunities exist
13. Highest Discount Categories	Avg discount_percentage by Main Category	Discounts vary widely, focusing on price-sensitive categories
14. Top 5 Products by Combined Score	Sort by rating × rating_count	Products combining excellent ratings and high engagement stand out

Conclusions & Recommendations

- Focus marketing on high-reviewed, high-rated products to boost conversion

- Consider aggressive discounts in categories like *Home Improvement* with strong price sensitivity

- Products with low reviews should be evaluated for promotional visibility

- Price optimization is essential; most buyers target mid-range products below $500

- Continuous monitoring of ratings and reviews can identify product improvement areas

Deliverables Provided

✓ Cleaned Dataset (Power Query Applied)
✓ Interactive Excel Dashboard (KPI cards, charts, slicers)
✓ Power Pivot Analysis Model
✓ This Insight Report for stakeholders