

Insights - EDA

1. Total Sales by Region :

- Customers from South America show the highest transaction count, leading the total sales by 6.79%, followed by Europe, Asia and North America, thereby presenting the greatest market potential based on current sales.

2. Category-wise Sales Distribution :

- The Books category has the highest sales value, exceeding 192,000, followed by Electronics closely around 180,000.
- This might imply that expanding the Electronics and Clothing product lines might drive additional sales growth.

3. Monthly Sales Trend

- There is a fluctuation in the month-on-month sales demonstrating a non-linear trend.
- The peak sales happen in July and September.
- The sharp dip in sales in June and October could be an indicator of seasonal factors.
- Sales are high in December and January, which can be attributed to the holiday season.

4. Price vs Quantity Sold by Category

- Quantity sold generally decreases as price increases across all categories.
- Electronics consistently have higher quantity sold compared to other categories, even at higher price points.
- Home Decor items seem to be priced lower than Electronics and Books, with a concentration of sales in the lower price range.

5. Price Distribution by Category

- Electronics show a higher median price as compared to others, with a compact interquartile range, suggesting price variability.
- Home Decor and Books exhibit similar median prices, but Books exhibit greater price spread.
- Clothing has the lowest median price and wider range, indicating variability.

6. Top 10 Products by Total Sales

- ActiveWear Smartwatch is the top-selling product. Its total value represents approximately 19.1% of the combined total value of the top 10 products.
- ActiveWear Jacket, Rug, and Cookware Set also rank highly, showcasing the popularity of the ActiveWear product line. Collectively, these four ActiveWear products contribute approximately 37.1% to the combined total value.
- There is a considerable difference between the top-selling product (ActiveWear Smartwatch) and the lowest (ActiveWear Cookware Set). The Smartwatch's total value is more than 2 times that of the Cookware Set.

