



COMPETITIVE ANALYSIS FOR SNAPDEAL

Leveraging Price Data for Business Improvement

BY SRI NIKHITHA BHAVANARI

OBJECTIVES



Introduction



Data Cleaning



Analysis & Hypothesis



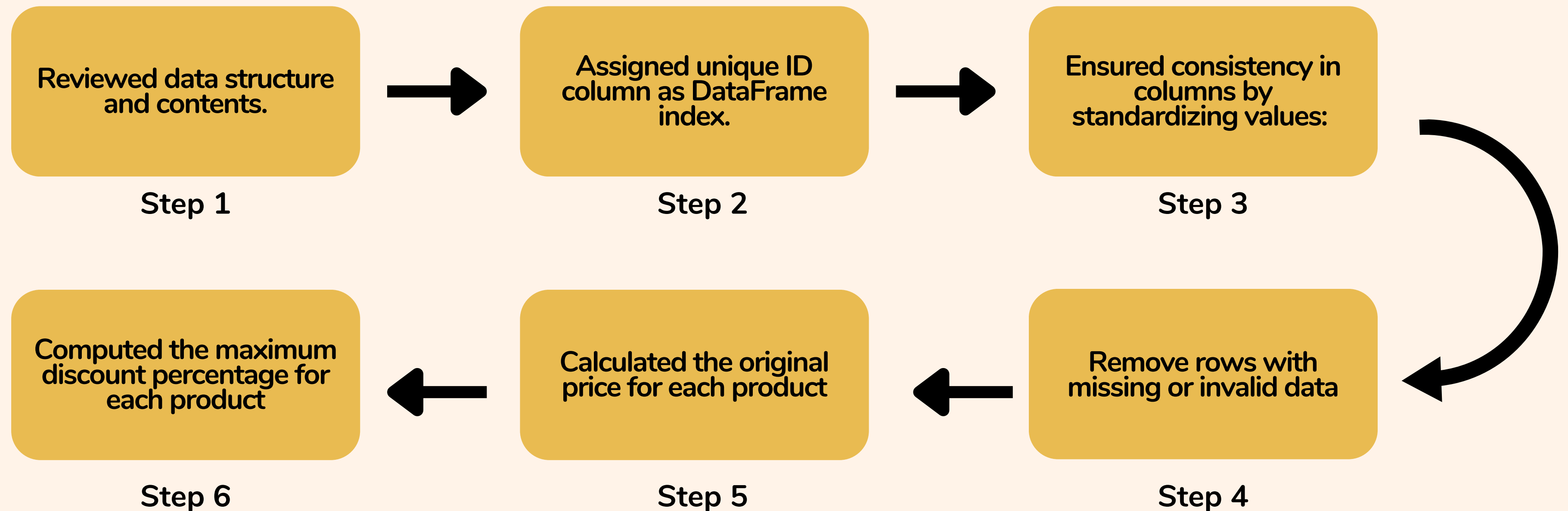
Insights & Recommendations

INTRODUCTION



- The assignment involved conducting a competitive analysis focusing on price data for Snapdeal, an e-commerce platform
- Provided with an Excel sheet containing historical selling prices for products across multiple websites over 8 consecutive days.
- The task is to derive hypotheses, analyze the data, and generate insights to improve Snapdeal's business performance using competitive information.
- I utilized Python libraries including pandas, matplotlib, and seaborn for data analysis

DATA CLEANING

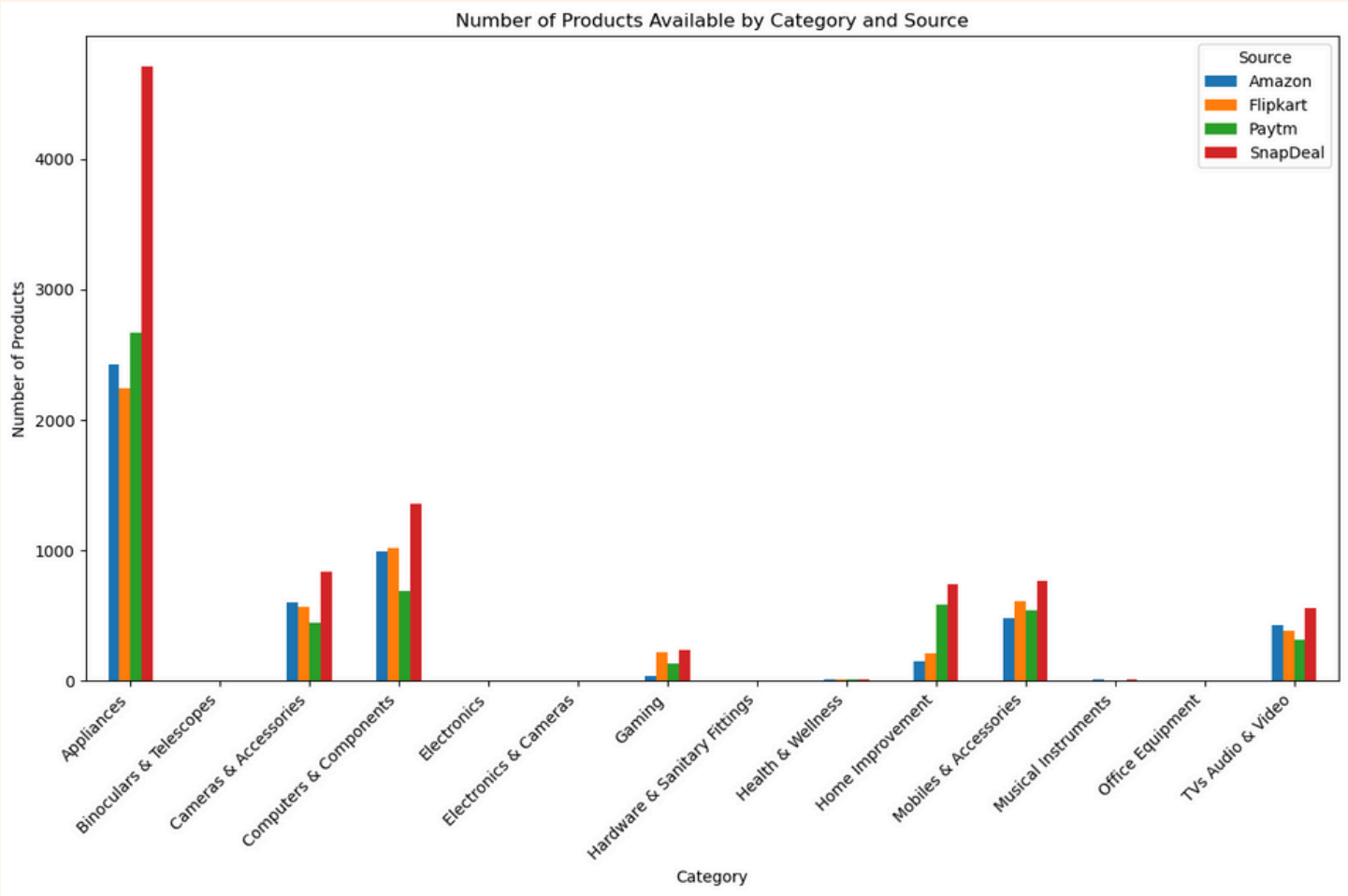


ANALYSIS

CATEGORY ANALYSIS

| Source | Amazon | Flipkart | Paytm | SnapDeal |
|------------------------------|--------|----------|--------|----------|
| Category | | | | |
| Appliances | 2427.0 | 2239.0 | 2665.0 | 4704.0 |
| Binoculars & Telescopes | 2.0 | 3.0 | 1.0 | 3.0 |
| Cameras & Accessories | 603.0 | 572.0 | 447.0 | 834.0 |
| Computers & Components | 992.0 | 1016.0 | 692.0 | 1360.0 |
| Electronics | 5.0 | 8.0 | 5.0 | 8.0 |
| Electronics & Cameras | 1.0 | 2.0 | 1.0 | 2.0 |
| Gaming | 39.0 | 223.0 | 136.0 | 240.0 |
| Hardware & Sanitary Fittings | 2.0 | 1.0 | 0.0 | 2.0 |
| Health & Wellness | 12.0 | 11.0 | 9.0 | 12.0 |
| Home Improvement | 151.0 | 210.0 | 586.0 | 739.0 |
| Mobiles & Accessories | 484.0 | 611.0 | 544.0 | 771.0 |
| Musical Instruments | 10.0 | 0.0 | 3.0 | 11.0 |
| Office Equipment | 2.0 | 0.0 | 0.0 | 2.0 |
| TVs Audio & Video | 429.0 | 384.0 | 316.0 | 562.0 |

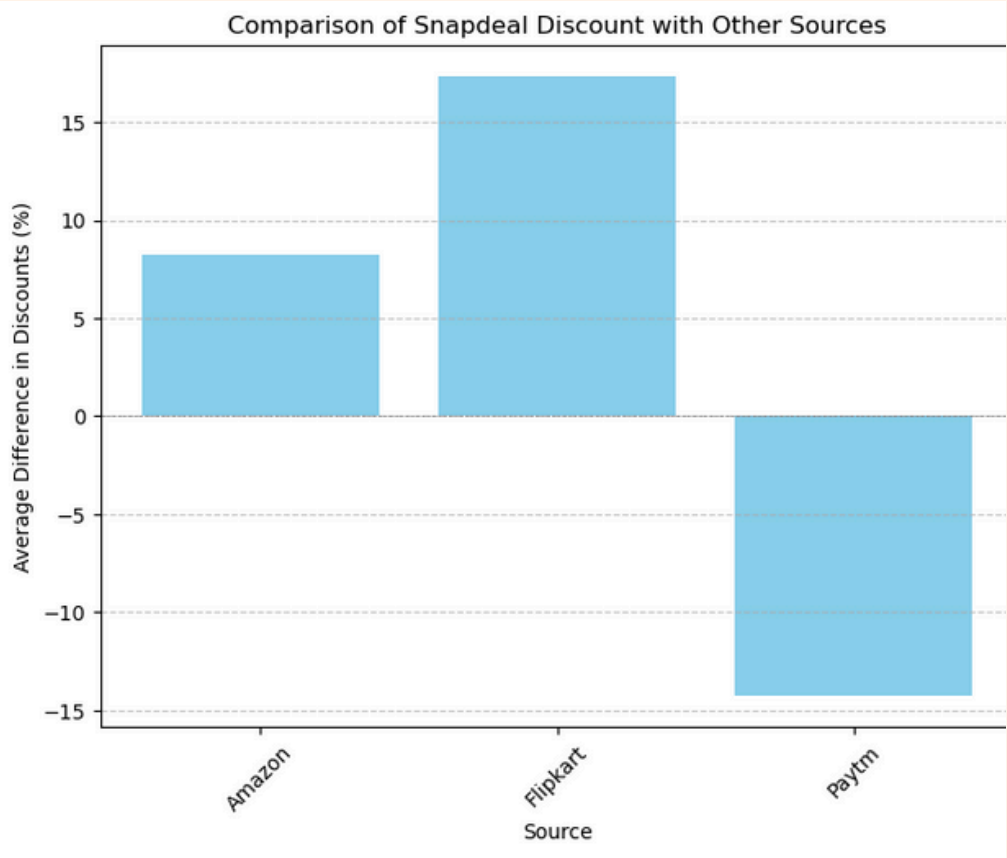
The table above presents the total count for each category across our main competitive sources



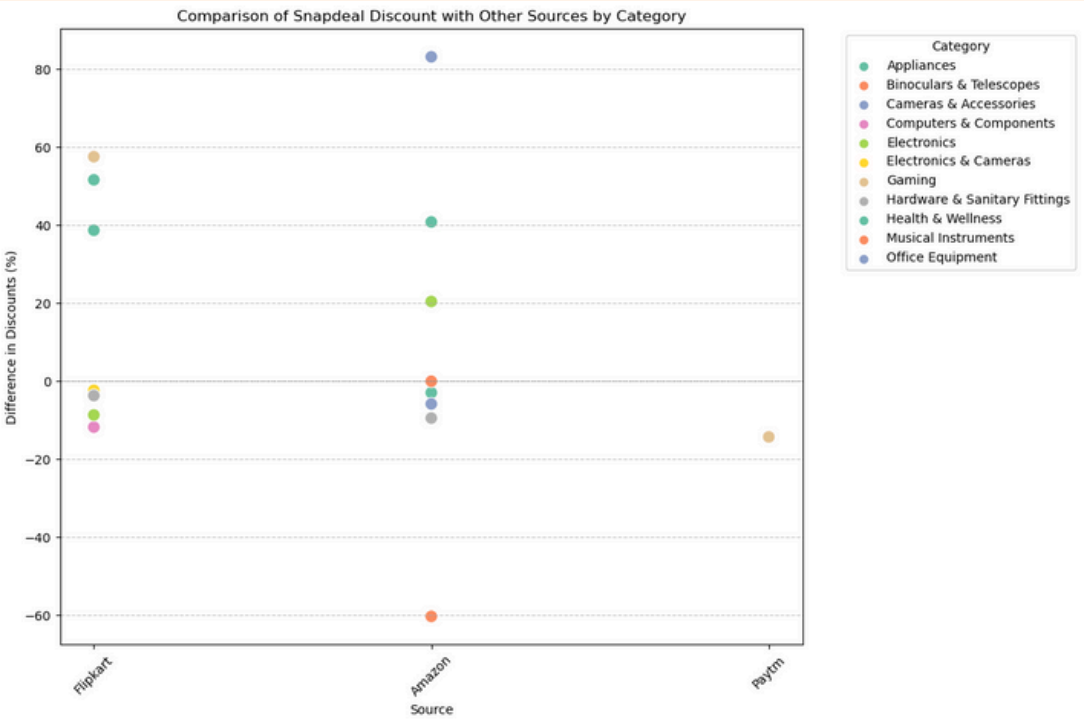
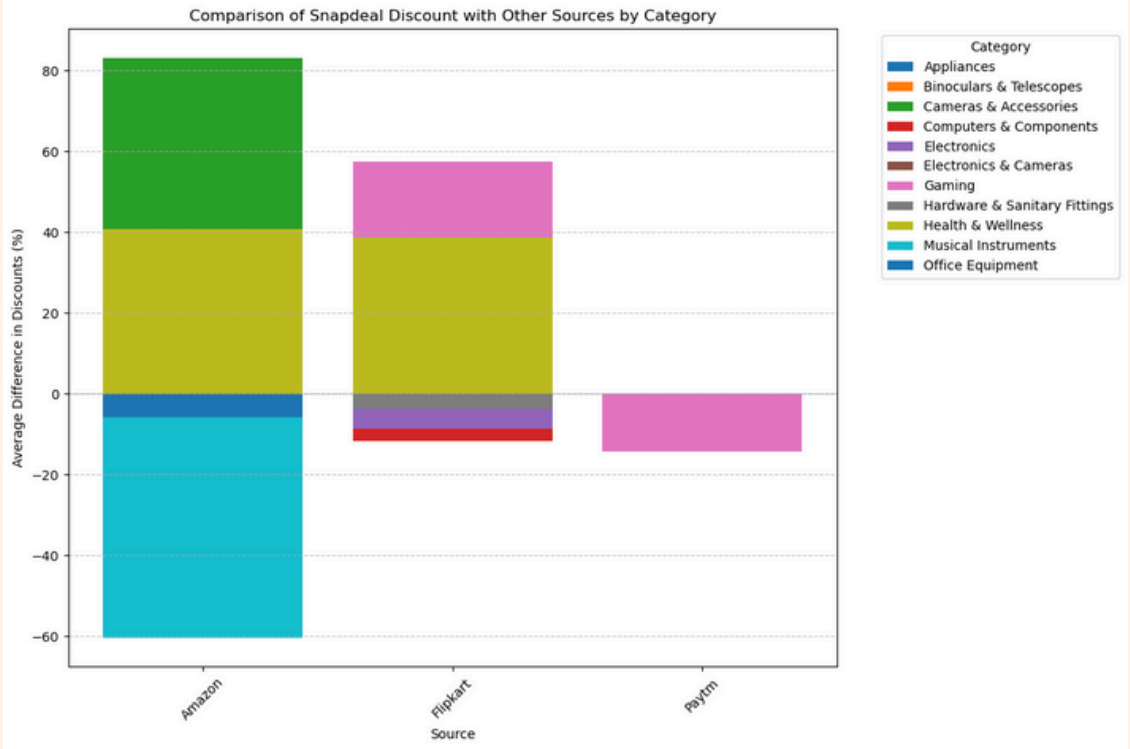
A grouped bar plot has been created to visually represent the total count for each category

DISCOUNT ANALYSIS

| Category | Source | Max Discount | Snapdeal_Discount |
|------------------------------|----------|--------------|-------------------|
| Appliances | Flipkart | 29.411765 | 81.020255 |
| Appliances | Amazon | 83.950978 | 81.020255 |
| Binoculars & Telescopes | Amazon | 0.004474 | 0.000000 |
| Cameras & Accessories | Amazon | 3.010753 | 86.143020 |
| Computers & Components | Flipkart | 88.487179 | 76.733333 |
| Electronics | Amazon | 0.058005 | 20.500205 |
| Electronics | Flipkart | 29.143898 | 20.500205 |
| Electronics & Cameras | Flipkart | 21.250000 | 18.927170 |
| Gaming | Flipkart | 7.877170 | 65.409773 |
| Gaming | Paytm | 79.679144 | 65.409773 |
| Hardware & Sanitary Fittings | Amazon | 17.508754 | 8.064516 |
| Hardware & Sanitary Fittings | Flipkart | 11.746032 | 8.064516 |
| Health & Wellness | Amazon | 8.726982 | 49.545455 |
| Health & Wellness | Flipkart | 10.867866 | 49.545455 |
| Musical Instruments | Amazon | 81.510468 | 21.250000 |
| Office Equipment | Amazon | 7.488987 | 1.668852 |



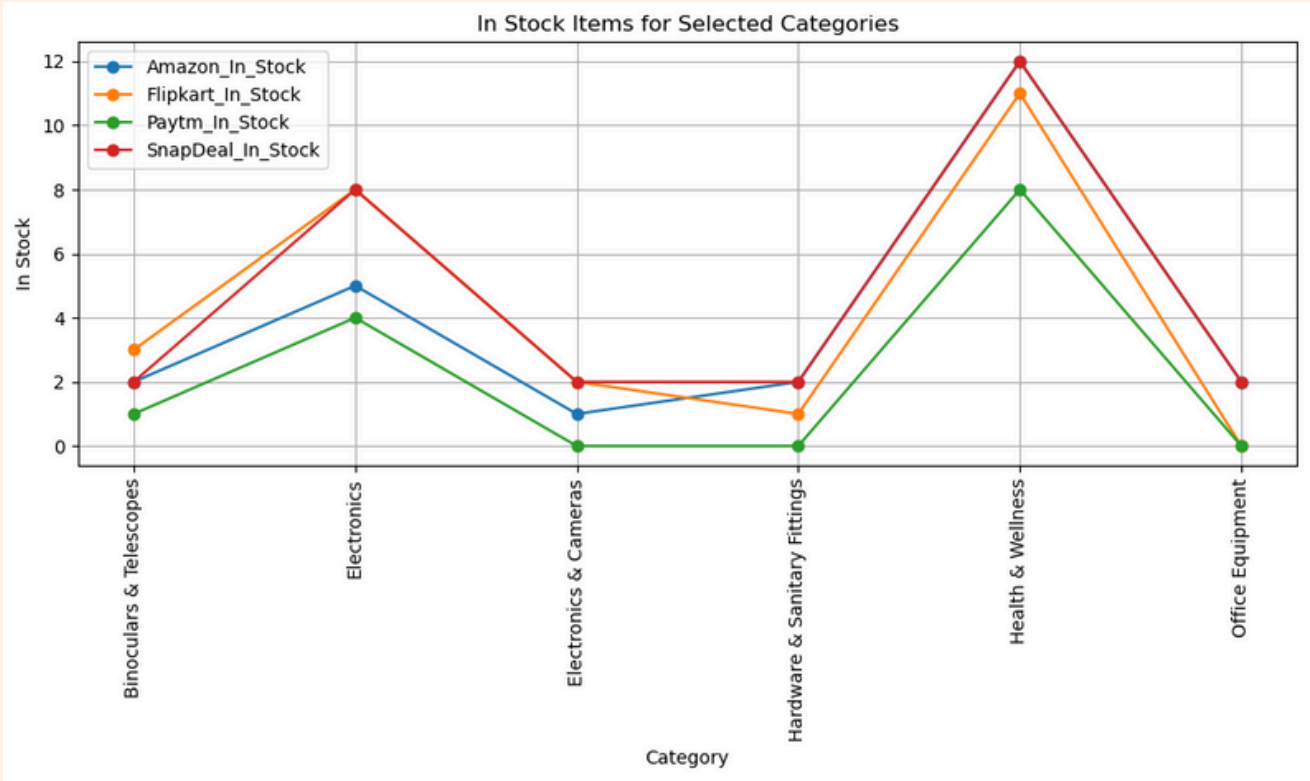
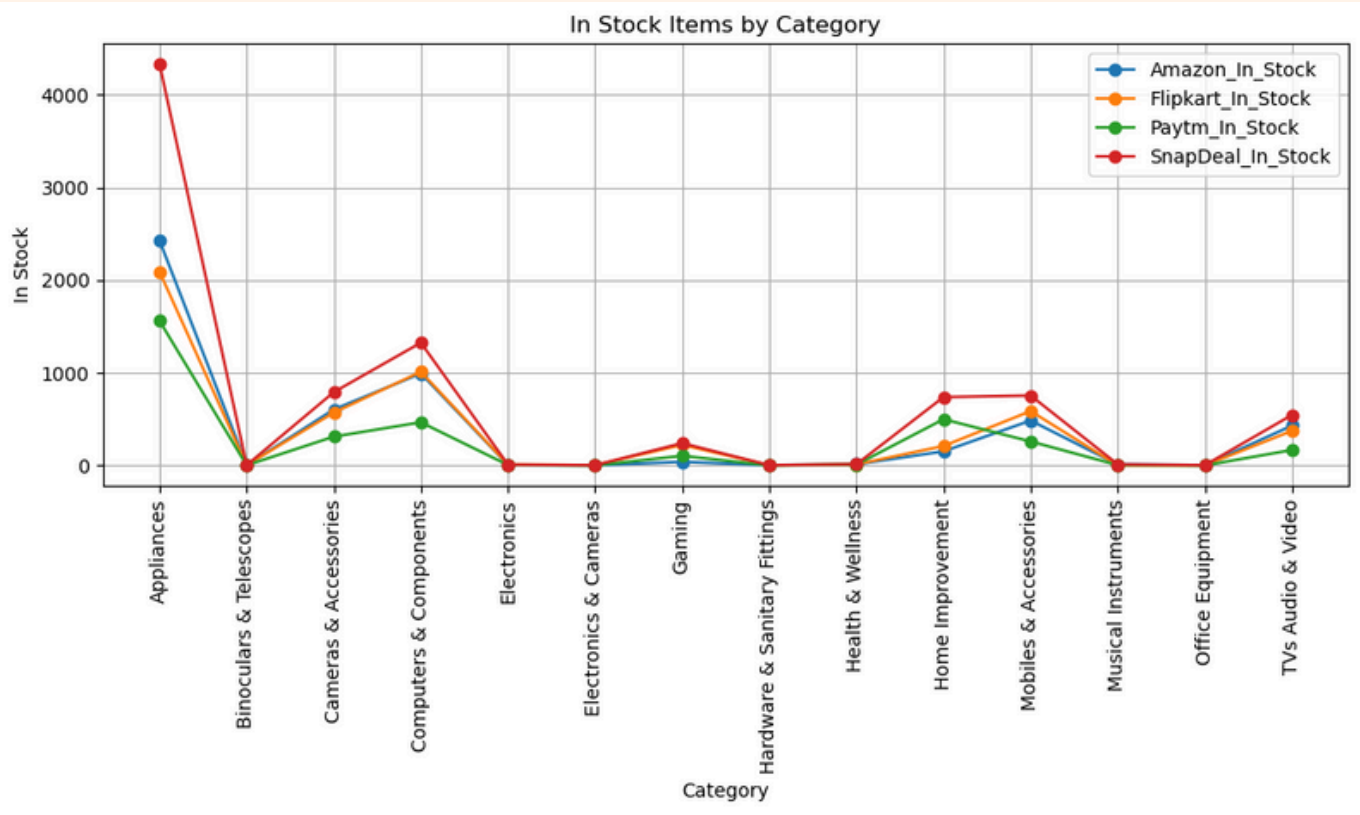
The table compares maximum discounts by category from Snapdeal and other sources. Different plots were shown to compare the same.



INVENTORY ANALYSIS

| | Amazon_In_Stock | Flipkart_In_Stock | Paytm_In_Stock | SnapDeal_In_Stock |
|------------------------------|-----------------|-------------------|----------------|-------------------|
| Category | | | | |
| Appliances | 2427.0 | 2090.0 | 1560.0 | 4333.0 |
| Binoculars & Telescopes | 2.0 | 3.0 | 1.0 | 2.0 |
| Cameras & Accessories | 603.0 | 569.0 | 310.0 | 790.0 |
| Computers & Components | 992.0 | 1010.0 | 465.0 | 1324.0 |
| Electronics | 5.0 | 8.0 | 4.0 | 8.0 |
| Electronics & Cameras | 1.0 | 2.0 | 0.0 | 2.0 |
| Gaming | 39.0 | 221.0 | 103.0 | 240.0 |
| Hardware & Sanitary Fittings | 2.0 | 1.0 | 0.0 | 2.0 |
| Health & Wellness | 12.0 | 11.0 | 8.0 | 12.0 |
| Home Improvement | 151.0 | 209.0 | 498.0 | 737.0 |
| Mobiles & Accessories | 484.0 | 586.0 | 258.0 | 754.0 |
| Musical Instruments | 10.0 | 0.0 | 3.0 | 11.0 |
| Office Equipment | 2.0 | 0.0 | 0.0 | 2.0 |
| TVs Audio & Video | 429.0 | 373.0 | 166.0 | 544.0 |

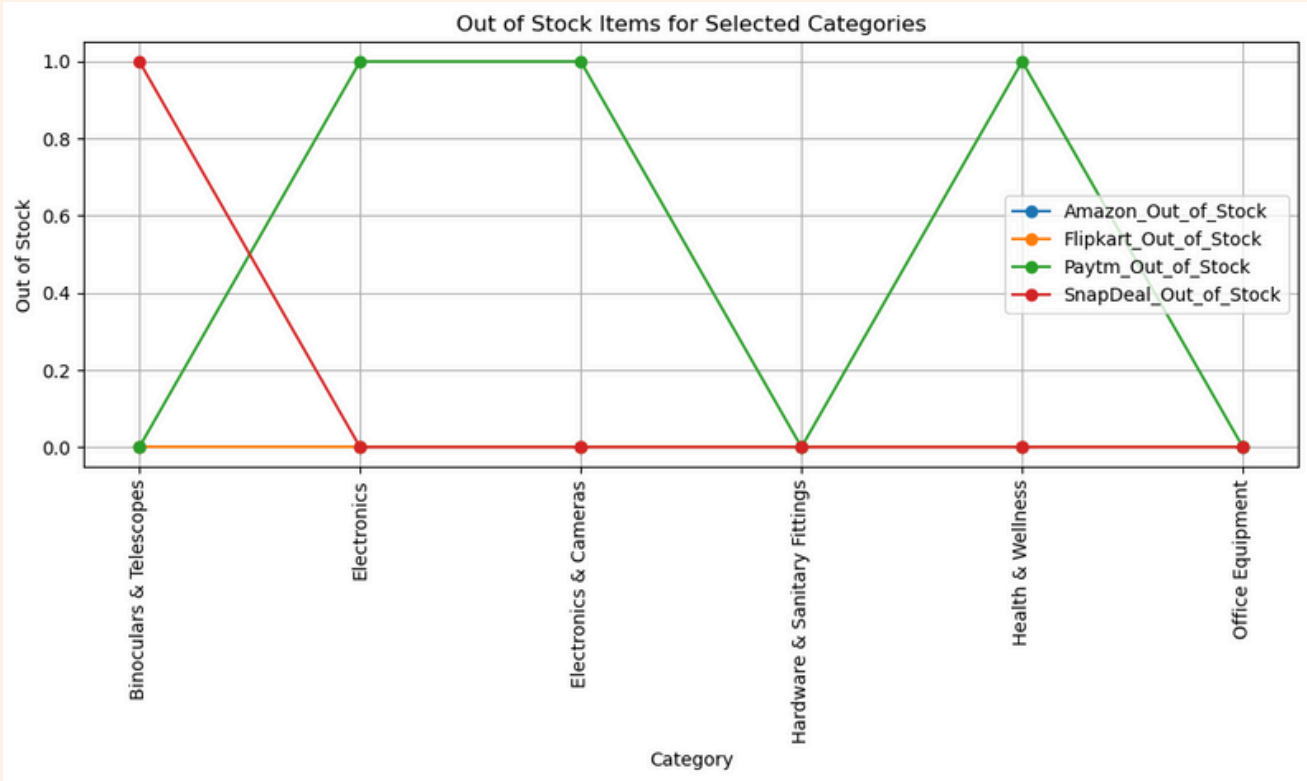
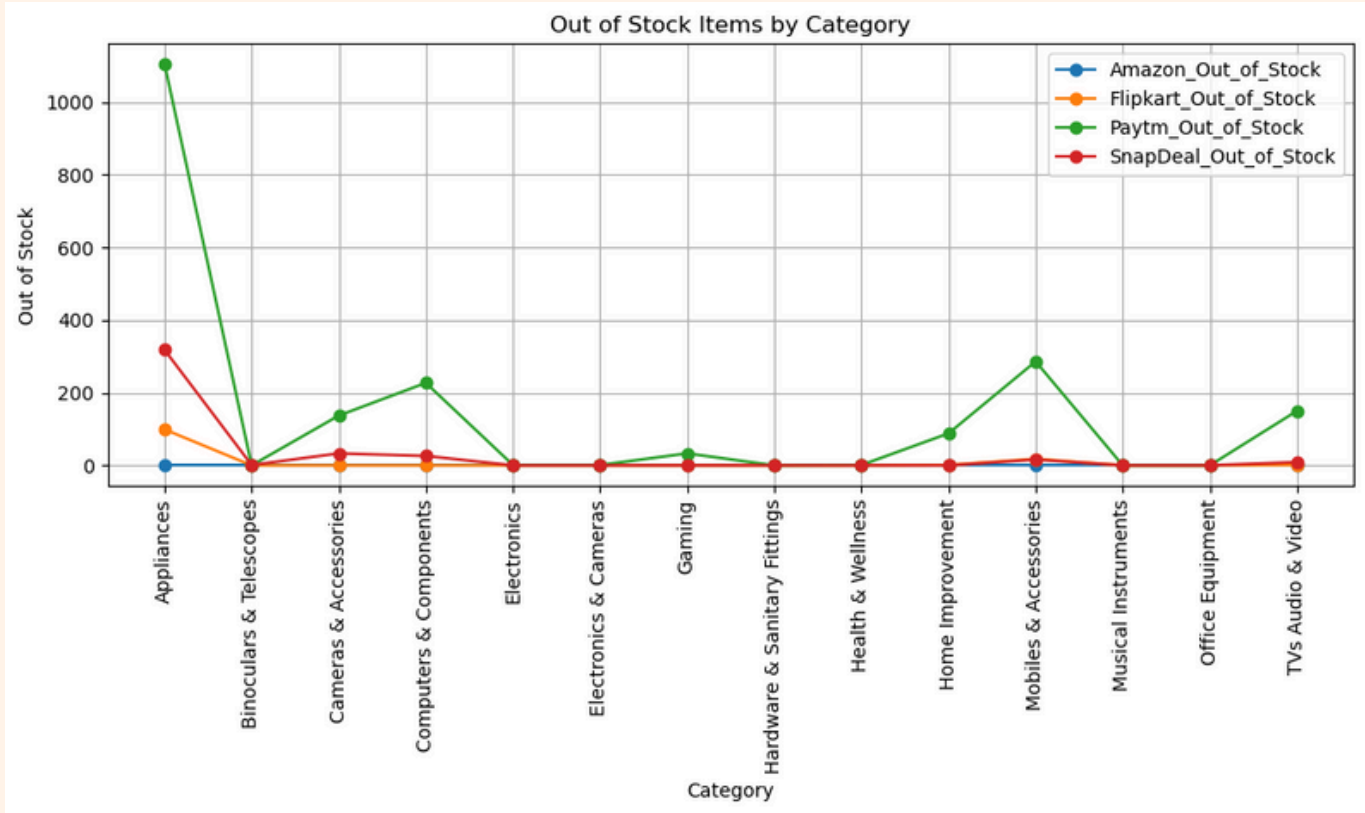
Tabulated the quantity of in-stock products across all categories and required sources and plotted a line graph.



INVENTORY ANALYSIS

| | Amazon_Out_of_Stock | Flipkart_Out_of_Stock | Paytm_Out_of_Stock | SnapDeal_Out_of_Stock |
|------------------------------|---------------------|-----------------------|--------------------|-----------------------|
| Category | | | | |
| Appliances | 0.0 | 99.0 | 1105.0 | 318.0 |
| Binoculars & Telescopes | 0.0 | 0.0 | 0.0 | 1.0 |
| Cameras & Accessories | 0.0 | 0.0 | 137.0 | 33.0 |
| Computers & Components | 0.0 | 0.0 | 227.0 | 26.0 |
| Electronics | 0.0 | 0.0 | 1.0 | 0.0 |
| Electronics & Cameras | 0.0 | 0.0 | 1.0 | 0.0 |
| Gaming | 0.0 | 0.0 | 33.0 | 0.0 |
| Hardware & Sanitary Fittings | 0.0 | 0.0 | 0.0 | 0.0 |
| Health & Wellness | 0.0 | 0.0 | 1.0 | 0.0 |
| Home Improvement | 0.0 | 1.0 | 88.0 | 0.0 |
| Mobiles & Accessories | 0.0 | 18.0 | 286.0 | 16.0 |
| Musical Instruments | 0.0 | 0.0 | 0.0 | 0.0 |
| Office Equipment | 0.0 | 0.0 | 0.0 | 0.0 |
| TVs Audio & Video | 0.0 | 1.0 | 150.0 | 9.0 |

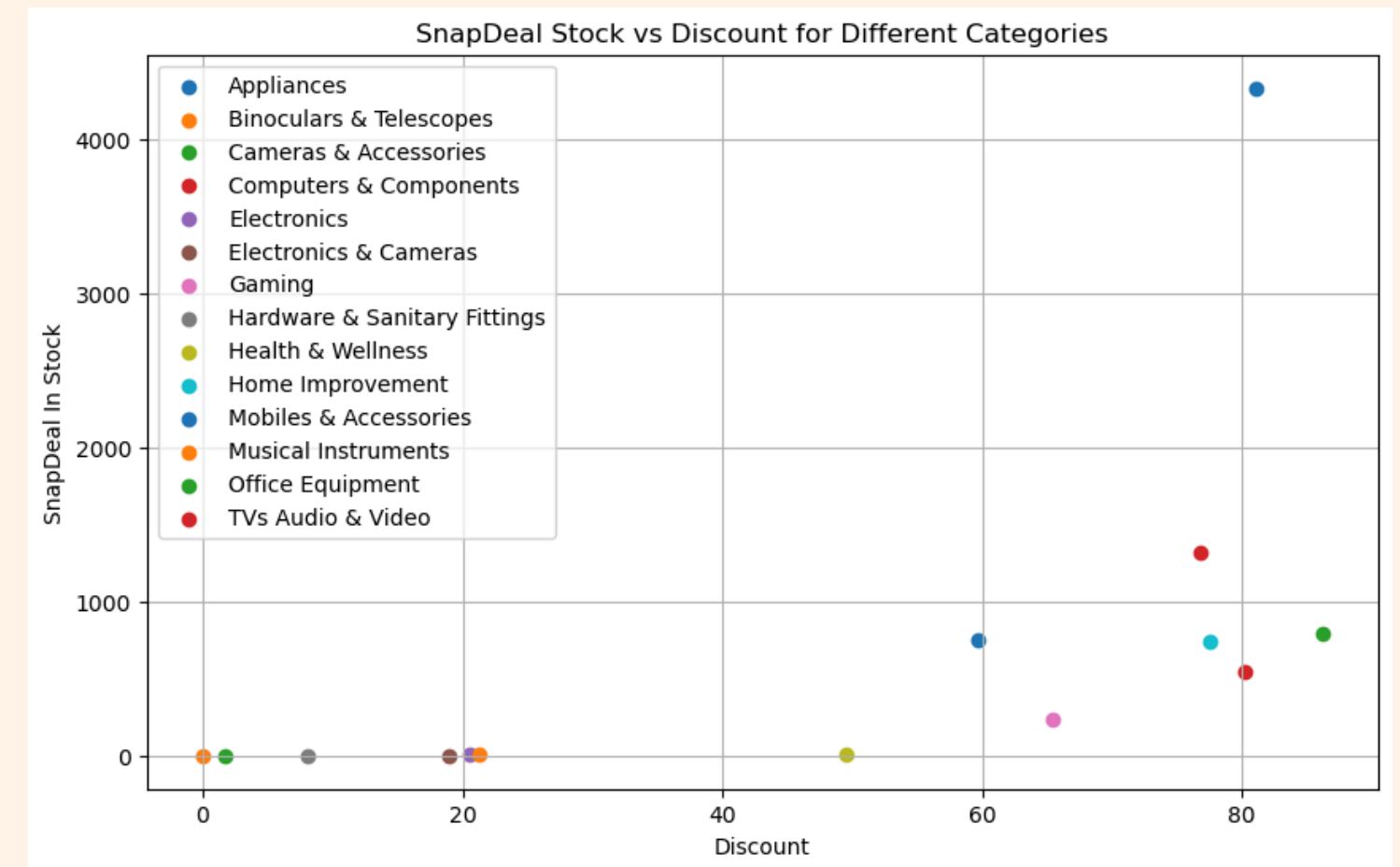
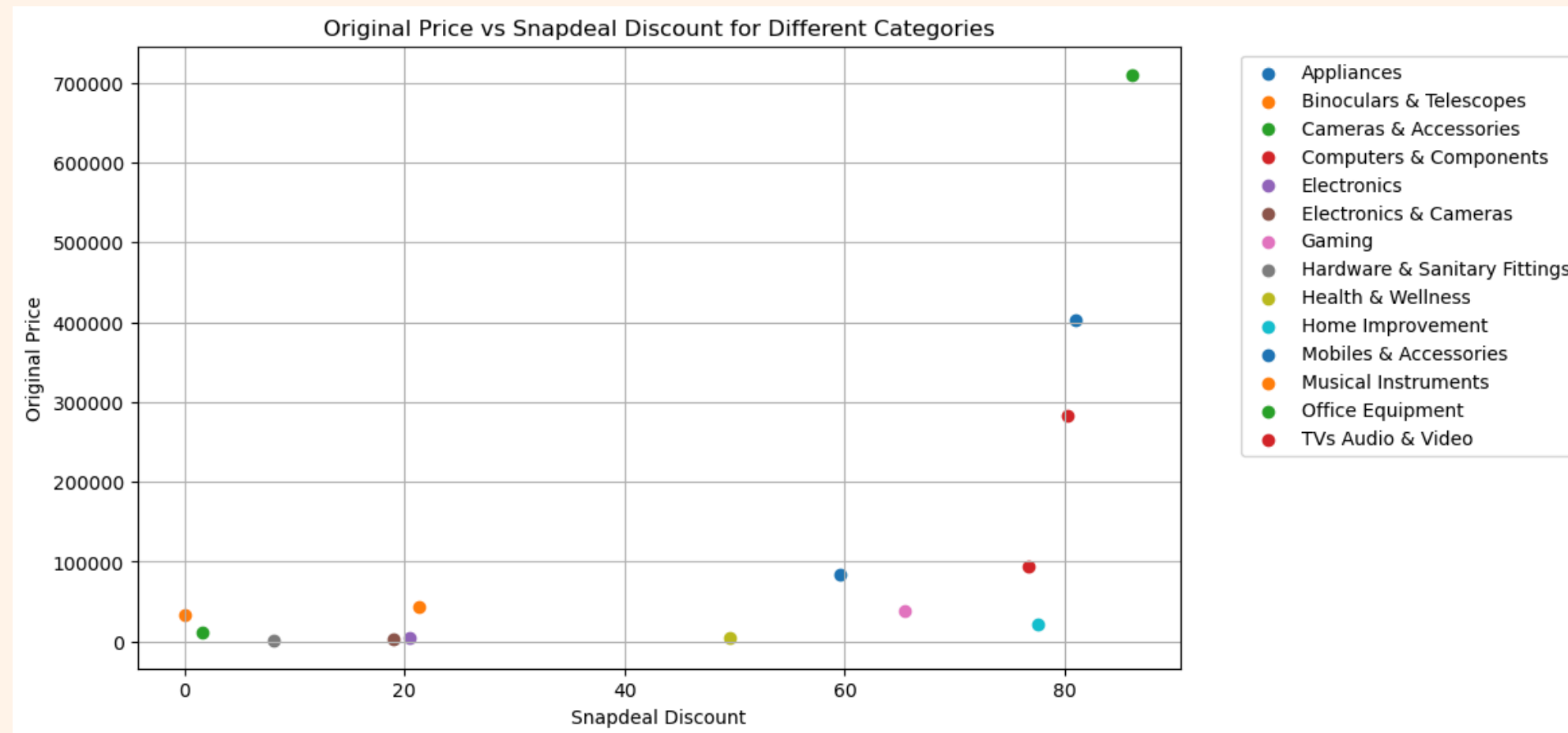
Tabulated the quantity of out-of-stock products across all categories and required sources and plotted a line graph.



HYPOTHESIS

The hypotheses I've formulated are:

- Offering maximum discounts on products with high stock levels may increase sales.
- Providing discounts on products with high prices could also lead to increased sales.



The plots show that my hypothesis were right, and the data aligns with my insights.

INSIGHTS

- ✱ Snapdeal has the highest number of products across every category, indicating a strong product portfolio compared to its competitors.
- ✱ Snapdeal offers lower discounts compared to Paytm. Additionally, in certain specific categories, Amazon and Flipkart also provide higher discounts than Snapdeal.
- ✱ Snapdeal generally maintains the highest stock levels and lowest out-of-stock levels across most product categories, indicating strong inventory management.

RECOMMENDATIONS

- ✱ To enhance customer attraction and engagement, Snapdeal can consider expanding its product offerings by introducing new categories while maintaining its leading position in terms of product variety.
- ✱ To maintain competitiveness in the market, Snapdeal should implement effective pricing strategies like Dynamic Pricing, Category-Specific Pricing and launch Promotional Offers
- ✱ Practices like Demand Forecasting, Strategic Product Assortment etc can be implemented to optimize stock levels and enhance competitiveness.



THANK YOU!

Any questions?

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