

## **EDA Report:**

### **Observations**

1. South America Leads in Customer Count
2. Balanced Distribution Across Europe, North America, and Asia regions.
3. ActiveWear Smartwatch has the highest sales in terms of quantity, making it the most popular product among customers.
4. SoundWave Headphones and HomeSense Desk Lamp closely follow in sales, indicating strong demand for tech and home-related items.
5. The sales distribution among the top 10 products is relatively even, with no extreme outliers.
6. The majority of the top-selling products are either tech gadgets or utility-focused items.
7. The highest sales peak occurs in July, indicating this is the busiest month for revenue generation.
8. A noticeable dip in sales is observed in June and December, marking periods of lower revenue.
9. The start of the year (January) begins with strong sales, followed by a slight decline in subsequent months.
10. There's a sharp recovery in November, suggesting the start of holiday shopping, with December improving compared to October.
11. Electronics dominance suggests a high consumer demand for tech products and/or higher price points per item
12. Books' strong performance indicates a solid customer base for reading materials, possibly due to competitive pricing or high purchase frequency
13. The relatively narrow revenue spread (approximately \$50,000) between highest and lowest performing categories suggests balanced category management

### **Analysis**

1. Market Focus: The company may have a strong presence in South America compared to other regions.
2. Marketing Opportunity: The company could capitalize on the popularity of tech gadgets like the Smartwatch and Headphones by bundling them with complementary products to boost sales.

3. Expanding the product line in the tech and home accessory categories could further enhance sales.
4. While tech dominates, items like Cookbooks and Rugs suggest demand in lifestyle categories, which can be leveraged for cross-selling opportunities.
5. Seasonal Trends: The peak in July could be driven by seasonal promotions, events, or product launches.
6. Low-Performance Months: June and December need focused marketing efforts, like discounts or loyalty campaigns, to attract more customers.
7. End-of-Year Opportunities: The upward trend in November and December aligns with holiday shopping. This period is crucial for maximizing revenue through aggressive campaigns and targeted promotions.
8. Sales Planning: Monthly patterns can help in inventory management and marketing resource allocation. For instance, higher inventory should be maintained in July, while leaner inventory might suffice in June.
9. The store maintains a fairly balanced revenue distribution across categories, indicating successful diversification
10. No single category severely underperforms, suggesting effective inventory and pricing strategies across all departments
11. Electronics could be considered the flagship category for the business, possibly driving store traffic and major sales events##### Observations:
12. Initial decline from 2022 to 2023. Followed by a sharp upward trend from 2023 to 2024.
13. In year 2022-2023 signups roughly decline by 11%
14. In year 2023-2024 recovery with approximately 37% growth is noted.
15. The recovery and growth in 2024 suggests successful customer acquisition strategies
16. The strong upward trajectory in 2024 indicates robust business health and effective customer acquisition