

## **Business Insights from Exploratory Data Analysis (EDA)**

### **Insight 1: Regional Distribution of Customers :**

From the analysis, South America has the highest number of customers, followed by Europe, North America, and Asia. This indicates that South America is a strong market for the company, whereas efforts might be needed to increase customer engagement and acquisition in Asia, which currently has the lowest customer count.

### **Insight 2: Growth in Customer Signups Over the Years :**

The trends in customer signups indicate consistent growth, with a significant spike in recent years. This growth could be attributed to successful marketing campaigns or increased brand recognition. Ensuring continued investment in customer acquisition strategies is essential to maintain this trajectory.

### **Insight 3: Product Pricing Distribution :**

The majority of the products fall within a mid-range pricing category, with a few high-priced outliers. This suggests that the company's pricing strategy caters primarily to middle-income segments. Exploring opportunities to introduce more affordable or premium products could expand the customer base.

### **Insight 4: Revenue Contribution by Product Categories :**

Certain product categories dominate the offerings, with some contributing significantly to revenue. For instance, the top 10 products generate a substantial share of the company's revenue. Focusing on promoting these categories or expanding the product range within them could drive further growth.

### **Insight 5: Monthly Revenue Trends :**

Revenue trends show noticeable peaks in specific months, potentially due to seasonal demand or promotional campaigns. Identifying these periods and aligning marketing efforts accordingly can help capitalize on high-demand times. Conversely, strategies can be devised to improve performance during low-revenue months.

### **Conclusion :**

The insights derived from the EDA provide actionable recommendations for optimizing regional strategies, enhancing product pricing, and leveraging seasonal trends to maximize revenue. These findings offer a comprehensive view of the company's performance and areas for improvement, aiding in strategic decision-making.