

# Exploratory Data Analysis

There are three datasets - Customers, Products and Transactions

## Customers

There are no missing values or duplicates in Customers. There are 4 unique Regions. - South America, Europe, North America, Asia

## Products

There are no missing values or duplicates in Products. There are 4 unique Categorys - ['Books', 'Electronics', 'Home Decor', 'Clothing']

## Transactions

There are no missing values or duplicates in Transactions.

## Business Insights

1. South America has the most number of transactions, followed by N America and Europe.
2. The most common category is Books, then Electronics and Home Decor.
3. The most common product is ActiveWear Smartwatch, followed with SoundWave Headphones and BookWorld Biography.
4. In Asia, Clothing is preferred. In Europe, Home Decor is preferred. In the Americas, Books are popular.
5. The most common region for all categories is south America, this could be since South America has the most transactions and most customers.
6.
  - S. America spends the most , and Asia spends the least.
7. Books category has the most sales, followed with Electronics and Clothing.
8. The average customer from South America spends the most, and the customer from North America spends the least.
9. The top 10 most-spending customers all are from South America.
10. The most sales occur between May to July and in December.
11. Monthly spending Trends -
  - South America spends the most in July.
  - North America spends the most in April.
  - Europe spends the most in January, September and December.
  - Asia spends the most in January and July.