## Cumulative Gains & Lift Charts Sample Project

## **Description:**

This project demonstrates an example of how to generate **Cumulative Gains and Lift Chart** in Oracle DV to evaluate performance of a Machine Learning classification model. This .dva project is built using Marketing Campaign data of a bank. This dataset contains demographic information about customers and whether they have subscribed to the service for which this marketing campaign is being run. Here is a pictorial representation of this entire project:



## **Contents of the project:**

Import the project by importing the .dva file. *Password* is *Admin123*. Importing the .dva project should import following Contents

- a. DVA project with name: Cumulative Gains and Lift Charts
- b. Datasets:
  - i. Bank Marketing Campaign Data: Training data to Train the ML models
  - ii. LiftChart Calc Input: Prediction data by Naïve Bayes algorithm
  - iii. LiftChart Output: Cumulative Gains and Lift values computed using Lift Calculation dataflow
- c. Dataflows:
  - i. LiftChart-DF1-Model Train: Dataflow to Train a model
  - ii. LiftChart-DF2-Model Score: Dataflow to apply the model and predict outcomes

- iii. LiftChart-DF3-LiftCalc Template: Dataflow to calculate Cumulative Gains, Lift and other metrics necessary for cumulative gains and lifts chart.
- d. Machine learning Model:
  - i. LiftChart Prediction Model

## How to reuse this project:

To generate gains and lift chart for your own model, you can create dataflows to train and apply model to perform prediction. From the output generated by Apply model dataflow select following columns only: *ID, ActualValue, PredictedValue, PredictionConfidence* and save it as a dataset.

Plug in the output dataset of Apply model dataflow as input to **Lift Calculation** dataflow by replacing the existing input. "Save As" this dataflow with a different name so that it doesn't overwrite the original dataflow. Execute the dataflow and you will see all the columns needed to generate cumulative gains and lift charts without having to change any column names anywhere else in the dataflow. You can use the .dva project included in this package as template to create your own dva project.