

# Myntra 168K Product Dataset Analysis

## Project Overview

This project involved a comprehensive analysis of Myntra's extensive dataset, comprising 168,000 products. The primary objective was to uncover significant trends and actionable insights to inform strategic decisions in marketing, product development, and pricing.

## Key Insights

### 1. Marked Price vs. Discounted Price for Brands

The top 5 brands with the highest marked vs. discounted price differences are:

- **Dyson**
- **Earnshaw**
- **Apple**
- **Swatika**
- **Swiss Beauty**

**Insight:** These brands employ substantial discounts, indicating a strategy of high initial markups followed by significant promotional pricing to drive sales.

### 2. Average Rating Comparison

The brand with the highest average rating is:

- **HRX by Hrithik Roshan**

**Insight:** This brand shows exceptional customer satisfaction, likely due to its focus on quality and customer experience.

### 3. Marked Price vs. Discounted Price for Products

The top 5 product categories with the highest marked vs. discounted price differences are:

- **Fitness Bands**
- **Smart Watches**
- **Suits**
- **Trolley Bags**
- **Watch Gift Sets**

**Insight:** These categories experience significant discounts, reflecting a competitive market and high consumer demand during sales events.

#### **4. Total Products Made by Each Brand**

The top 5 brands with the most products are:

- **Roadster**
- **Mast and Harbour**
- **DressBerry**
- **Highlander**
- **HRX by Hrithik Roshan**

**Insight:** These brands have a broad product portfolio, catering to diverse consumer preferences and enhancing market reach.

#### **5. Total Products Sold by Each Brand**

The top 5 brands with the highest sales are:

- **Roadster**
- **Maybelline**
- **Biotique**
- **Sassafras**
- **Highlander**

**Insight:** Roadster's dominance in both production and sales highlights its strong market demand and effective distribution strategies.

#### **6. Number of People Who Bought the Product**

The top 5 product categories by the number of purchasers are:

- **T-shirts**
- **Shirts**
- **Dresses**
- **Kurta Sets**
- **Tops**

**Insight:** These categories are wardrobe staples, driving high sales volumes due to their essential nature.

#### **7. Number of Brands Selling These Products**

The top 5 product categories by the number of brands selling them are:

- **T-shirts**
- **Shirts**
- **Dresses**

- **Kurta Sets**
- **Tops**

**Insight:** The competitive landscape for these popular categories is intense, with numerous brands vying for consumer attention.

## Overall Statistics :

The dataset includes detailed information on various aspects such as product IDs, names, brands, ratings, pricing, discounts, and sales figures. Here are the overall stats after the analysis and final dashboard compilation:

- **Unique Products:** 81,507
- **Unique Brands:** 2,371
- **Categories:** 305
- **People:** 18,119,530 engaged customers
- **Average Marked Price:** ₹2,318
- **Average Discounted Price:** ₹1,231
- **Average Rating:** 4.17

## Conclusion

This analysis highlights key trends and insights into the strategies employed by leading brands, consumer preferences, and market dynamics. By leveraging these insights, stakeholders can make informed decisions in pricing, marketing, and product development, ultimately driving business success.

## Repository Structure

- **Data:** Contains the dataset used for the analysis..
- **Dashboard:** Final dashboard visualizing the key insights.
- **Reports:** Detailed reports and summaries of the findings.