

Assignment-1: Problem Statement

You are a Machine learning specialist working for a fin-tech company. The team has developed a data science model that forecasts the **Return on Investment** (ROI) for various marketing campaigns.

Your organization uses GCP for tech and analytical workloads and your task is to work with the data science team and deploy this model on Google cloud for continuous training.

You must go through the input data and the model training code in order to understand the business requirements.

Below is the breakdown of your tasks:

1. Go through the model training code and execute the model training in your local system once.
2. Execute the model training on Vertex AI workbench (one-time activity)
3. Setup the end-to-end pipeline on GCP Composer (Airflow) to run at 10 AM everyday. The pipeline must handle the below tasks:
 - a. Input data validation
 - b. Model training
 - c. Model evaluation
 - d. Artifact deployment to GCS (“joblib” file)
4. Setup automated email alerts to handle failures