Business Insights

Customer Distribution by Region:

- The company has a balanced global customer distribution, with the largest proportion in South America (59 customers), followed by Europe (50 customers), and North America (46 customers). Asia has a slightly smaller share (45 customers).
- **Insight**: South America represents the biggest potential market for growth, while North America and Europe can benefit from targeted marketing strategies to engage the customer base.

Top-Selling Product Categories:

- **Books** (26.8%), **Home Decor** (25.2%), and **Electronics** (24.7%) are the top-selling categories, followed closely by **Clothing** (23.3%).
- **Insight**: Product categories like Books and Home Decor are driving the majority of sales. Focusing marketing efforts on promoting these categories could drive further growth.

Monthly Sales Trends:

- The highest Total Sales Value (TSV) is seen in **January 2024** at **66.38K**, followed by **July 2024** at **71.37K**.
- **Insight**: There is a noticeable seasonal peak in January and July. Strategies like holiday promotions or end-of-season sales can be capitalized upon to maximize sales during these months.

Top 10 Customers by Transactions:

- Customers such as **C0109**, **C0156**, and **C0008** are the most active, with up to **11 transactions** each.
- **Insight**: These top customers represent high engagement. Special loyalty programs or targeted offers could further increase transaction frequency and retention.

Top 10 Customers by Total Spending:

- Customers like **C0141** and **C0054** have the highest total spending, with **C0141** spending over **10K USD**.
- **Insight**: These high-spending customers are critical for revenue. Offering premium services or exclusive promotions could increase their lifetime value.

Sales by Day of the Week:

- Sales are highest on **Fridays** and **Saturdays**, with weekends contributing significantly to overall sales.
- **Insight**: The trend of higher sales on Tuesdays and Wednesdays suggests that customers are more likely to engage and make purchases early in the week. This

provides an opportunity to run mid-week promotions, targeted email campaigns, or flash sales to maximize engagement during these days.

RFM Analysis - Customer Segmentation:

- The RFM analysis segments customers into various groups. A significant portion of the revenue comes from customers in the **'High Recency, High Frequency, High Monetary'** group.
- **Insight**: Focus efforts on retaining and rewarding this high-value group with loyalty programs or VIP treatment to ensure they continue making purchases.

Churned Customers:

- A significant number of customers have stopped purchasing after a few transactions, indicating churn.
- **Insight**: Churned customers could be re-engaged through targeted re-engagement campaigns or personalized promotions to bring them back into the fold.

Seasonal Purchase Trends:

- Sales exhibit clear seasonality with higher sales during specific months such as **December 2023** (3769.52 USD) and **January 2024** (66.38K USD).
- **Insight**: Identifying these seasonal peaks allows for better stock planning, promotional timing, and product launch strategies to capture the most sales during these months.

Product Category Analysis:

- Categories such as **Books**, **Home Decor**, and **Electronics** have the highest total sales and transaction counts.
- **Insight**: Product diversification and bundling strategies in these top-performing categories can drive higher sales and customer engagement.