

AMZONG DISCOUNT STRATEGY REPORT

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TOOL



BACKGROUND

Amazon, a leading e-commerce platform, frequently offers discounts across various product categories, but data suggests that larger discounts do not always lead to higher customer satisfaction. Some heavily discounted products still receive lower ratings, raising concerns about customer perception, product quality, and purchasing behavior. To enhance its pricing strategy, Amazon aims to optimize discounts for high-ticket items while ensuring customer satisfaction. Additionally, the company seeks insights into which product categories benefit most from discounts and how customer feedback can help improve overall sales and shopping experiences.



EXECUTIVE SUMMARY

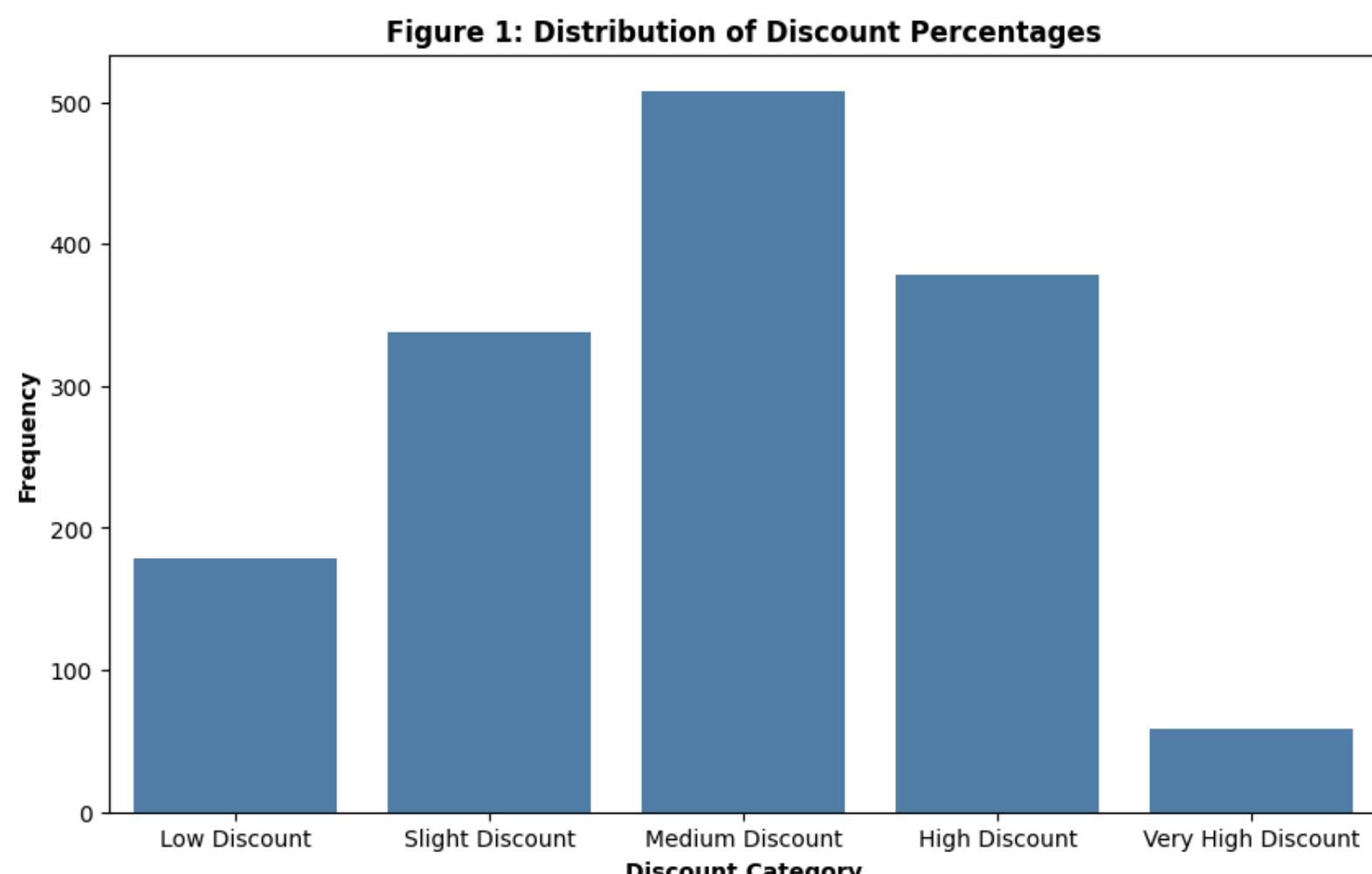
This report analyzes the relationship between discount percentages, sales volume, and customer ratings across various product categories. The findings reveal that discount effectiveness varies by category, with Electronics and Computer Accessories benefiting the most from discount-driven sales, while other categories such as Office Products and the "Others" category show limited sales growth despite discounts. The correlation analysis indicates that discounts have little to no impact on customer ratings, suggesting that factors like product quality, brand reputation, and usability may play a stronger role in influencing customer satisfaction. Additionally, an examination of high-ticket items highlights that even substantial discounts do not always drive sales, particularly in categories with lower consumer demand or strong brand loyalty. Customer feedback analysis further confirms that negative reviews frequently mention product quality issues and unmet expectations rather than discount levels. Overall, discount strategies should be tailored to specific product categories, focusing on customer priorities beyond just price reductions to maximize sales and satisfaction.

CODE LINK:

[HTTPS://COLAB.RESEARCH.GOOGLE.COM/DRIVE/1H342Q9YWWOKIJXCHR9QGHHDJOWZ54UYN#scrollTo=P-B2Q1JRAXMF](https://colab.research.google.com/drive/1H342Q9YWWOKIJXCHR9QGHHDJOWZ54UYN#scrollTo=P-B2Q1JRAXMF)

ANALYSIS

1. DISCOUNT DISTRIBUTION AND ITS RELATIONSHIP



The majority of discounts = **40% - 60%**

Within this range, **the discount was highly effective** in boosting sales volume.

< 40% and > 60%: For discounts below 40% and above 60%, the frequency seems to be decreasing, indicating that **discounts have little effect on sales volume in these sectors, except for the medium discount range**

DOES DISCOUNT PERCENTAGE HAVE A SIGNIFICANT IMPACT ON CUSTOMER RATINGS ?

In figure 2 (Correlation Matrix), the correlation between **discount percentage and rating (-0.16)**, as well as **discount percentage and rating count (0.01)**, is weak, indicating that discounts do not strongly influence customer perception or review activity.

Similarly, Figures 3 and 4 (Scatter Plots) reinforce this finding, as both regression lines remain nearly flat, with **low R² values (0.0242 for discount vs. rating and 0.0001 for discount vs. rating count)**, demonstrating that neither ratings nor review counts fluctuate significantly with discount levels. These insights suggest that **discounts are not a key factor in shaping customer satisfaction and other elements such as product quality may have a stronger influence on purchasing decisions.**

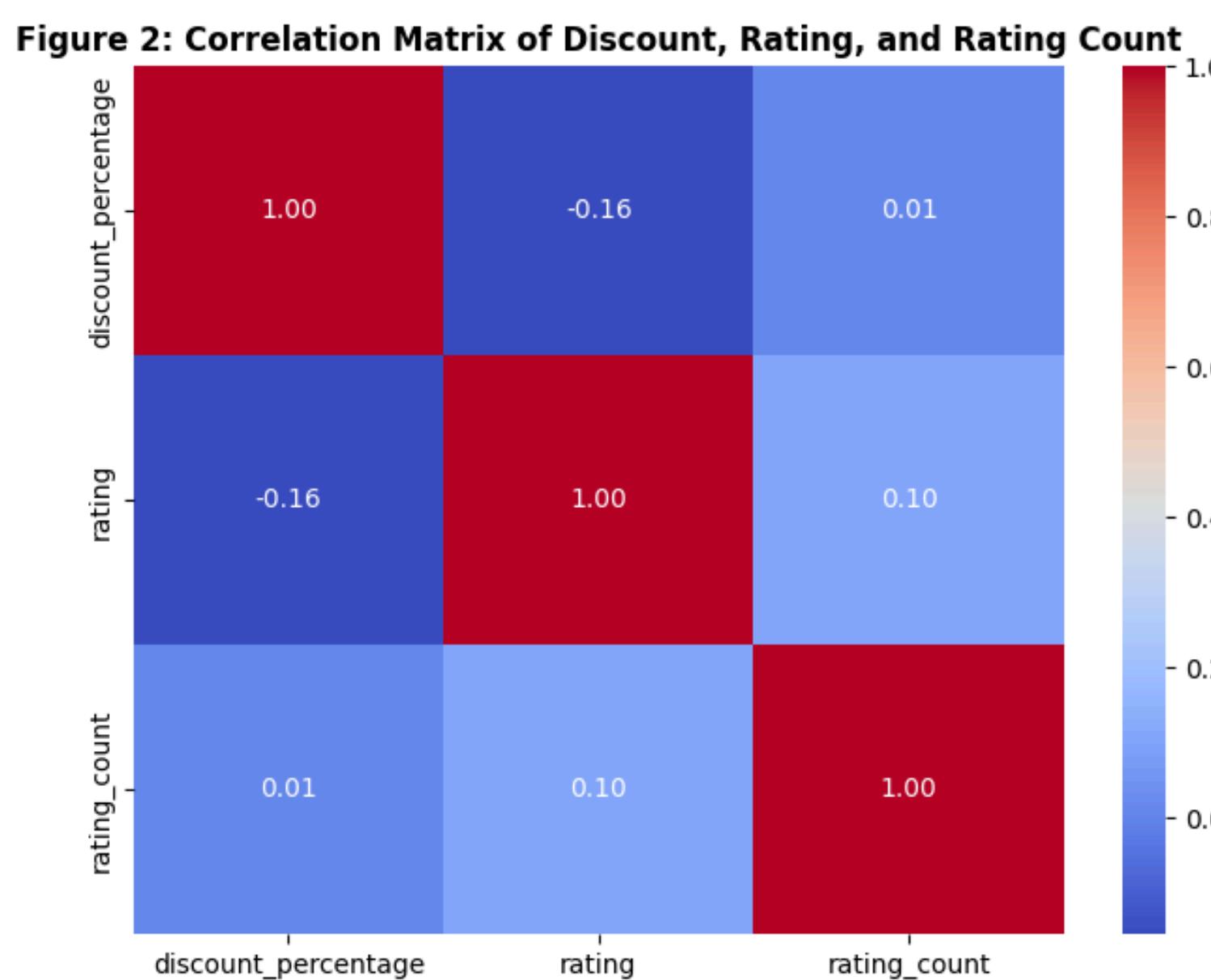


Figure 3: Scatter Plot of Discount vs. Rating with Regression Line

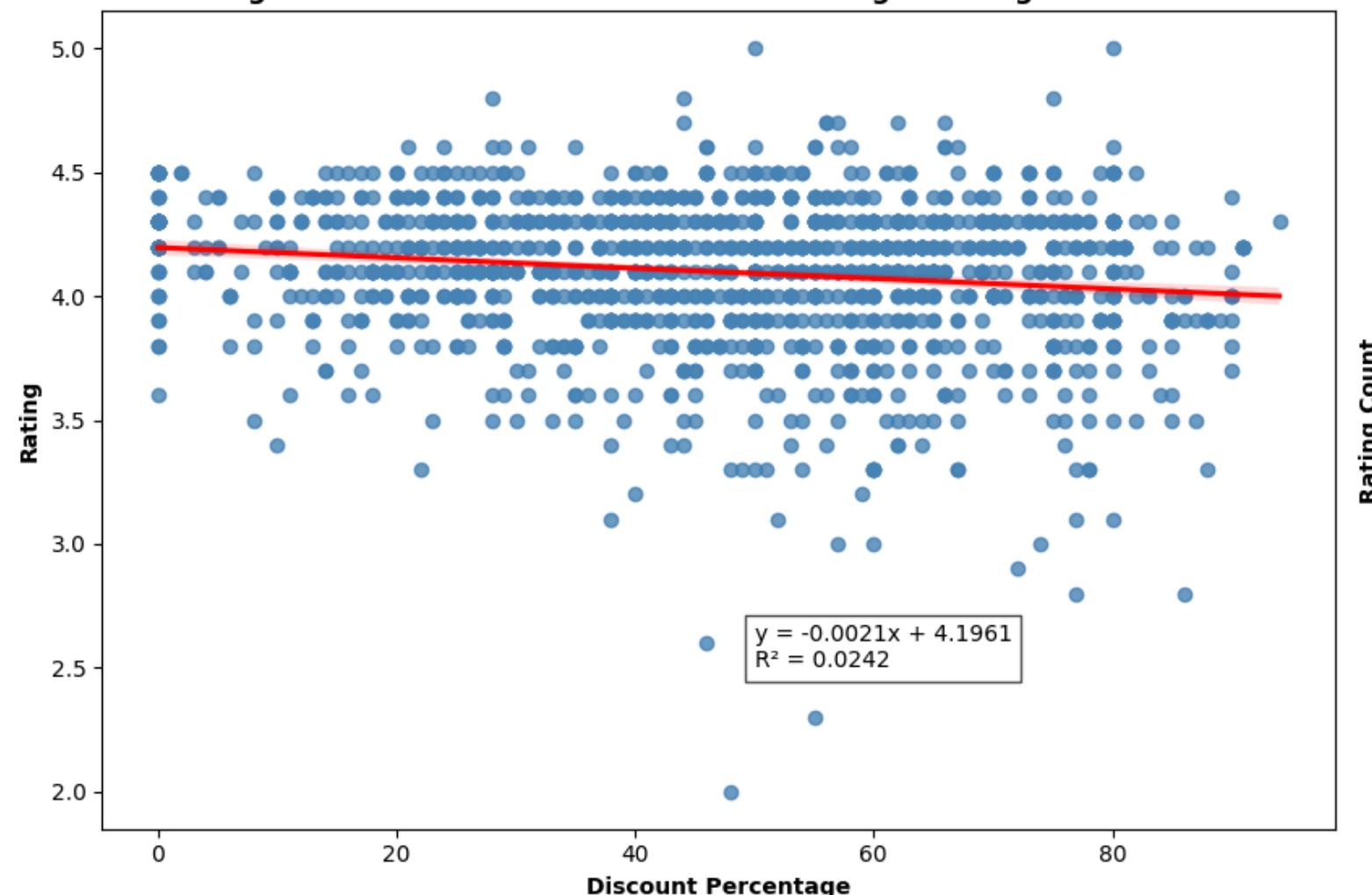
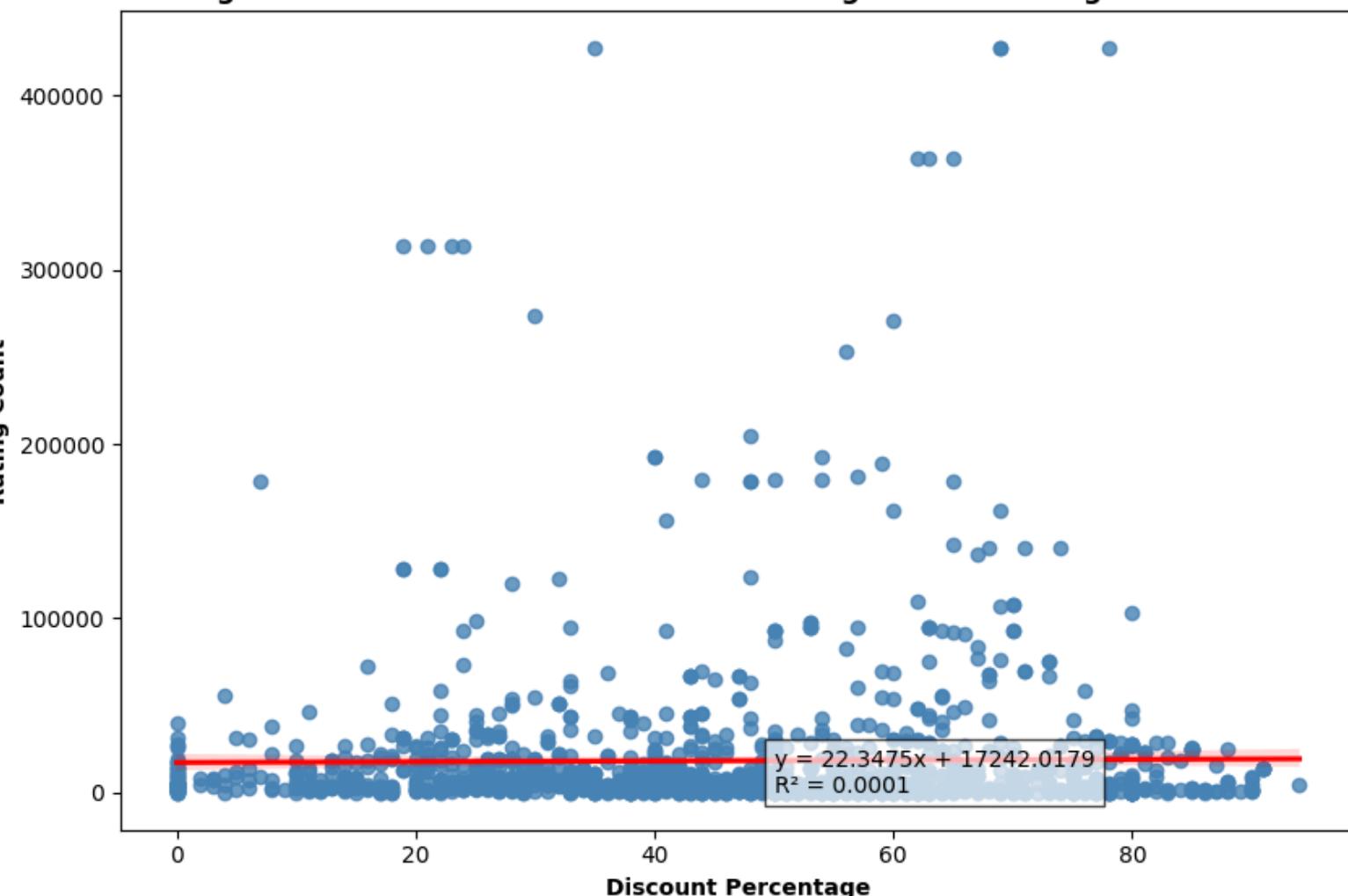
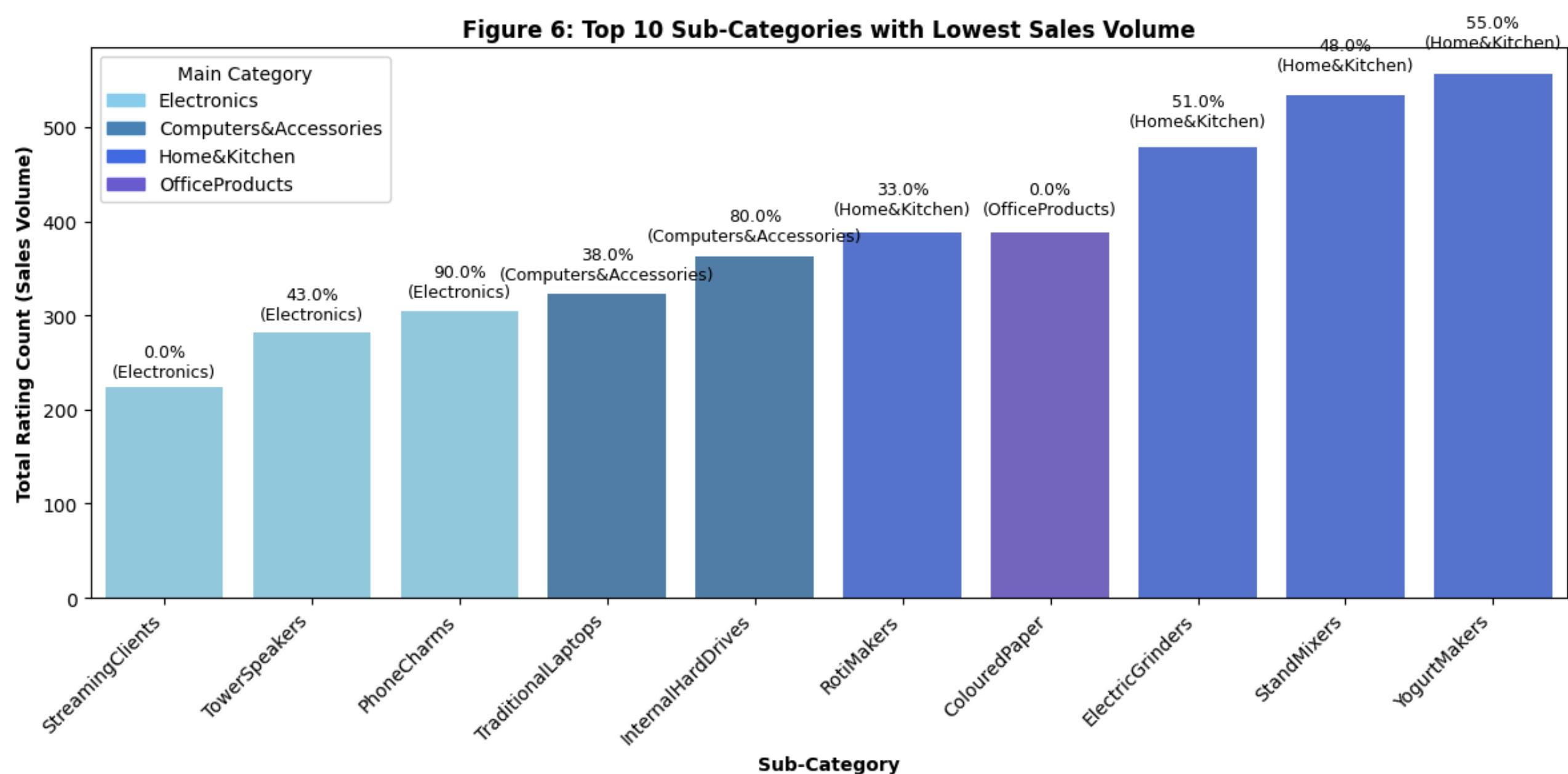
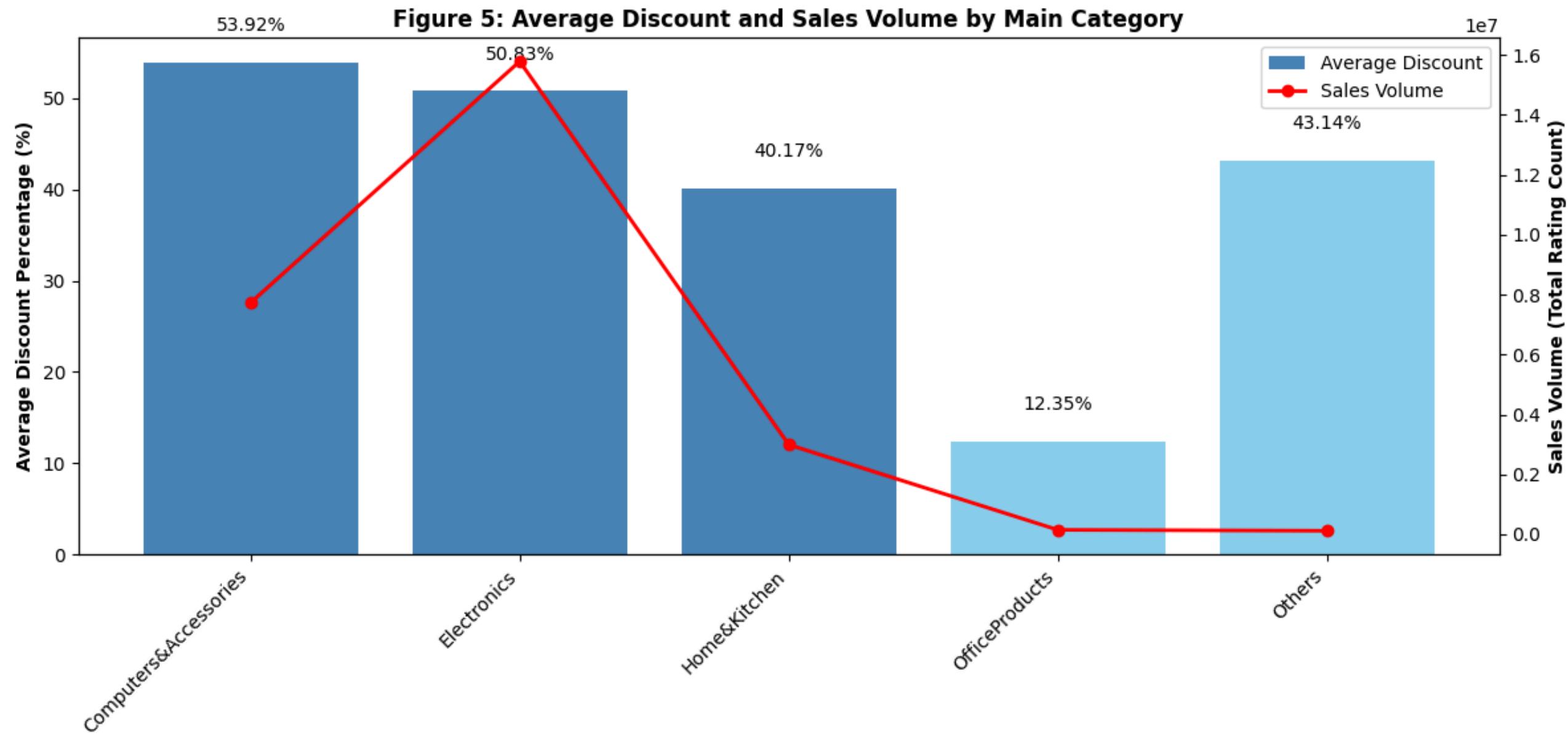


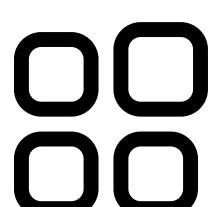
Figure 4: Scatter Plot of Discount vs. Rating Count with Regression Line



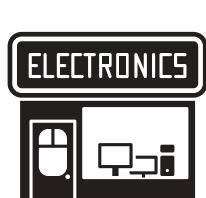
2. SALE VOLUME & CUSTOMER RATINGS



Office Products have both **low discounts (12.35%) and low sales volumes**, suggesting that customers are not highly influenced by discounts in this category, possibly **due to lower demand or limited necessity for price reductions**.



Others category has a **high average discount (43.14%) but very low sales volume**, indicating that discounts are not a strong driver for sales in this category, likely **due to low product diversity or lack of consumer interest**.



Electronics and Computer Accessories receive the most attention, with **the highest average discounts (50.83% and 53.92%)** and relatively higher sales volumes, suggesting that **discounts in these categories effectively drive sales**.



Home & Kitchen products (**40.17% discount**) show **moderate sales performance**, indicating a balanced response to discounting strategies.

The average discount

48%

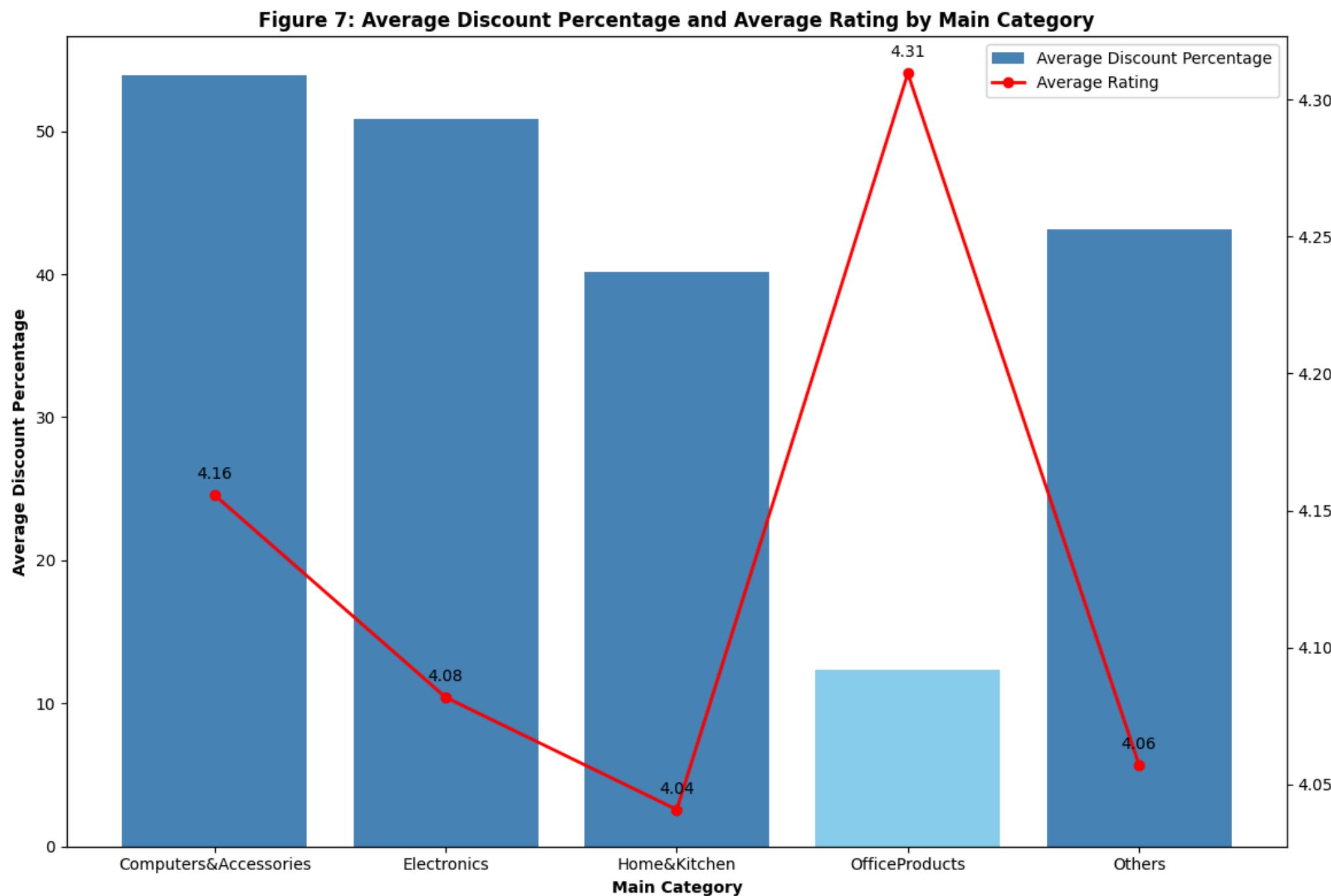
The max value of discount

94%

The min value of discount

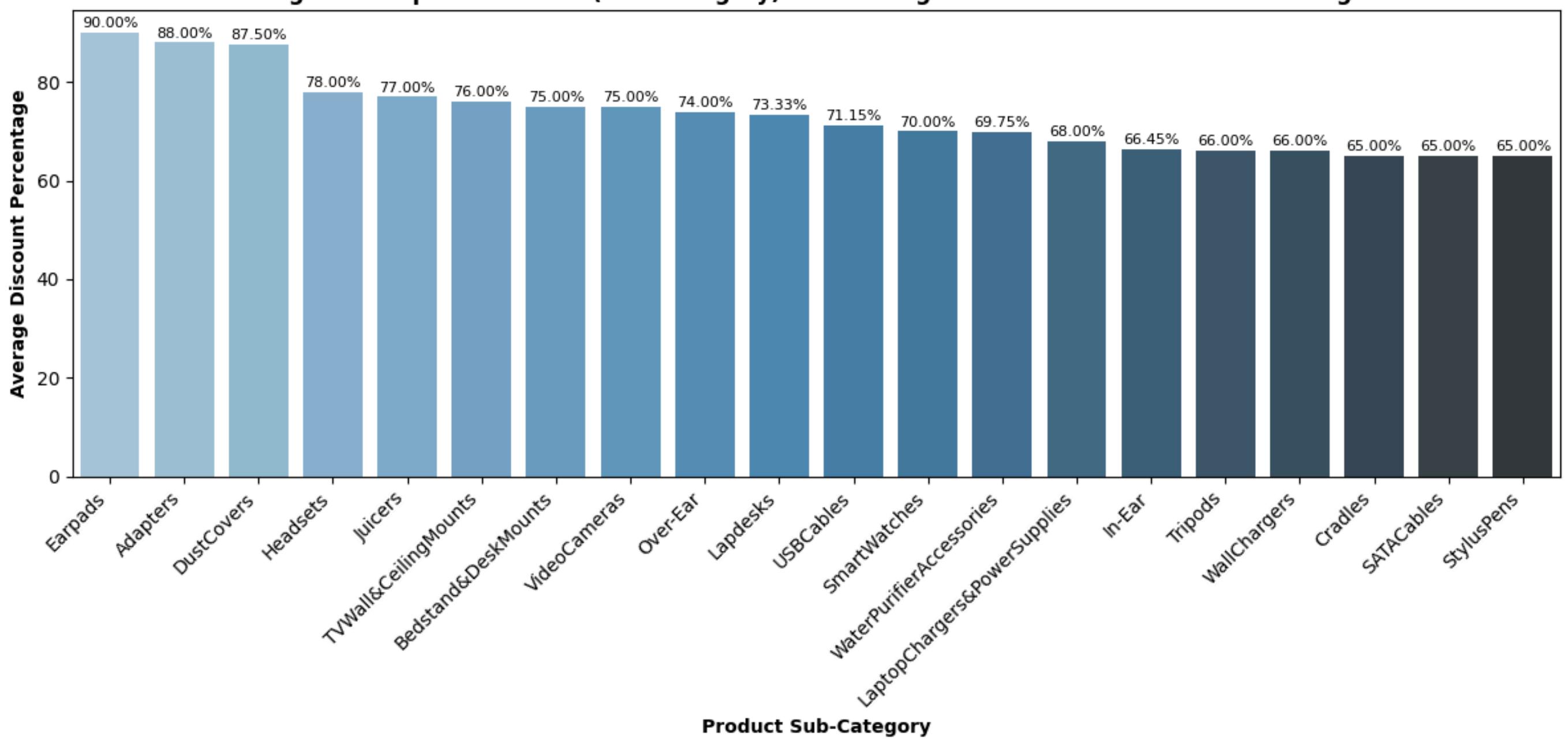
0%

2. SALE VOLUME & CUSTOMER RATINGS



The average rating = 4★
The max value of rating = 5★
The min value of discount = 2★

Figure 8: Top 20 Products (Sub-Category) with Rating < 4 and their Discount Percentage

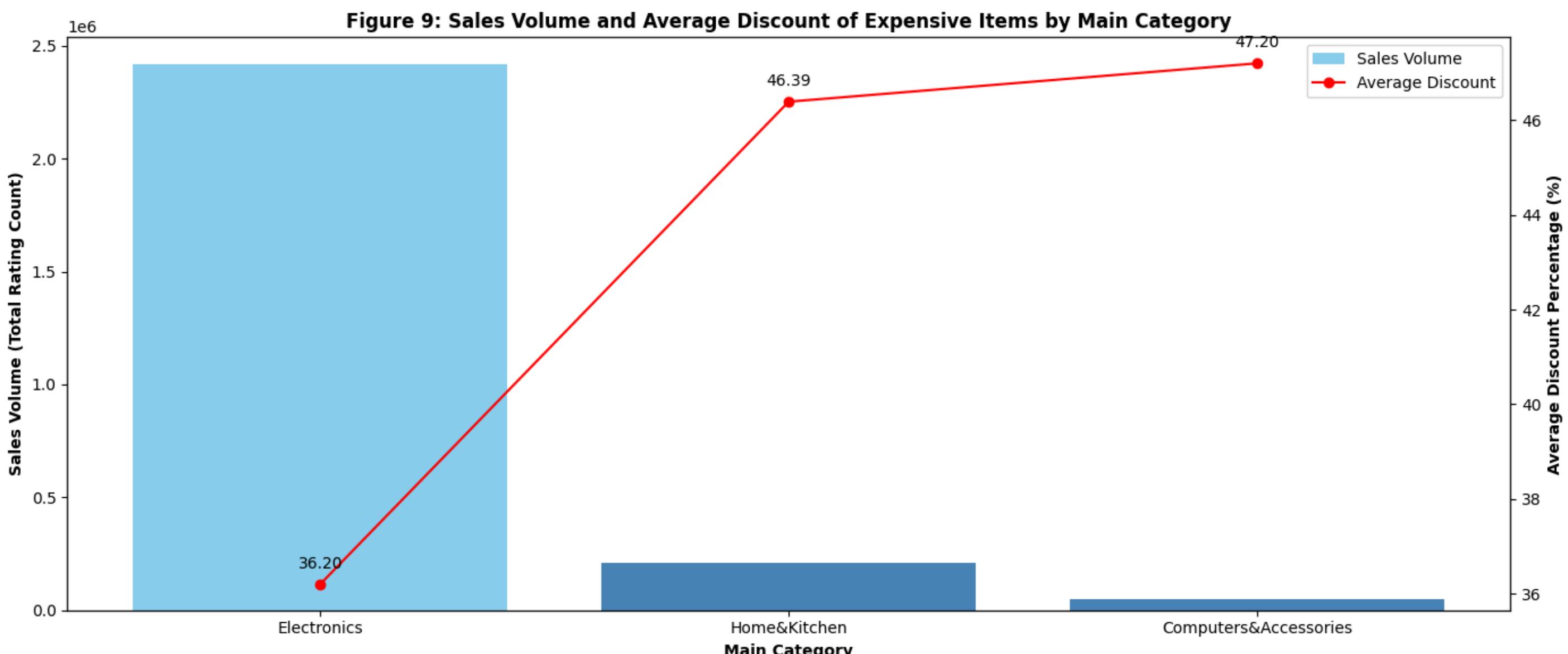


HOW ABOUT CUSTOMER RATINGS ?

The first chart shows that **Electronics and Computer Accessories receive the highest discounts (over 50%)**, yet their **average ratings remain moderate (4.08 and 4.16, respectively)**. Meanwhile, **Office Products**, despite having the lowest discount percentage, achieve **the highest average rating (4.31)**, suggesting that customers may **prioritize quality and utility over price reductions** in this category. The second chart further supports this trend, showing that **many low-rated subcategories (ratings < 4) still receive significant discounts**, reinforcing the idea that **discounting alone does not directly improve customer perception or satisfaction**.

Key findings: Discounts alone are not the primary driver of customer satisfaction, and factors such as product quality, usability may play a more crucial role in influencing ratings.

3. HIGH TICKET ITEMS



Electronics dominate the sales volume among expensive items, despite having the lowest average discount (36.32%) among the three categories. This suggests that demand for high-end electronics remains strong even with moderate discounts. However, businesses can further boost sales in this sector by offering deeper discounts.



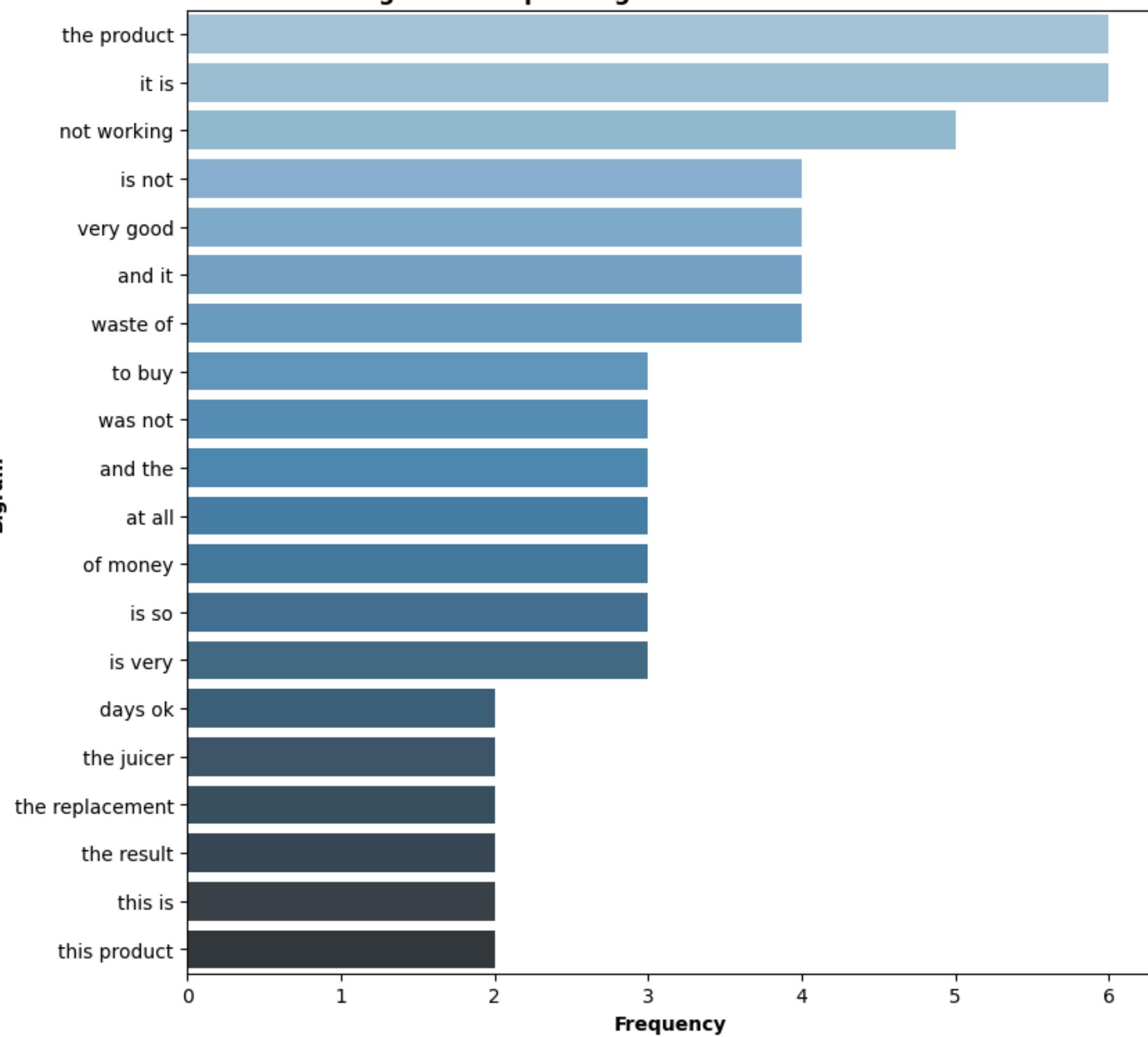
Home & Kitchen items receive a higher average discount (46.39%) but generate significantly lower sales volume. This indicates that discounts in this category may not be as effective in driving sales, possibly due to customer preferences, product longevity, or lower urgency in purchasing expensive home-related items.



Computers & Accessories receive the highest average discount (47.70%) but experience the lowest sales volume. This suggests that even substantial discounts in this category fail to significantly boost sales, possibly due to market saturation, lower consumer demand, or a preference for specific premium brands that customers may purchase regardless of discounts.

4. CUSTOMER FEEDBACK

Figure 10: Top 20 Bigrams in Low-Rated Reviews



- **Customer complaint about quality** ("not working", "waste of", "of money", "The replacement") : indicating the customer is not satisfied with the product's quality and have to request a replacement
- **Positive comment** ("very good", "Days ok") : indicating some low-rated reviews still acknowledge certain positive aspects.

5. RECOMMENDATIONS

Optimize Discounts for High-Performing Categories

- Focus on offering **targeted discounts** for **Electronics** and **Computer Accessories**, as these categories show a **strong correlation between discounts and sales volume**.
- Amazon can also experiment with **strategic seasonal or promotional discounts** rather than continuous markdowns to maintain perceived value.

Improve Product Quality and Customer Experience

- Address common complaints from **low-rated reviews**, particularly **product defects, poor durability, and unmet expectations**.
- Implement **stricter quality control measures** and provide better **product descriptions** and **customer education** to align **expectations with reality**.

Refine Discount Strategies for Low-Impact Categories

- For Office Products and the "Others" category, where **discounts do not significantly impact sales**, consider **alternative marketing strategies such as bundling, loyalty programs, or added-value promotions**.