

Amazon Electronics Sample Analysis

A Data Analysis that will help you make better data driven decisions when buying products and selling them on Amazon

Key measures

- 1. Average selling **price** for the products in the sample - \$7
- 2. Average **weight** of the products - **150g**
 - a. **most of the products in the sample are very light**
 - b. \Rightarrow we **won't have high shipping and amazon fees**
- 3. Average **rating** of the products - **4.0**

Distribution of Price and Weight

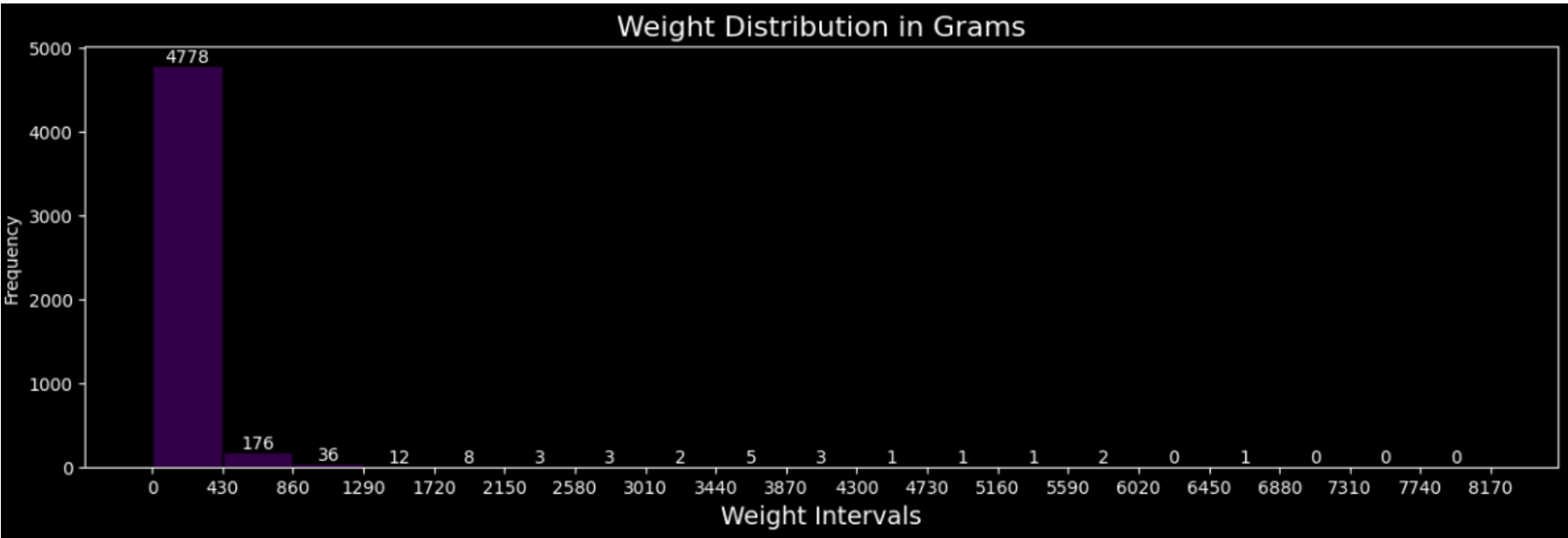
1. Sales Price Distribution

- a. Most of the products in the sample are in the range \$0-\$6
- b. They may be cheap, but it'll be easier to have high margins



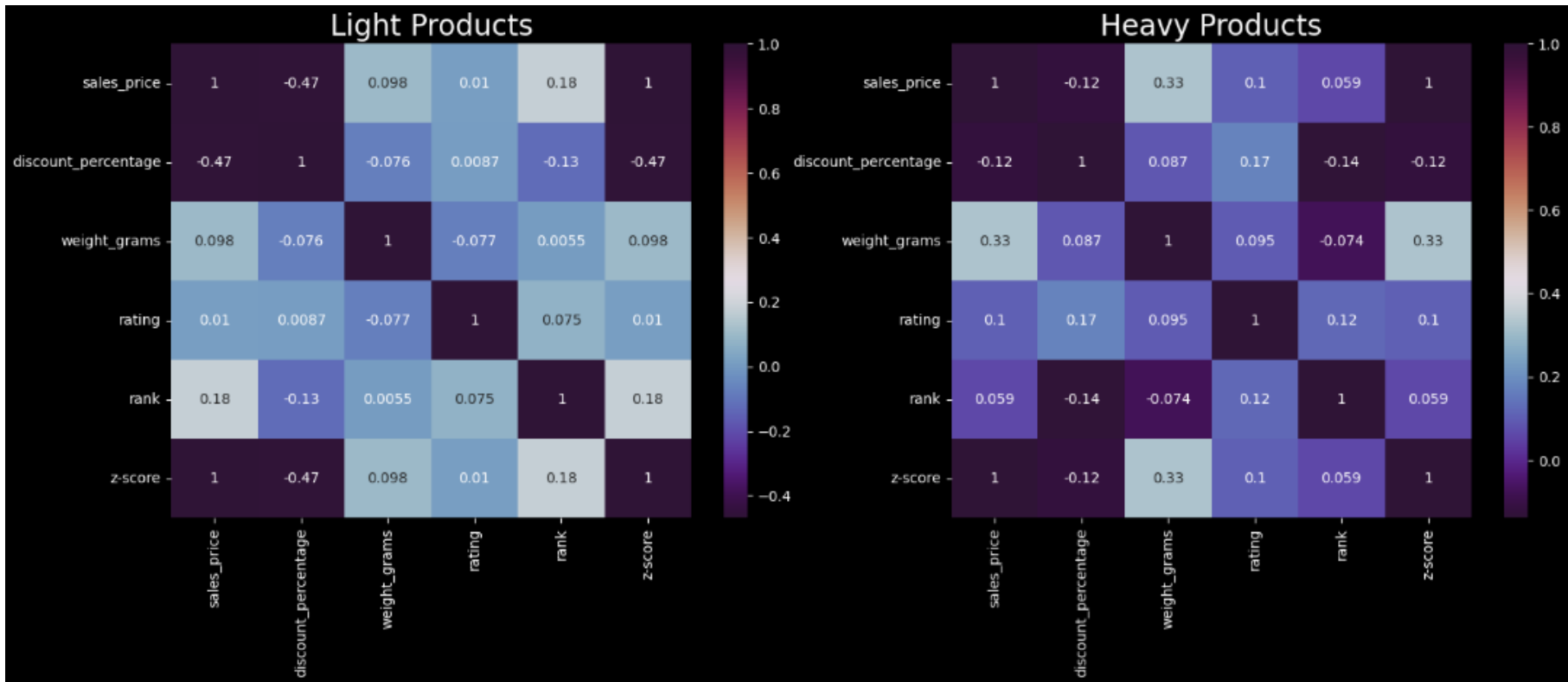
2. Weight Distribution

- a. **95% of the products in the sample are between 0 and 430 grams**
- b. Easier to store them in a warehouse as they won't take much space
- c. We'll divide the sample into *Light* and *Heavy* products and analyze and compare them **separately**

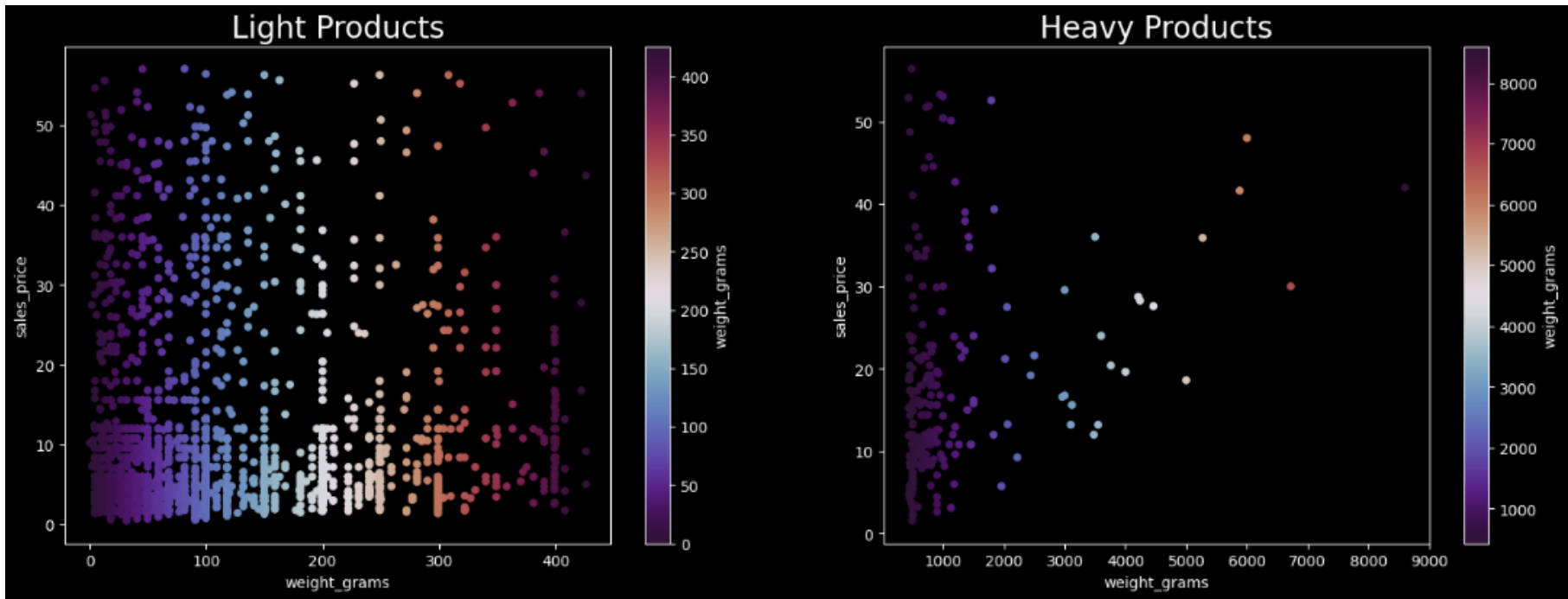


Exploring the Relationships between the different features

- 1. Comparing the relationships of light and heavy products
 - a. Insights about the relationships:
 - The **heavier** products have **stronger relationships** between the different value pairs
 - The values in the light products sample are mostly independent from one another
 - There's a **high negative relationship between the discount % and the price** in the **light** products sample
 - ⇒ **The higher the price, the lower the discount and the other way around**
 - The highest correlation is between the sales price and weight of the heavy products



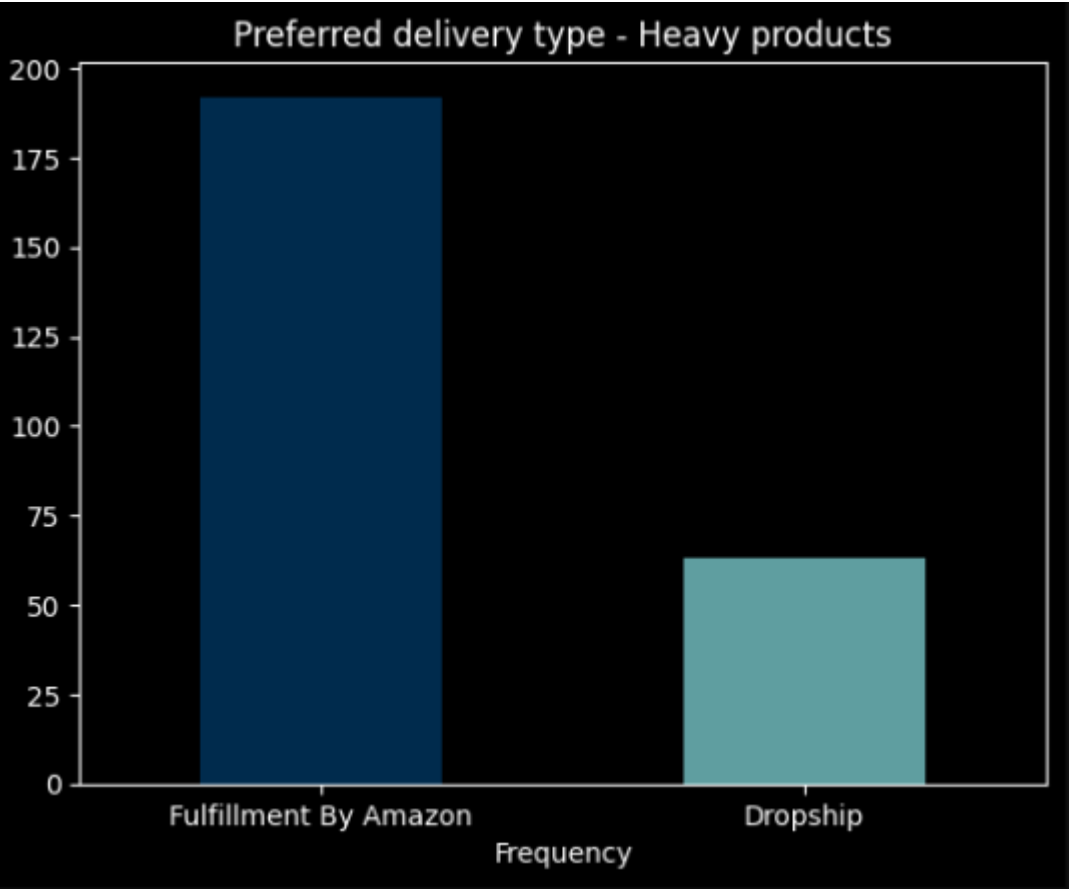
- 2. Compare the relationship between sales price and weight of the light and heavy products
 - a. There **isn't an obvious relationship between the price and the weight** of the light and heavy products.
 - b. The only apparent **positive** relationship is between the price and weight of the **heaviest** products.



Preferred delivery type for the heavy products - DS or FBA is on the BB

75% of the heavy products are sold on Amazon using the FBA delivery type

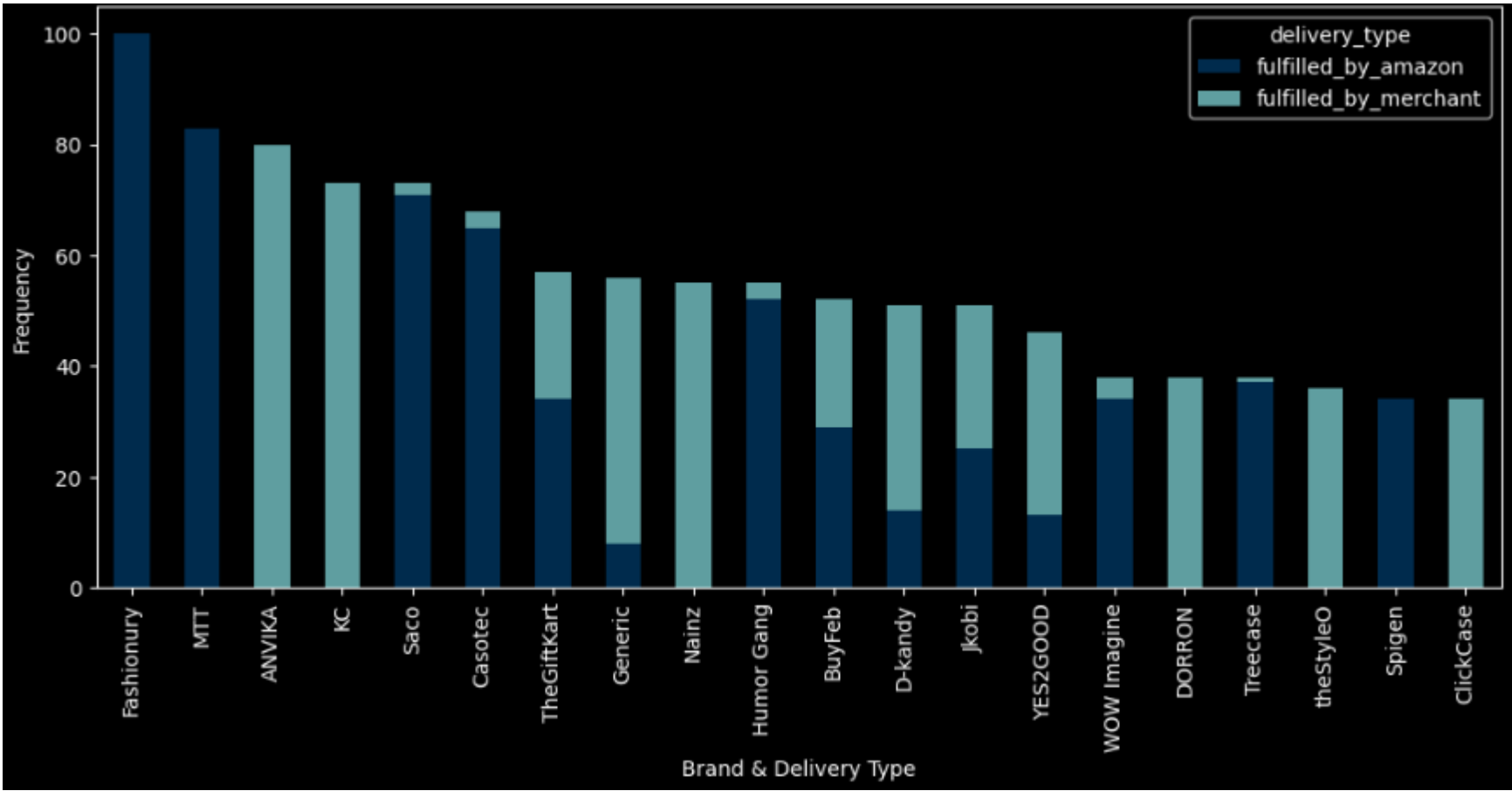
delivery_type	count	cum_fr_%
fulfilled_by_amazon	192	75.294118
fulfilled_by_merchant	63	100.000000



Conclusions:

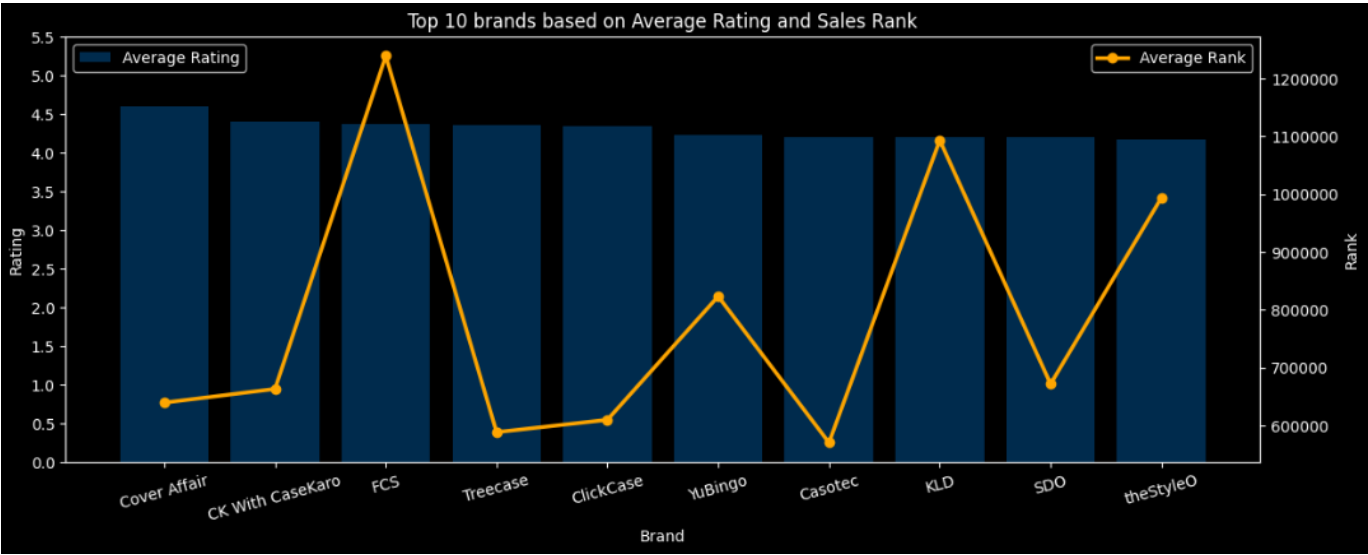
- It'll be a better decision to **send heavier products to FBA**
 - most of the **buyboxes are taken by the FBA sellers** ⇒ higher chance to sell more pieces in FBA
 - heavier products won't take so much space in the warehouse
- It's harder to compete with FBA sellers if you're using the dropship delivery type
 - the **FBA sellers that keep low prices have more priority** than dropship sellers, which may **slow down the volume of products we're selling**

Top 20 Brands with the most products and their preferred Delivery Types



Top 10 brands based on average rating, average rank and average number of products

brand	asin	rating	rank
Cover Affair	33	4.596970	639318
CK With CaseKaro	22	4.404545	663092
FCS	18	4.372222	1238981
Treecase	38	4.363158	588316
ClickCase	34	4.341176	609723
YuBingo	19	4.226316	823195
Casotec	68	4.204412	570209
KLD	19	4.200000	1093142
SDO	28	4.200000	671642
theStyleO	36	4.166667	993736

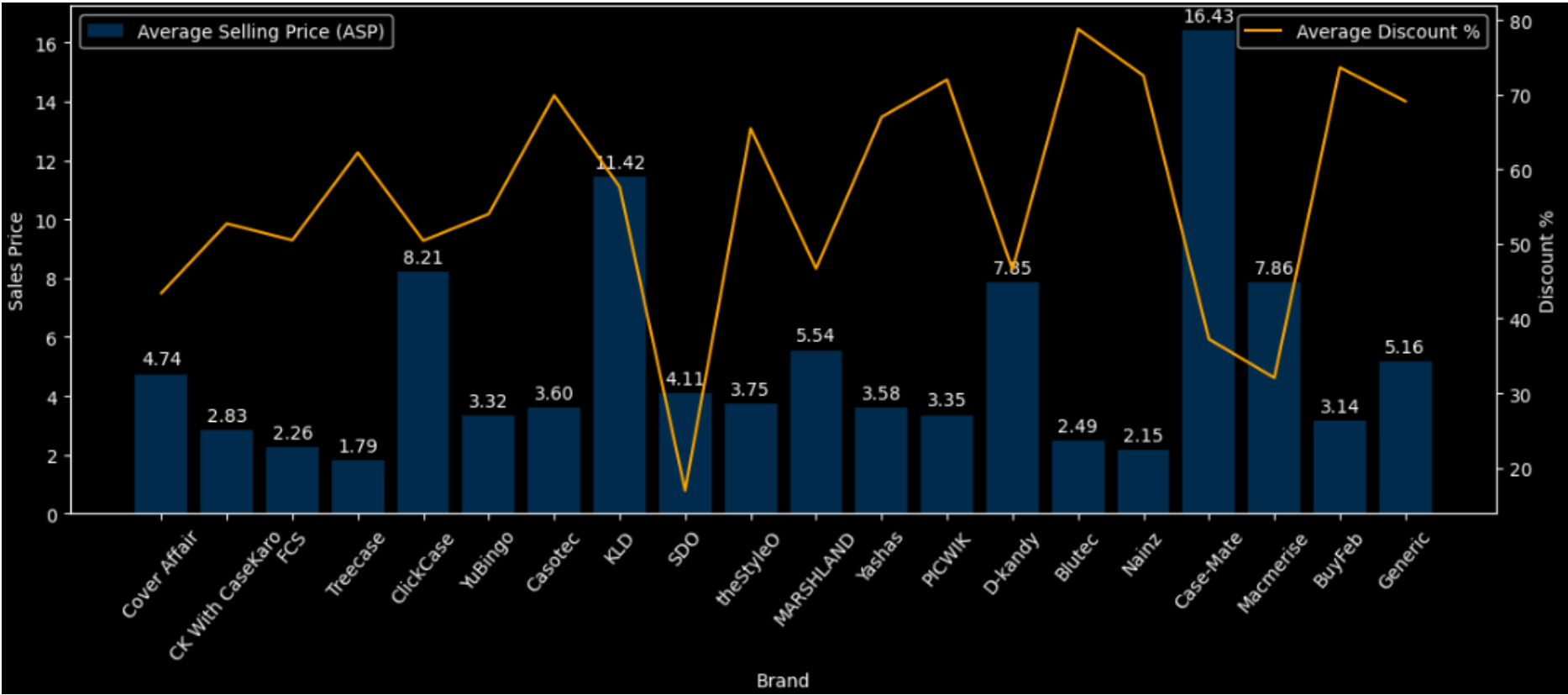


Insights:

- The **rating** and **the number of listings** that a brand has on Amazon, **may not be enough** to decide wether or not you should try selling those products
- The better approach will be to focus on products from the top 10 brands that have **high average rating and low average rank**
- **Example** - The FCS brand has a high average rating but their products have very high rank, so the products may not be that popular and may not be selling as much as the other brands from the top 10
- **Suggestion** - Focus on the first 4 brands(except for FCS) because they have the highest chance of having more sales, thanks to their good average rating and rank

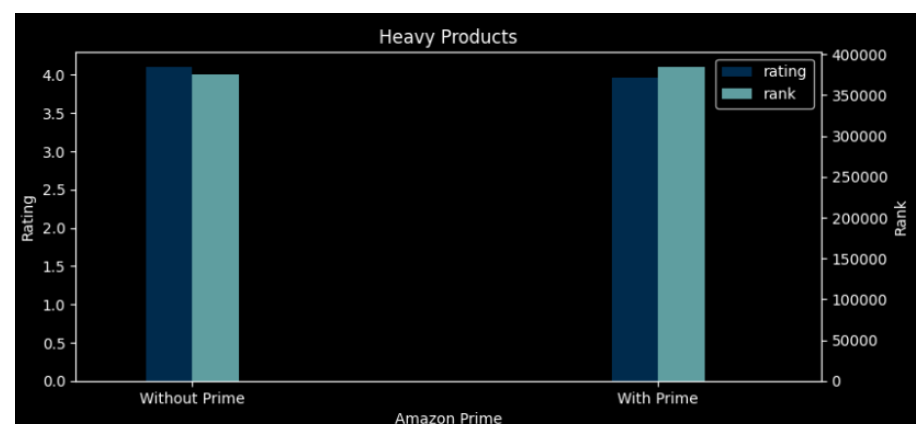
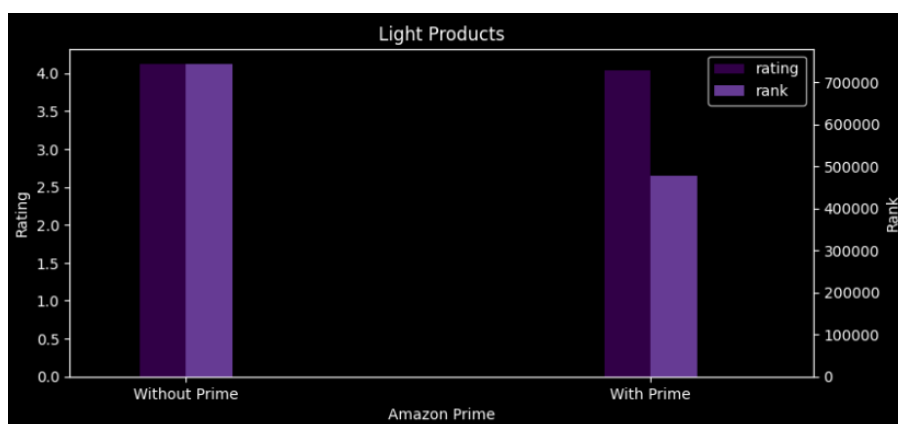
Average Selling Price and Discount of the Top 20 Brands based on their Average Rating

Overall, in the light products sample, the products have very low prices but also very high discount percentage



Comparison between average rating and rank of listings with or without Amazon Prime - Light and Heavy Products

Is the rating higher for products that have prime or not?

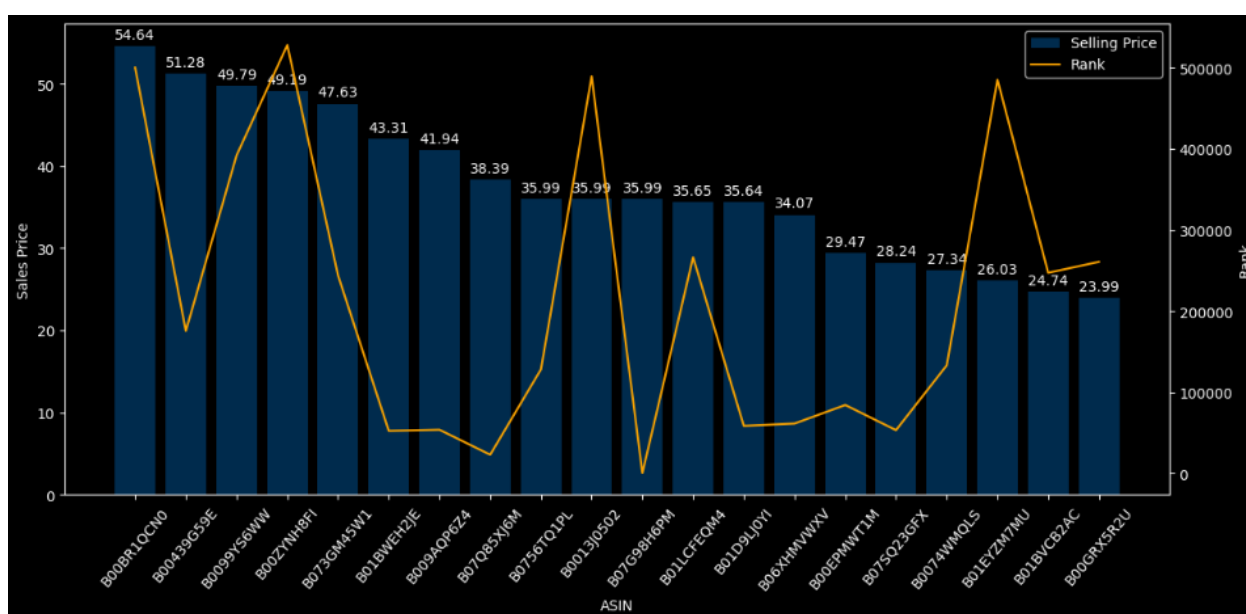


Insights about Prime:

- There isn't a significant difference between the average rating with or without Prime for both heavy and light products
- However, there's a significant difference between the **average rank of the light products**
 - Listings that have **Prime** have much **lower Rank** in comparison with listings without it
 - ⇒ Listings with Prime have **much more exposure and possibly sell more**

Top 20 light products to sell on Amazon from the sample

Which are the most expensive products that are light and have rating higher than 4.5?

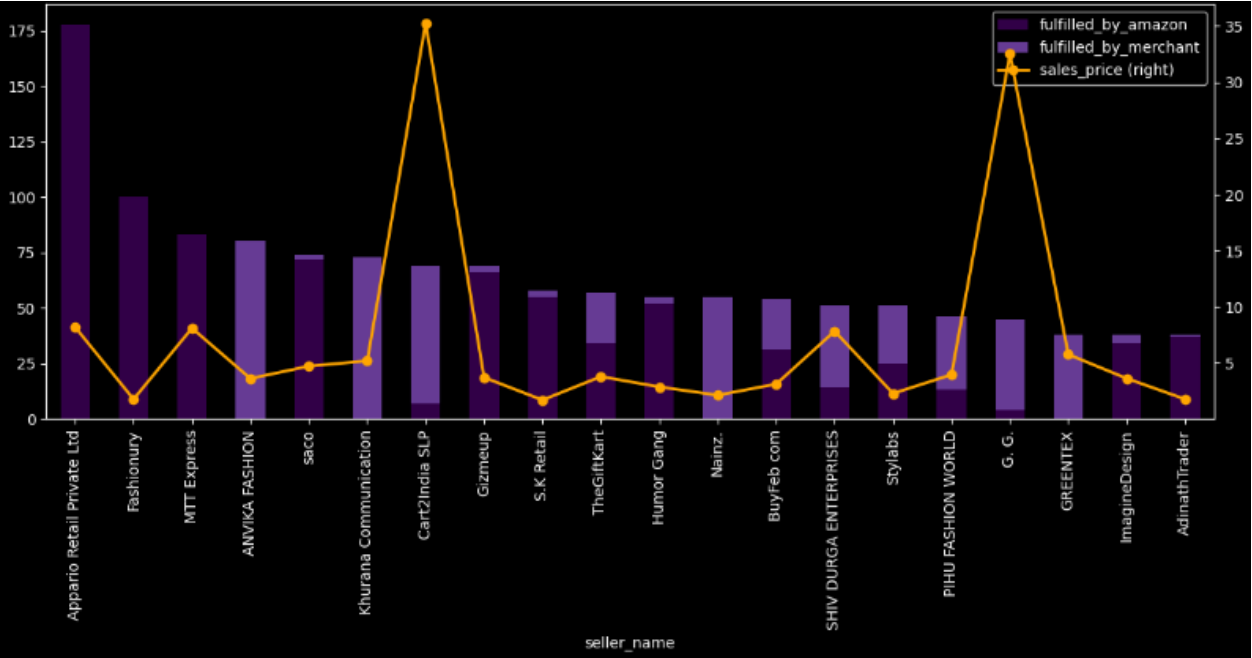


- The price range from \$24 to \$54 is good for light products because you **won't have high shipping fees** as well as Amazon fees
 - **more room for profit**
 - **easier to get the buyboxes** (more room on the price/cost)
- The products have very high rating and higher than the average rank for the sample
 - **low-risk items**
- **Suggestion** - Focus on the Amazon listings with the lowest rank, as there's more chance for them to have sales

Using the top 20 table and chart, we can place test orders for the following models as they are very **stable in terms of price, weight, rating and rank**

	asin	product_name	sales_price	discount_percentage	delivery_type	rank
0	B00BR1QCN0	Blackbeery Leather Flip Shell for BlackBerry Q...	54.64	9	fulfilled_by_merchant	500162
1	B00439G59E	Targus PA248U5 Laptop Chill Mat (Black)	51.28	14	fulfilled_by_merchant	175630
2	B0099YS6WW	Sony ADPAMA Shoe Adapter (Black)	49.79	8	fulfilled_by_merchant	392004
3	B00ZYNH8FI	SanDisk Ultra Micro SD UHS-I 200GB Flash Memor...	49.19	18	fulfilled_by_merchant	528046
4	B073GM45W1	elago AirPods Leather Case [Brown] - [Genuine ...	47.63	20	fulfilled_by_merchant	244171
5	B01BWEH2JE	ProCase Plastic Leather Stand Folio Case Cover...	43.31	20	fulfilled_by_merchant	52476
6	B009AQP6Z4	6 UnitÃ©s Oral-B Precision Clean Eb20For Elect...	41.94	72	fulfilled_by_merchant	53810
7	B07Q85XJ6M	SoundPEATS Bluetooth Headphones Wireless Earbu...	38.39	18	fulfilled_by_amazon	23024
8	B0756TQ1PL	Flip Cover Case for Apple iPad Pro 10.5 (2017)...	35.99	14	fulfilled_by_merchant	128207
9	B0013J0502	Giotto's AA1903 Rocket Air Blaster Large-Red	35.99	40	fulfilled_by_merchant	489375
10	B07G98H6PM	Logitech G304 Lightspeed Wireless Gaming Mouse...	35.99	21	fulfilled_by_amazon	412
11	B01LCFEQM4	Car Charger RAVPower 54W 4-Port USB Car Charge...	35.65	19	fulfilled_by_merchant	266434
12	B01D9LJ0YI	ProCase Wallet Sleeve Case for 9.7 inch iPad P...	35.64	66	fulfilled_by_merchant	58559
13	B06XHMVWXV	HP 19V 2.31A 45W Ac Adapter/Power Cord Supply ...	34.07	20	fulfilled_by_merchant	61461
14	B00EPMWT1M	Digigear SD SDHC SDXC to CF tpe II CF Ultimat...	29.47	43	fulfilled_by_merchant	84328
15	B07SQ23GFX	SUPCASE Silicone Protective Case Cover for App...	28.24	23	fulfilled_by_merchant	53313
16	B0074WMQLS	RAM Mounts RAM Composite Double Socket Arm for...	27.34	35	fulfilled_by_merchant	133236
17	B01EYZM7MU	Acestar Vinyl LP Record Player Turntable Cartr...	26.03	20	fulfilled_by_merchant	485345
18	B01BVCB2AC	Click Car CCM660301 Maserati Gran Turismo Wire...	24.74	65	fulfilled_by_merchant	247298
19	B00GRX5R2U	CAIUL NodArtisan Instax Brown Vintage PU Leath...	23.99	0	fulfilled_by_merchant	260803

Top 20 Sellers with the most products and their preferred Delivery Types



- The **Top 3 Sellers** prefer only **FBA** as **their shipping type**
- Most of the seller in the top 20 have **between 50 and 75 products** on Amazon
- There are only 2 sellers that sell products over \$30, all others have an ASP in the range \$2-\$10
- Suggestion - For selling products using **dropship delivery**, it may be a good idea to check the types of products that ANVIKA FASHION, Khurana Communication and Nainz are selling because there may be a **higher chance of getting the DS buyboxes on these listings**, which will lead to more sales

The most frequently used Meta Keywords for the light products listings

