

Price vs. Ratings Analysis in the Home Decor & Lifestyle Sector

Project Overview

This project analyzes the relationship between product price and customer ratings in the home decor and lifestyle sector. The objective is to understand whether higher-priced products tend to receive better ratings and how different product categories influence customer preferences.

Dataset Overview

- Price (USD): The selling price of each product
- Rating: The average customer rating (on a scale of 1 to 5)
- Category: Product classification (e.g., Furniture, Lighting, Decor)
- Reviews Count: Number of customer reviews
- Brand & Product Name: Additional product details

Data Analysis & Visualizations

To explore patterns and trends, the following visualizations were created:

- Scatter Plot (Price vs. Rating): Displays the distribution of ratings across different price ranges
- Categorical Hue Plot: Highlights rating variations across product categories
- Interactive Plotly Chart: Provides deeper insights into price-rating relationships with hover details

Key Insights

- No direct correlation between high price and high ratings; some affordable products also received excellent reviews.
- Certain categories tend to have higher ratings regardless of price, indicating strong customer satisfaction.
- Products with a higher number of reviews generally have more stable ratings due to larger customer feedback samples.

Project Link

View the complete analysis here: [🔗 Home_Decor_Data_Analysis.ipynb](#)