

Zeotap Data Science Internship

Assignment Task 1: Business Insights

1. Rise of Aesthetics Market in North America:

The purchasing behaviour in **North America** for the Home Decor category indicates a preference for decorative items such as **Wall Art** and **Vases**, as opposed to primarily utilitarian products like cookware or rugs, which dominate in other regions.

This trend suggests that customers in North America value aesthetics and interior decor enhancement over purely functional items.

Actionable Recommendation: Focus on Decorative Products, Increase the availability of decorative items like Wall Art, Vases, and similar high-demand products in North America.

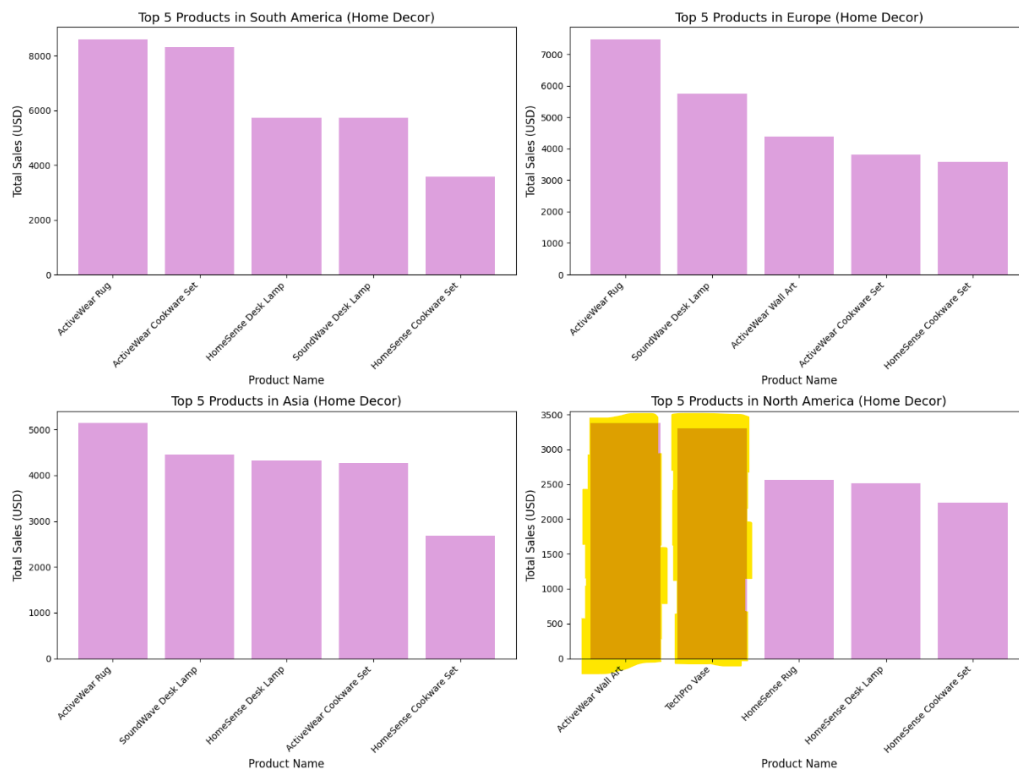


Fig 1. Top 5 Products of Home Décor category by sales in each region. Focus on yellow highlighted region to notice high sales of aesthetic based products like Wall Art and Vase in North America

2. Books are the best gifts:

The Books category experiences a noticeable drop in sales during the early holiday season (October to November), which is typically a high-consumption period for other categories. This represents a missed opportunity to **leverage the holiday gifting culture to boost book sales**.

Actionable Recommendation: Launch targeted holiday promotions, such as discounts on popular titles or gift bundles, to encourage customers to consider books as holiday gifts.

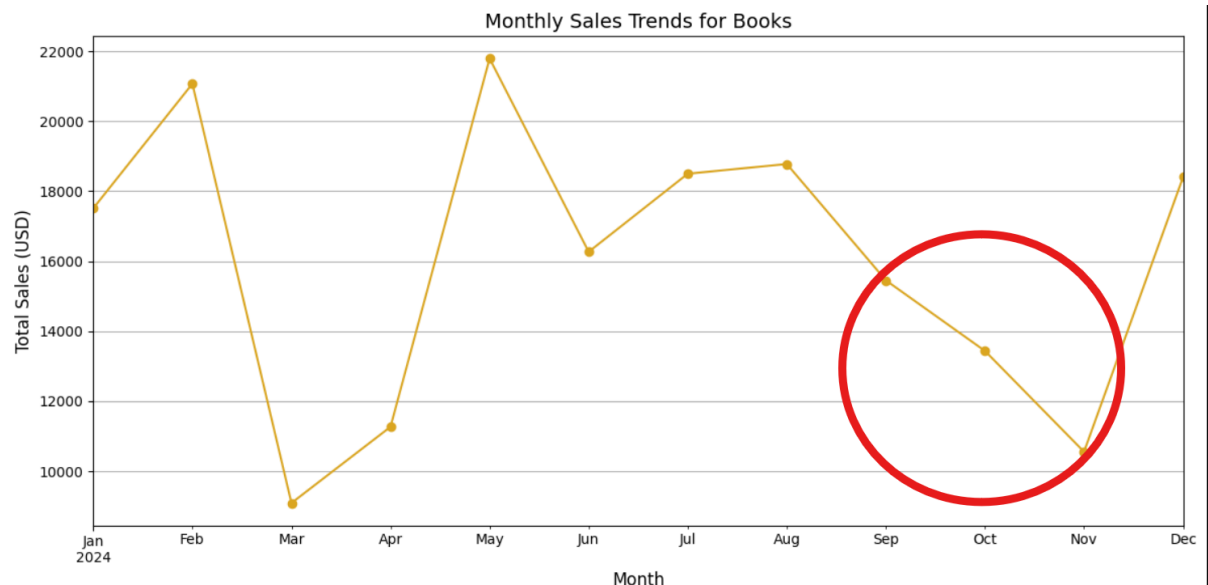


Fig 2. Monthly Sales Trend for Books, notice the red outlined circle for drop in sales consistently from September to November which marks early festive month in most regions

3. Summers of Asia:

The sales trend for Clothing in Asia highlights a significant drop during the summer months, despite the region experiencing some of the highest average temperatures globally.

Additionally, winter clothing items such as **sweaters and jackets outperform summer items like T-shirts**, suggesting a mismatch between product offerings and seasonal demands.

Actionable Recommendations: Seasonal Product Adjustments: Increase the availability and promotion of summer-friendly clothing (e.g., T-shirts, shorts) during the summer months to better align with the climate and potential demand.



Fig 3. Sales Trend in Asia, focus on red outlined regions, there is significantly less sales during summer month then winter period.

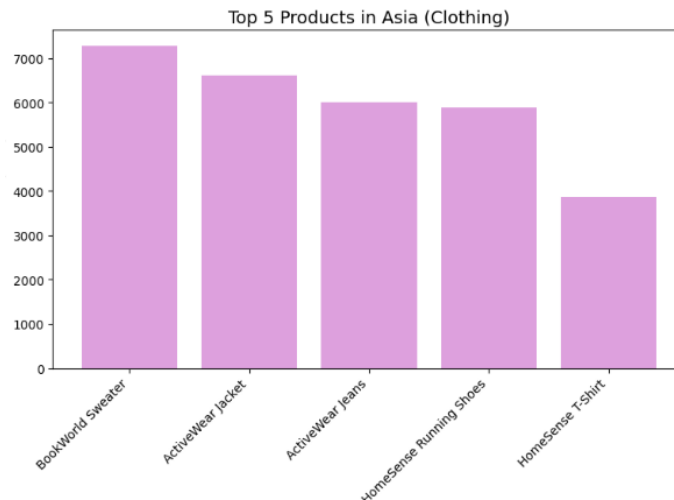


Fig 4. Top 5 Clothing products in Asia, notice how Sweater and Jacket are doing better than T-Shirts, in a typically warmer region like Asia, confirming above insight.

4. Electronic Holiday in North America:

Unlike other regions, North America experiences a noticeable decline in Electronics sales during the holiday season (November to December).

This behaviour deviates from global trends where holiday seasons typically see a sales boost in Electronics, possibly due to gifting and festive shopping.

Actionable Recommendation: Revise Holiday Campaigns: Evaluate existing holiday marketing campaigns and ensure they effectively target the North American audience. Highlight popular gifting options, discounts, and tech bundles.

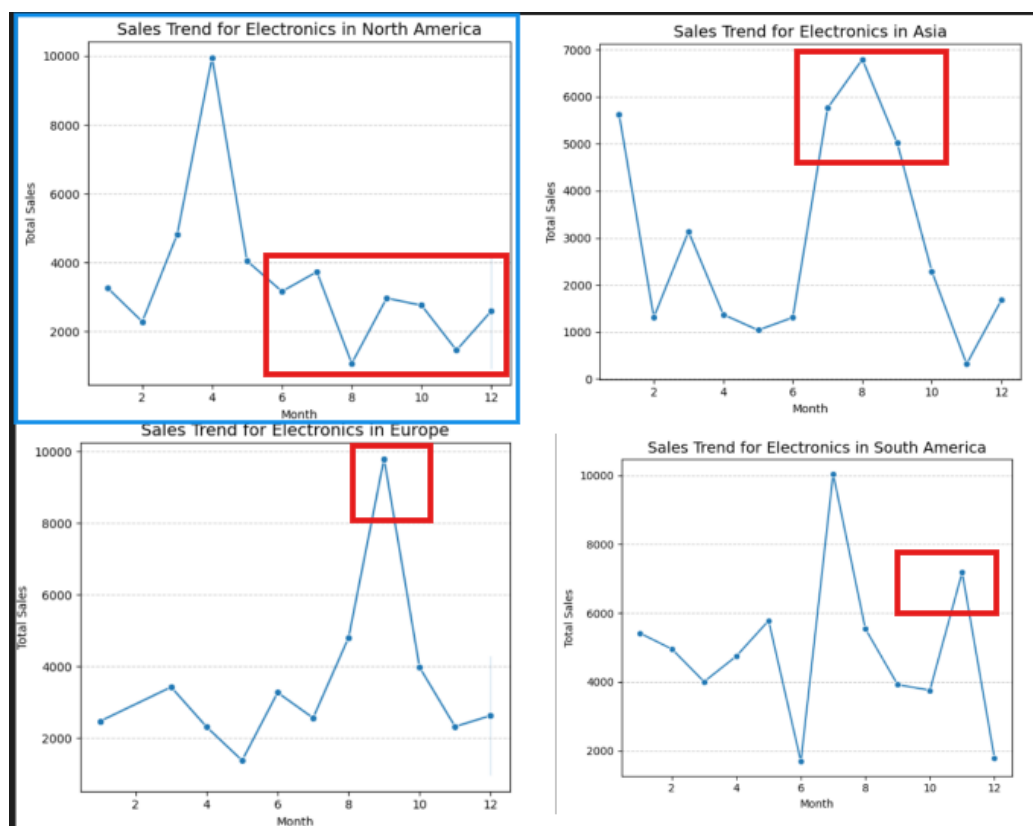


Fig 5. Notice the red outlined boxes how every region in holiday and pre-holiday season has boost in electronics sales, the only exception to is North America

5. Winters Clothing in South America:

Clothing occupies the lowest percentage of total sales in South America (19.3%) compared to other product categories, and sales during the winter months are particularly weak.

This contrasts sharply with other regions where winter sales for Clothing typically peak. The data indicates that the winter clothing product lineup or marketing efforts may not resonate with the South American audience.

Recommended Action: Reassess winter clothing products and introduce designs or fabrics that better match the moderate winter climate of South America.

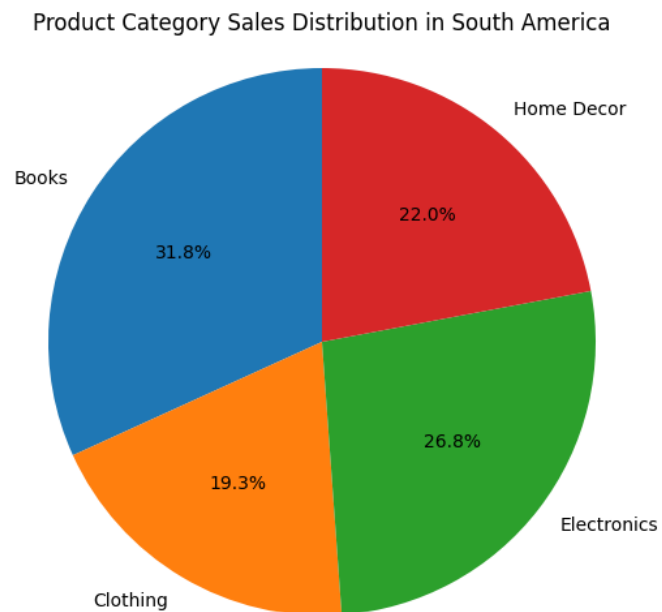


Fig 6. Notice from this pie chart how Clothing has lowest market share in South America

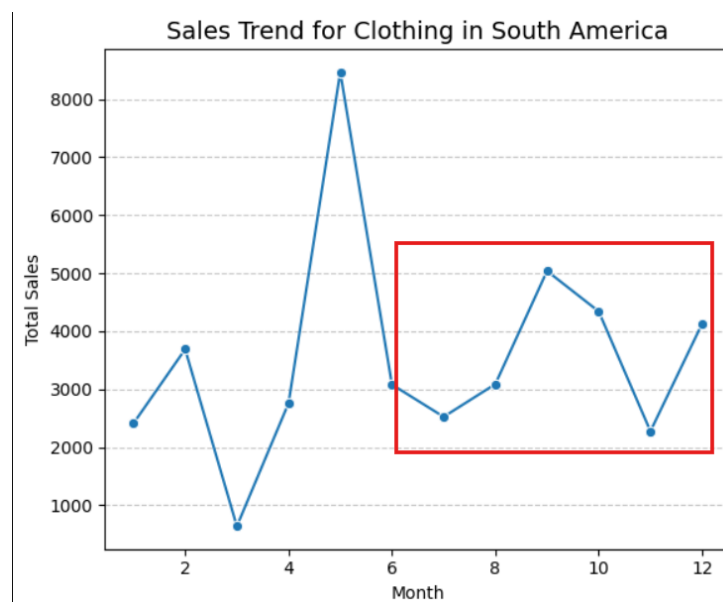


Fig 7. Notice how sales trend in South America declines during winter season unlike other regions where our winter catalogue is heavily preferred.