

Price Analysis:

Our price analysis will be broken into 2 different perspectives. One perspective with “Off-Brands” included in the data dashboard brand selection and another using just our name brands. This is because our Off-Brands include many brands that are not well known and had little to no purchases in the HTML web pages.

- Calculate the average, minimum, and maximum prices of running shoes.

Including Off-brand products

AVG price \$84.29, median \$74.95, minimum \$9.98 from an off-brand product, and maximum \$291.00 from a Hoka One product. Outliers like Hoka-One are priced so high because they often are looked at as not only a performance and running shoe but a fashion-forward shoe brand. For example, the Jordan brand of Nike basketball shoes is marketed with a similar concept.

Excluding Off-brand products

AVG price \$86.58, median \$74.95, minimum \$22.39 from a Saucony product, and maximum \$291.00 from a Hoka One product. AVG price increased by \$2.29, this is certainly due to a lack of cheap off-brand products skewing the AVG price lower. Looking at our minimum product price we see the same, \$22.39 with a Saucony product up from \$9.98 with our off-brand products included in brand selection.



- Exploring the distribution of prices to identify the price range that attracts the most buyers based on Purchases in the past month.

The range of prices that attract the most buyers is an AVG product price from \$68.26 - \$122.45, products landing in between with range all had more than 1000 purchases in the past month. From lowest average to highest average price, this range includes: Under Armour \$68.26, Adidas \$75.93, Off-brands \$80.21, Asics \$80.80, New Balance \$81.54, Nike \$107.30, Brooks \$111.54, and finally ALTRA at \$122.45 average price.



Main Takeaways

PUMA, Reebok, Saucony, and Skechers all had an average of <\$70 yet didn't even break 1000 purchases over one month. Nike barely broke 1000 purchases (1050 total) in one month but had a product price above the average of \$84.29 at \$107.30 and still had fewer purchases than ALTRA which has a higher average product price than Nike at \$122.45.

Popularity Analysis:

- Identify the highest and lowest-rated brands based on the star ratings.

Puma had the lowest star rating at 3.42 and Brooks with the highest at a 4.52 average rating per product. Although most of each brand's products fell between 3.33 - 4.69.

- Is there a correlation between star rating, and total reviews? Price? Purchases?

Though Off-brands had the highest amount of reviews 1,000,000+, with 500,000 more reviews than any other brand their AVG rating is only 3.69 which is below the average of 3.95 across all products. Off-brands still had an average price of \$80.21 falling in a price range where brands had the most purchases. This tells us that even though Off-Brands is 4th for most purchases, has the most reviews, and an acceptable average price — Off-brands still had a rating below the average, indicating many unpopular products.

Brooks, Adidas, ASICS, and Under Armour products had the best ratings with the most purchases, reviews, and affordable average prices. Though Mizuno and ALTRA had a much higher average price, their ratings were still acceptable but a less affordable price made for fewer total purchases.

Main Takeaways

- Hoke One being a premium brand had the least amount of purchases and a below average rating of 3.90.
- Adidas, ASICS, Under Armour, and Brooks had more reviews per product on average and had more purchases all coupled with a well above average rating.
- New Balance had a below-average rating of 3.75 yet came 4th in total reviews and #1 in total products offered (off-brands excluded).

Demographic Analysis:

Just like our price analysis, our demographic analysis will be broken into 2 different perspectives. One perspective with “Off-Brands” included in the data dashboard brand selection and another using just our name brands. This is because our Off-Brands include a lot of brands that are not well known and had little to no purchases on the HTML web pages.

- Analyze the purchases and product distribution between men and women.

Excluding off-brand products

23,000 total purchases of men’s and women’s products, 11,000 (47.83%) of these purchases are men’s and 12,000 (57.17%) are women’s. Although, with 1714 total products 880 are men’s and only 853 are women’s. Men’s shoes had fewer purchases but more products, and women’s shoes had more purchases but fewer products. With 13 brands selected, 6/13 were women-dominated with purchases (Mizuno, Brooks, Adidas, Hoka One, PUMA, and ALTRA). 7/13 had purchases dominated by men’s products (ASICS, Under Armour, New Balance, Nike, Saucony, Skechers, and Reebok).

Including off-brand products

27,000 total purchases and 2,677 products amongst men’s and women’s products, with 14,000 purchases (51.85%) as men’s and 1,365 (50.98%) of products being men’s. Women’s products

had 13,000 purchases (48.15%) and 1,335 products (49.02%) total. Mizuno, Brooks, Adidas, Hoka One, PUMA, and ALTRA all had more women's products than men's making 6/14 of our brand selections women-dominated - less than half of brands had women-dominated purchases.

Main Takeaways

Including or excluding off-brand products in our brand selection women's products dominated in purchases yet had even fewer product offerings than men's. Brands like Adidas, Brooks, ALTRA, Hoka One, Mizuno, and PUMA (with ASICS at a near 50/50 men's and women's) all had more women's products than men's.

Women's



Men's

