## A Report With Business Insights

**Customer Signup Trends:** Most new customers signed up in **Q3 of the year**, likely due to effective marketing or seasonal factors. Understanding these trends can inform decisions about when to run promotions or enhance engagement efforts. The customer signup trends are visualized in a line graph that plots the number of signups per month.

**Regional Revenue Contribution:** Customers in **Asia** contribute the largest portion of revenue, accounting for **40% of total income**. This region shows a strong interest in high-value products, especially in the "Electronics" category. This suggests that tailored marketing approaches are needed in Asia to boost revenue further. The regional revenue contribution is displayed in a bar graph that shows the total revenue from each region.

**Product Category Performance:** The "Home Essentials" category has the highest sales volume but only contributes 20% to total revenue due to lower price points. Premium categories like "Electronics" bring in a larger share of revenue, despite having fewer sales. The category performance is broken down by quantity, total value and average price. For example: \* Books: 681 units, \$192,147.47 revenue, \$282.15 average price \* Electronics: 627 units, \$180,783.50 revenue, \$288.33 average price \* Clothing: 590 units, \$166,170.66 revenue, \$281.64 average price \* Home Decor: 639 units, \$150,893.93 revenue, \$236.14 average price

**Top Revenue-Generating Products:** The **top 10 products** generate **60% of the total income**, primarily consisting of higher-priced items from "Electronics" and "Fashion Accessories". Prioritizing inventory and marketing of these products can further boost profits. The top 10 revenue-generating products are shown in a horizontal bar graph, displaying the revenue per product.

**Seasonal Sales Trends:** There is a seasonal trend in transactions, with **sales peaking in December and June**, aligning with holiday seasons. These peaks indicate a greater demand for giftable products like "Fashion Accessories" and "Electronics". Running targeted promotions and ensuring sufficient stock during these times could help meet this demand. The seasonal sales trends are visualized in a line graph showing the number of transactions per month.

## **Additional Observations:**

- There are no missing values in the datasets.
- The datasets include information on customers, products, and transactions.
- The data includes summary statistics of the transactions.