

# Exploratory Data Analysis (EDA) and Business Insights

## Task 1

**Strong Retention in North America:** North America consistently shows high customer signups across the years, indicating that the region has a strong customer retention strategy. To continue this growth, businesses should focus on enhancing the customer experience and introducing loyalty programs to keep the momentum going.

**Surge in Signups in Early 2024:** The significant increase in signups in early 2024 suggests the success of recent marketing campaigns or new product launches. This growth presents an opportunity for businesses to capitalize on the momentum, perhaps by introducing similar campaigns or exclusive offerings to sustain this trend.

**Growth Potential in Europe:** Europe demonstrates moderate but fluctuating signup numbers, with some notable peaks. By focusing targeted marketing efforts during these high-activity periods, businesses can boost engagement and drive more conversions in this market.

**Effectiveness of Year-End Campaigns:** A slight uptick in signups at the end of each year highlights the success of year-end promotional activities. To further leverage this, businesses should refine their end-of-year strategies, ensuring they meet customer demand with timely offers and promotions.

**Asia-Pacific: A Market for Expansion:** While Asia shows steady performance, its growth rate lags behind other regions. To unlock its potential, companies can explore region-specific marketing strategies, product localization, or partnerships to better cater to local preferences and stimulate growth.

**Average Transaction Value by Region:** By calculating and analyzing the average transaction value across different regions, businesses can better understand regional spending behaviors. This insight could help tailor pricing, promotions, and offerings to maximize sales in specific regions.