Customer behavior Analysis

Exploratory Data Analysis (EDA)

Descriptive Statistics

* Summary
* How Sales are Distributed according to the age ranges (Also considering gender)
* Cloth Sizes distributed according to gender
* Purchasing according to the color
* Analyze the average age of customers and how it varies by gender and location
* Calculate the average rating and see how it varies by category.

Correlation Analysis

Regression Analysis

* Sales Performance Analysis
  + Which product category generates the most sales in each season?
  + What is the relationship between product price and sales volume?
  + Which location has the highest sales, and why?
  + What is the contribution of each product category to total revenue?
* Customer Behavior Analysis
  + Which customer segments are most likely to purchase specific product categories?
    - Age group
    - Gender
    - Size
  + How do customer demographics influence purchasing behavior, such as responsiveness to discounts or promotions?
  + What is the average customer purchase frequency, and how does this vary across different customer segments?
* Discount and Promotion Analysis
  + How do discounts and promotions impact sales for different product categories?
  + What is the best time to offer discounts or promotions for different product categories?
  + Do promotions involving free shipping or bundled offers outperform regular percentage discounts?