Product Analysis: Insights and Recommendations

1. What the Data Tells Us

This analysis explores product data to identify trends in pricing, demographics, and product attributes. The data is sourced from two datasets:

1. Product Details Dataset: Contains 12,491 entries without missing values.

2. Products Catalog Dataset: Contains 12,491 entries with 894 missing values in the 'PrimaryColor' column, replaced with 'Unknown'.

The datasets were merged on 'ProductID' to create a comprehensive dataset for analysis.
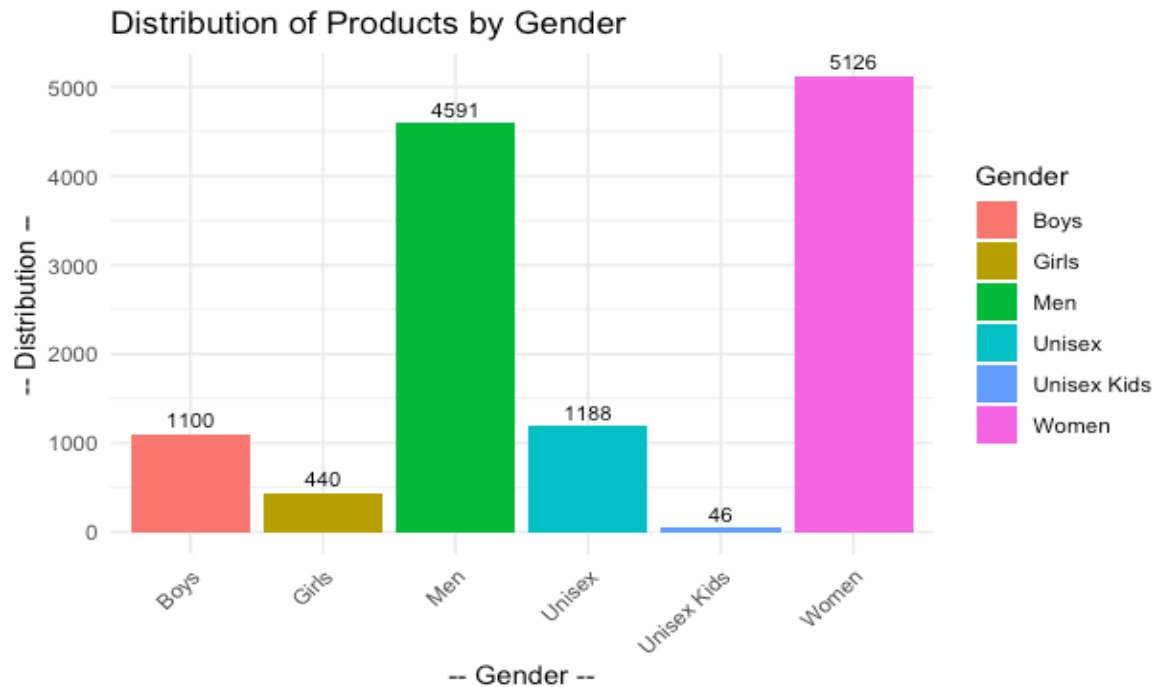
2. Quick Takeaways from the Analysis

How Prices are Distributed

Most products are priced below ₹2,000, while a smaller subset exceeds ₹10,000, likely indicating premium items.
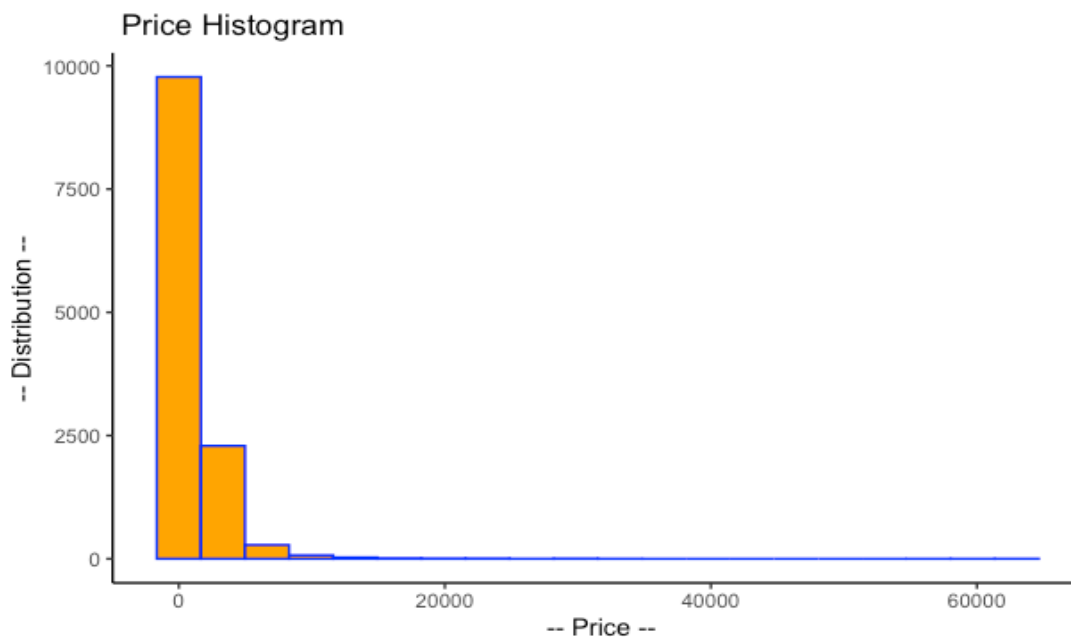
Who are These Products For?

The majority of products are designed for Men and Women, with fewer options for Unisex and Kids' categories.

Distribution of Products by Gender

Does Gender Influence Pricing?

Unisex products have the highest average price, followed by Men's and Women's products. Products for kids are generally more affordable.
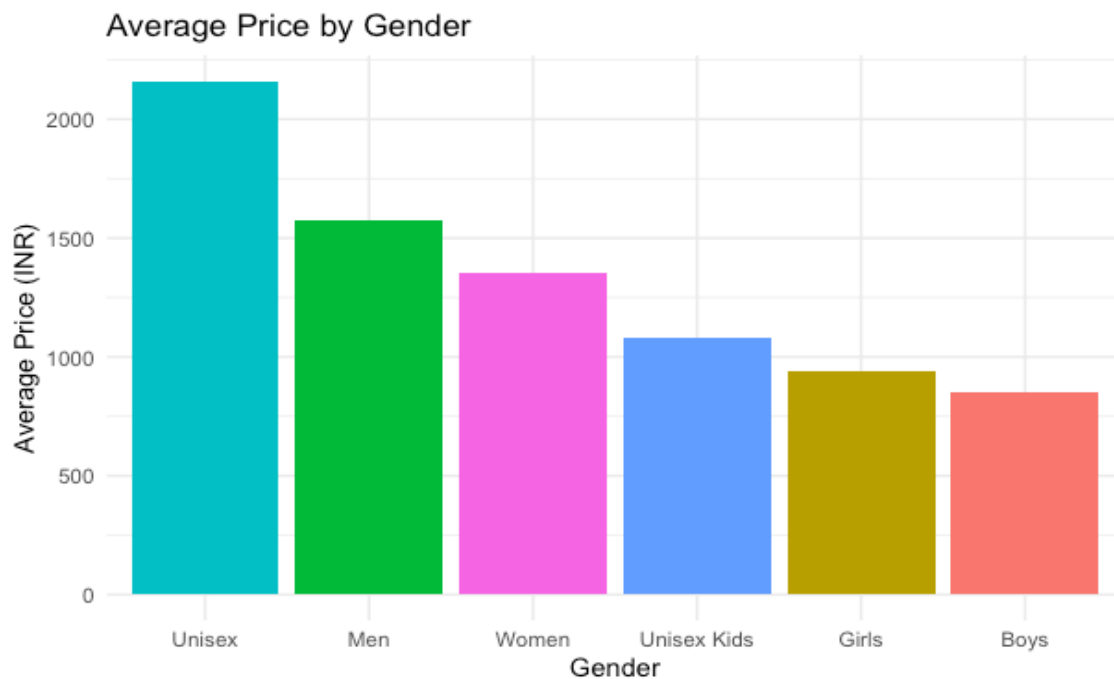
Average Price by Gender

Products with more images are generally higher priced, though the correlation is weak (0.127).
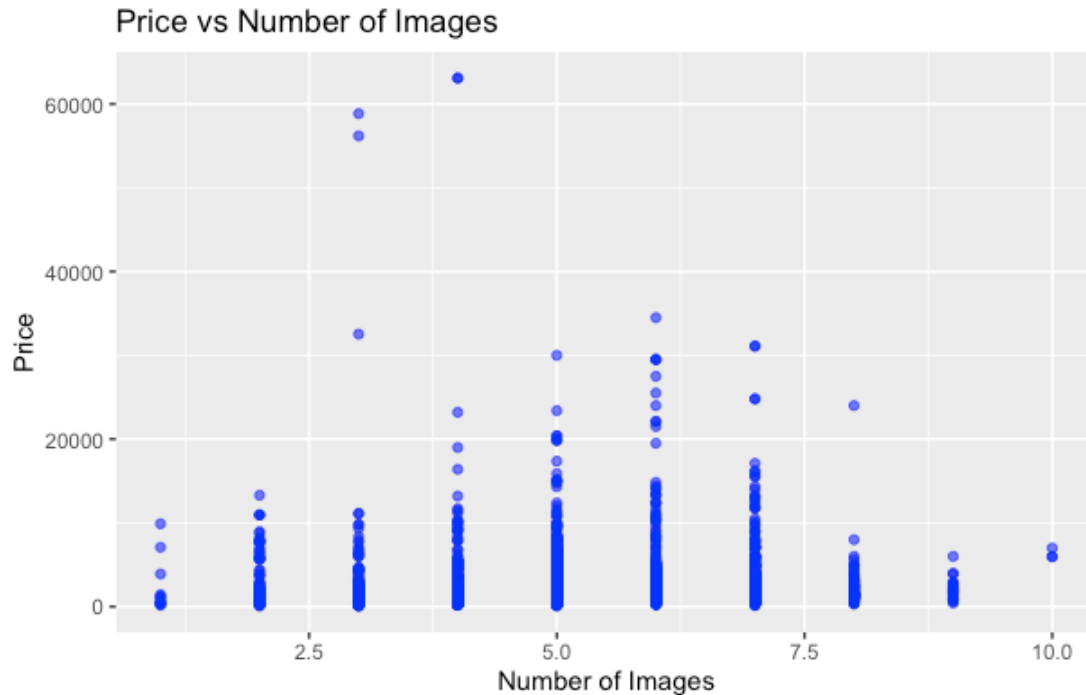
3. What We Can Do with These Insights

Based on the analysis, the following recommendations are proposed:

1. Charge premium prices for Black, Blue, and Beige products.

2. Expand affordable options in Yellow and Pink to attract budget-conscious customers.

3. Develop a broader range of products for Unisex and Kids' categories.

4. Standardize image counts and resolve data inconsistencies for a better customer experience.

4. Wrapping It Up

This analysis highlights actionable insights into pricing trends, color preferences, and target demographics. Businesses can leverage these findings to optimize strategies, improve profitability, and better align with customer needs.