Problem Definition:

CLV is a pivotal metric that quantifies the long-term worth of each customer to the company, encompassing their purchase behaviors, retention rates, and the revenue they generate over time. The primary challenge in this project lies in accurately assessing and optimizing the Customer Lifetime Value (CLV) for business(es). To maximize profitability and inform strategic decisions, we need to address critical questions such as:

- What factors influence CLV the most within the customer base?
- How can we identify and target high CLV customers for retention and acquisition efforts?
- Are there actionable insights from CLV analysis that can guide product development or pricing strategies?

The problem is to develop a robust analytical framework that not only computes CLV accurately but also leverages these insights to enhance customer engagement, marketing campaigns, and overall business profitability.