

# Exploratory Data Analysis

## **INSIGHT 1: BASED ON RFM AND CUSTOMER SEGMENTATION**

According to the RFM, 61 customers—including those in the High and VIP classes—had their most recent transaction almost three months ago. For instance, a VIP customer (ID: C0018) spent 4781.85 and made five purchases, however it has been 146 days since they last made a purchase.

## **INSIGHT 2: BASED ON CUSTOMER SEGMENTATION BY MONETARY VALUE**

Customers belonging to the Low and Medium classes accounting for around 50% of monetary value having high very high average recency value in the range 70 to 120 days. For low spenders: Offer discounts on frequently bought items or creating bundles to encourage them to buy more often.

## **INSIGHT 3: BASED ON SIGN UPS BY REGION ON THE PERIOD OF 1 YEAR**

The chart shows that South America had the highest number of sign-ups over the 1-year period, significantly more than other regions. North America had the second highest, followed by Europe, while Asia had the lowest. This again suggests South America is a region with high user engagement and growth potential, and the company should consider investing more resources to capitalize on this opportunity.

## **INSIGHT 4: BASED ON SIGN UPS OVER TIME**

According to the figure, South America had a lot more sign-ups than any other region during the course of a year. Asia had the lowest, while North America had the second-highest, followed by Europe. This indicates once more that South America has a great potential for user engagement and growth, and the business should think about allocating additional resources to take advantage of this.

## **INSIGHT 5: BASED ON THE HEATMAP OF AVERAGE TIME TO FIRST PURCHASE BY REGION AND MONTH**

Clear seasonal trends in the average time to first purchase across areas are displayed in the heatmap. Asia and North America have the longest times, while South America has the shortest. Given that the time to first purchase is comparatively shorter in Europe between April and June and July and September, the data points to possible opportunities. It also suggests that concentrating on marketing and sales efforts could result in faster conversions in particular locations and time periods.