# AMAZON SALES ANALYSIS

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# Amazon Product Dataset – Exploratory and Descriptive Analysis 🔗

In this notebook, we conduct a comprehensive exploratory and descriptive analysis of the Amazon Product Dataset, which includes product information, pricing, customer reviews, categories, and other attributes relevant for e-commerce analytics.

This analytical phase is crucial for identifying patterns, detecting anomalies, understanding product and customer behavior, and building a strong foundation for any subsequent modeling or business intelligence tasks. We explore the distribution of key numerical and categorical variables, examine relationships between product features and customer sentiment, and leverage visualizations to effectively communicate insights. Special attention is given to variations in pricing across categories, sentiment trends in customer reviews, and the distribution of products within the dataset. These findings can inform strategic decisions such as product positioning, pricing strategies, and customer satisfaction improvements.
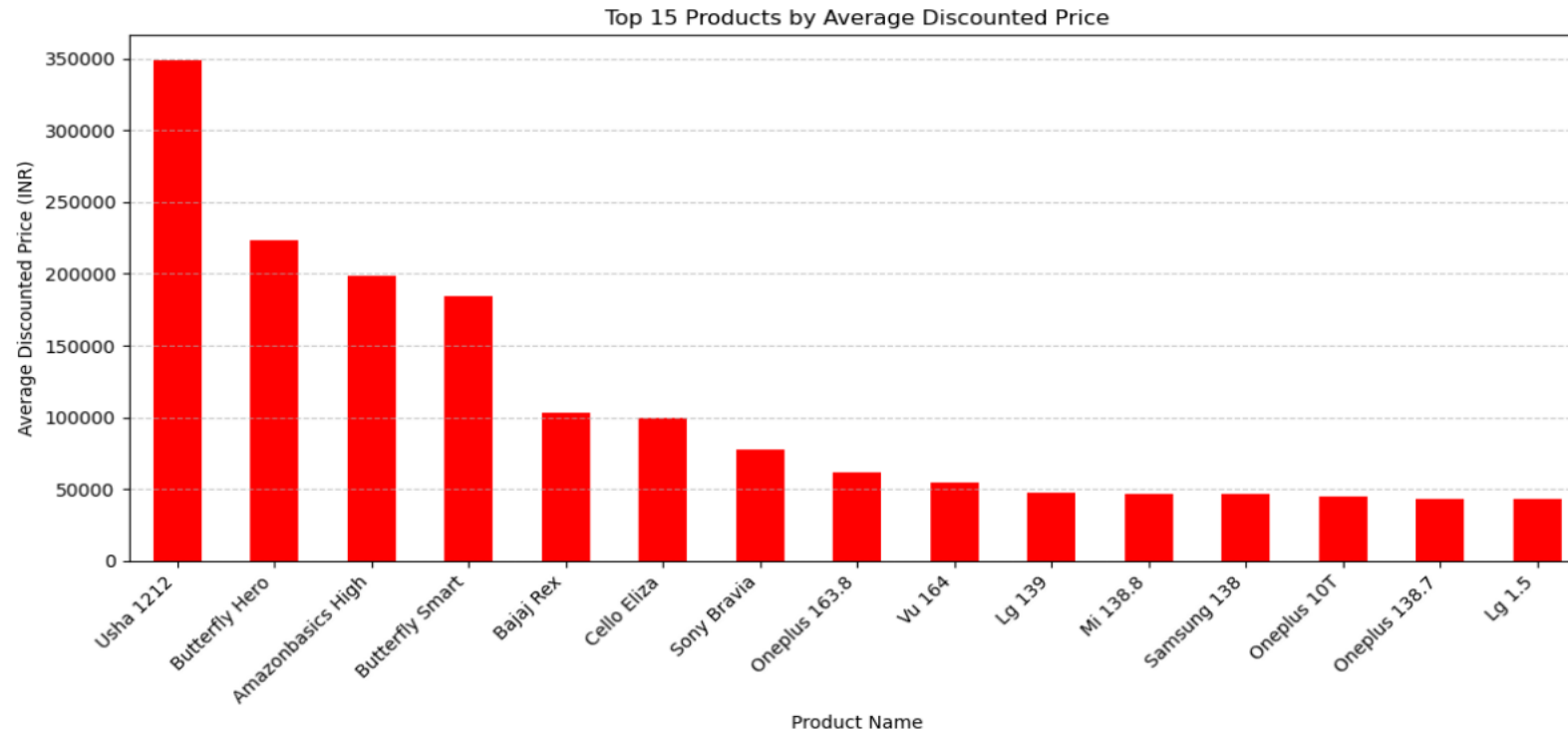
# Keys insights:

All transaction: **1465**

Number of categories: **9**

Number of all products:  **930**

Total income after discount: **346 876 Indian Rupee**

Top 15 Products by Average Discounted Price

## Recommendations

- Promote products at discounted prices to appeal to more buyers.
- Compare these prices with competitor listings. If they're too high, consider reviewing the pricing strategy.
- Increase visibility of these products in advert, especially during sales campaigns.

Top 15 Products by Review Sentiment
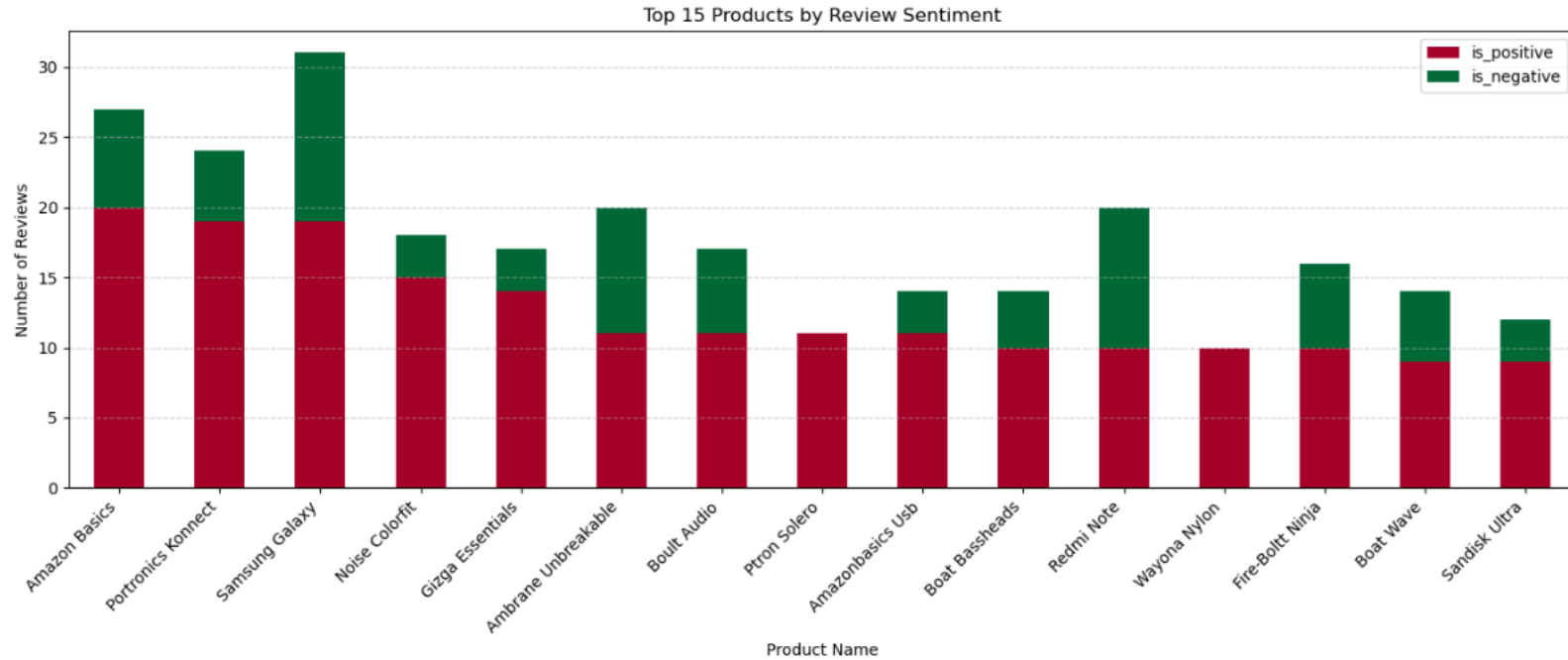
# Recommendations

- Products with a high number of positive reviews,Highlight these products in marketing campaigns.
- Use positive review quotes as social proof in advert or product descriptions.
- Read full negative reviews to understand pain points (e.g., quality, delivery delays) and try to collect it.
- Encourage customer feedback follow-up via email.

**Categories by Number of Products**
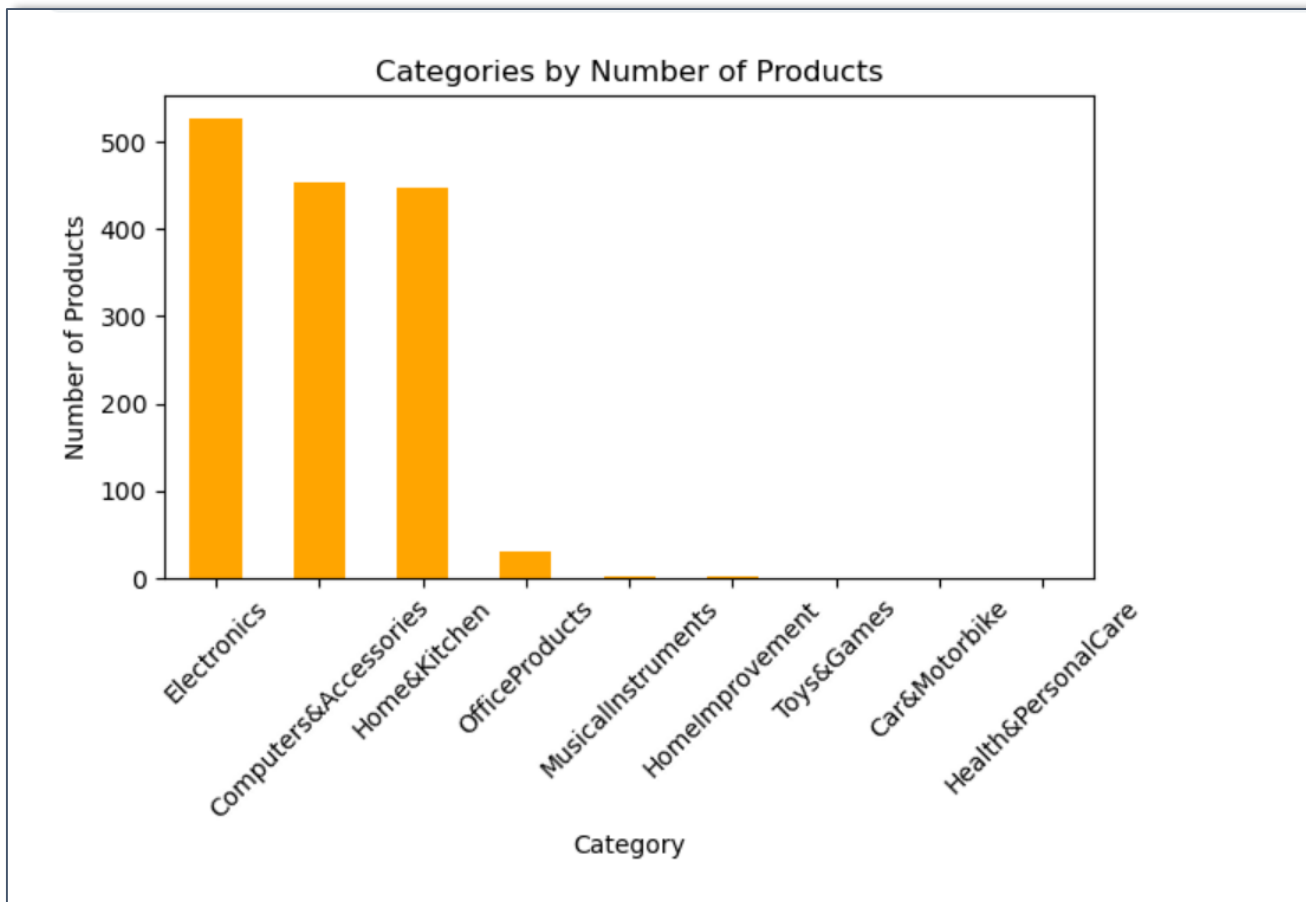
## Recommendations

- Prioritize these dominant categories for targeted marketing, promotions, and inventory optimization.
- Ensure these top categories have detailed filters and smooth navigation on e-commerce platforms.
- Do market research: Are people searching for these categories but finding too few products?
- Either expand the product line in these categories or remove them to reduce clutter.

Average Rating per Category
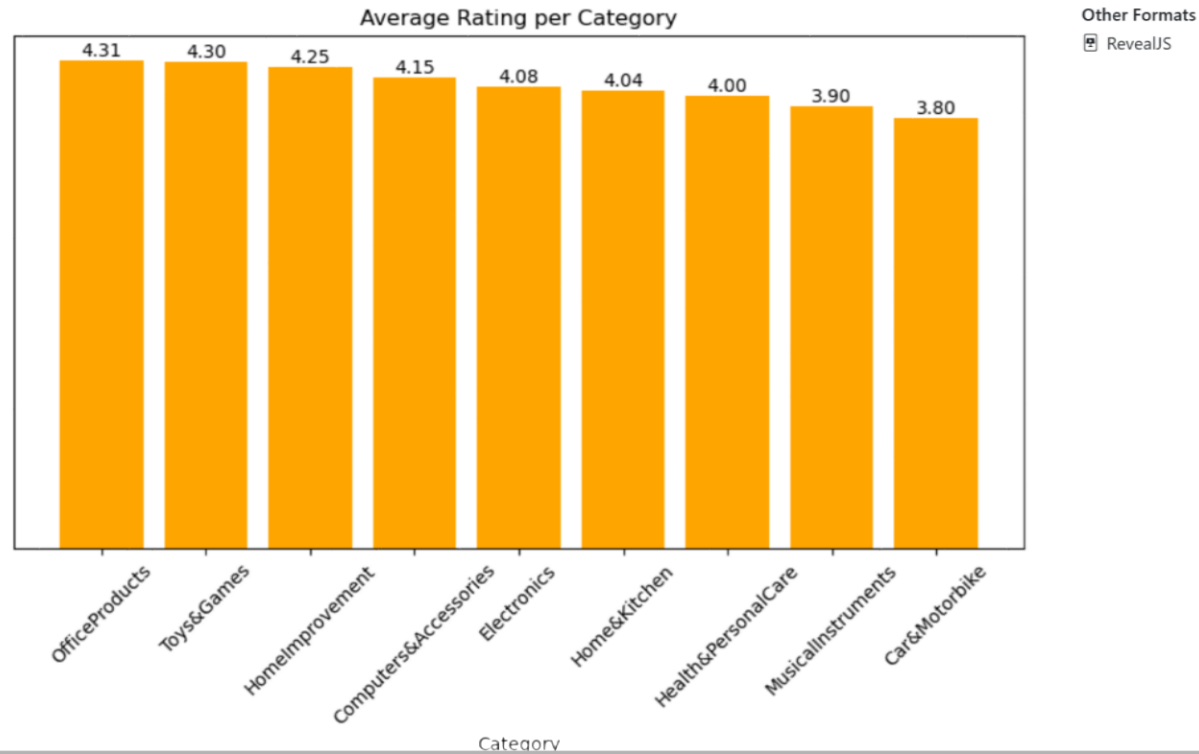
# Recommendation

- Check if the low ratings are due to quality issues, shipping delays, or misleading descriptions.

- Read user reviews to identify the common complaints.

- Consider replacing poor-quality items or improving the listing content.

Average Actual vs Discounted Price per Category
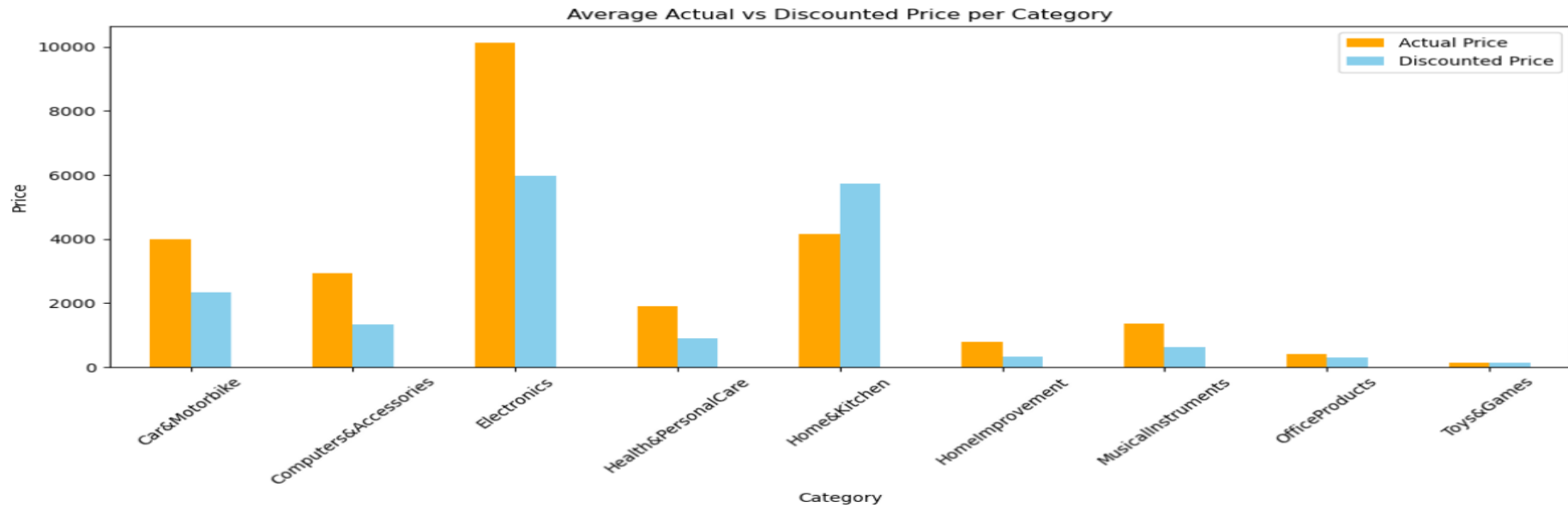
# Recommendation

## Focus on Categories with Big Discounts

- If some categories (like electronics or appliances) have a big difference between actual and discounted price:
- Promote them more customers love good deals.
- Use them in advrt or banners to attract buyers.
- You can also bundle with smaller items to increase sales.

## Watch Categories with Small or No Discount

- These products might be selling well without a discount Or maybe they are essentials (e.g., chargers, cables), and people buy them anyway.

# THANK YOU FOR YOUR ATTENTION