

# Data Science Assignment: eCommerce Transactions Dataset

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

### 1)Product Performance Analysis:

In 2024, the top-selling product in the Electronics category was the “**ActiveWear Smartwatch**” and the least-selling products were “BookWorld Wall Art” and “ComfortLiving Headphones” in the Home Décor and Electronics Category.

### 2) Customer Analysis:

In terms of Total Customers, **South America** has more than other regions. However, the customer “**Abigail Jones**” from North America bought more in quantity.

### 3)Revenue Analysis:

The high-peak sales months in 2024 are **July - September**, and November generated less revenue. We can observe that the **South America** region itself generated a revenue of 216K.

### 4)Category Analysis:

The demand for **Books** is very high as they sell 680 units.

In the Book category high demand in South America and low demand in Asia. Each category has demand in a different region according to their availability in their region.

### 5)Inventory & Supply Chain Optimization:

The “**SoundWave Headphones**” in electronics has the least turnover, “**SoundWave Cookbook**”, “**SoundWave Jeans**” and “**TechPro Headphones**” from Books, Clothing and Electronics have the highest turnover.