

Business Insights

1. Regional Distribution:

- **South America:** The region accounts for 29.5% of the customer base, making it the largest segment. Despite this, the volume of signups and sales trends suggest a high potential for future growth.
- **North America:** Has notable spikes in signups (especially in January 2024), possibly due to seasonal demand. But, it has a lower average transaction value compared to Europe.
- **Asia:** Asia has the smallest customer base but shows consistent activity. Might require more targeted marketing strategies to increase engagement and boost base.
- **Europe:** Europe shows consistent growth, with high total sales despite fewer transactions i.e it has a higher average transaction value and a more premium market.

2. Customer Behavior:

- **Signup Trends:** There's a pattern of dips in signups from May to August. These months should be targeted with promotional campaigns to maintain growth.
- **Active Customers:** Customers who frequently purchase (i.e., repeat transactions) tend to spend more overall so we must utilize this and increase repeat purchases.

3. Product Insights

1. Price Distribution and Categories:

- **Product Pricing:** The majority of products fall in the mid-to-high price range (with a mean price of \$267.55). This suggests that the company is catering to customers who are willing to pay for quality products, with a smaller proportion of budget-friendly options.
- **Category Insights:**
 - **Books and Electronics** are the most popular product categories across regions. However, books are slightly more popular in South

America and Europe, while electronics dominate in North America. **Electronics** generally have higher price points, while **Books** tend to be more affordable, showing that customers may be willing to spend more on electronics.

2. Price vs Quantity:

- The average quantity per transaction is **2.5**, and the data shows a negative correlation between price and quantity, meaning customers tend to buy more affordable products in larger quantities while purchasing more expensive items in smaller quantities.

3. Product Models/Variations:

- Duplicate product names, like "ActiveWear Smartwatch," may indicate variations of the same product, such as different models or colors. The company could consider leveraging this information for targeted marketing or promotions for different models of a product. We are unsure if certain models of the product are performing better than others and getting clarity on that would allow us to distinguish better between them.

4. Transaction Insights

1. High Sales Periods:

- Sales spiked in **January, July, and September 2024**, possibly due to **seasonal demand** (e.g., post-holiday sales in January or mid-year promotions).
- **Holiday Season Sales (Oct-Dec)** seem to be lower than expected, which could indicate inefficiencies in marketing during these months. It may be helpful to examine the reasons, such as insufficient holiday promotions or competing with other major sales events like Black Friday in North and South America especially.

2. Sales by Region:

- **South America** not only leads in transaction volume but also in total sales, indicating strong purchasing power in this region. It's also worth noting that **Europe** has a high total sales value despite fewer transactions, which points to higher-value purchases per transaction.
- **North America** has a higher number of transactions but lower sales, suggesting that although people are buying more frequently, the average order value is relatively low.

3. Most Popular Products:

- **ActiveWear Smartwatch** is a standout in terms of overall sales, especially in South America and North America. This product could be promoted even more through targeted ads in these regions.
- **Books** tend to be more popular in South America and Europe, which might indicate regional preferences or spending habits.
- It would be helpful to figure out what caused certain products to do better in certain regions to address how it can be promoted better in other regions.

4. Customer Loyalty:

- **High Transaction Frequency** correlates with increased sales, meaning customers who purchase more frequently tend to spend more. This shows us that we must identify and retain loyal customers with incentives.

5. Region-Specific Preferences:

- **Asia** shows a preference for **Clothing**, while **South America** and **Europe** prefer **Books**. These preferences should be taken into account when planning inventory, marketing campaigns, and even the introduction of new product categories tailored to the regions' preferences.

