Task-1 - Exploratory Data Analysis (EDA) and Business Insights

Business Insights Report

Insight 1: Transactions Over Time

South America leads in clothing, electronics, and home decor sales. Asia shows low interest in home decor, and Europe struggle with clothing and electronics sales. Books perform well in south America but poorly in Asia. Overall, south America is the top market, while Europe and Asia face challenges in certain categories.

Insight 2: Top Product Categories

Books lead both in transaction volume and revenue, followed by Electronics. Clothing ranks last in both unique customers and revenue, with home décor generating the least revenue despite good transaction numbers.

Insight 3: Regional Performance

Books are the top-selling category in South America. South America also leads in home décor revenue. Clothing, however, generates the highest revenue in Asia, outperforming in other regions. The greatest number of customers are also from South America

Insight 4: Product-Level Trends

High-value products in the **Books** and **Electronics** category significantly contributed to revenue. However, some products in lower-performing categories show limited sales volumes. Offering discounts or targeted promotions for these items can increase their market share.

Insight 5: Customer Behaviour

The majority of transactions are associated with customers who signed up within the last two years, indicating that new customers are highly engaged. However, retention strategies for long-standing customers can further boost revenue and improve lifetime value.

Insight 6: Revenue

Books have the lowest sales in Asia, while clothing performs poorly in Europe. Electronics see lower sales in Asia as well and home decor has the least revenue in north America

Conclusion:

South America leads in sales, while Asia and Europe face challenges in certain categories. Focused strategies are needed to boost underperforming products in these regions