

EDA Insights Report

1. Customer Distribution by Region:

- The customer distribution is pretty even across the regions with South America having the highest customer count.
- This could guide region-specific marketing strategies.

2. Product Categories:

- Products are evenly distributed across categories, with books having the highest count.
- Identifying underperforming categories can help optimize inventory.

3. Total Transaction Value by Region:

- Regions like South America contribute significantly more to total sales than other regions.
- Regions might account for most of the revenue, indicating high-priority markets.

4. Top Products by Sales Value:

- Products like ActiveWear Smartwatch has the highest sales compared to other products.
- These top sellers could be leveraged for promotions, bundling, or targeted advertising.

5. Transaction and Product Pricing Insights:

- Average product prices are around \$267.
- Average transaction value is \$690.
- Pricing adjustments or discounts could optimize revenue further.

6. Sales Trends Over Time:

- Sales are the highest in months like January, May, July, October with July being the highest and November being the lowest for the year 2024.
- Monthly sales analysis reveals significant variability in transaction values over time, indicating potential seasonality in purchasing behavior. Peaks in sales align with specific months, suggesting periodic high-demand events, possibly influenced by marketing campaigns, holidays, or product launches. Understanding these trends can help optimize inventory management and targeted promotions.

7. Top-Selling Products:

- Top selling products most include electronics with TechPro Headphones being the highest.

- Focused marketing on these high-performing products or bundling them with lower-performing items could boost overall sales.

8. Customer Signup Trends:

- Customer signup trends highlight specific periods of high activity, possibly linked to promotional campaigns or new product launches.
- A clear uptick in signups during certain months suggests the effectiveness of seasonal or campaign-driven marketing strategies.
- Optimizing campaign timings based on these trends can drive customer acquisition.

9. Regional Sales Performance:

- Regional Sales Performance was the highest in South America and least in Asia and North America.
- Expanding efforts in underperforming regions might unlock growth potential, while maintaining focus on top-performing regions ensures steady revenue.

10. Category-Wise Revenue Distribution:

- Books and Electronics have the highest total revenue and home décor being the least.
- Investing in popular categories and reassessing pricing, marketing, or product development strategies for underperforming categories can help balance the revenue portfolio.