**Problem Statement (Situation):**

“Finding out potential target customers for personal loans” In this case study, the goal of HBFC bank is to sell more personal loans to their savings account holders. The bank wants to start a campaign to sell the personal loans, but before that they want to analyze last marketing campaign data to understand the profile of potential loan customers. This will help them in doing a targeted approach to the prospective customers in future. The bank has approached you, to help them with the analysis of the previous campaign data. The bank basically has two customers,

**• Liability customers** – They deposit the money in the bank and pays interest against the deposited money.

**• Asset customers** - They borrow money (take different types of loan) from the bank and the bank charges interest against the borrowed money. At present the bank has small number of asset/loan customers.

The bank wants to increase their income by increasing the customer base of “asset customers”. Last year the bank ran a campaign where they successfully converted 9% of the existing “liability customers” to “asset customers”. This has encouraged the bank to have a better targeted marketing campaign to increase the success ratio with minimum budget. You would receive a file Bank.xls which contains data of 5000 customers. It includes, • Customer demographic information (age, income, etc.), • Relationship with the bank (mortgage, securities account, etc.) • Customer response to the last personal loan campaign (Personal Loan). • Among the 5000 customers, only 480 (9.6%) customers have accepted the personal loan in the last year campaign.

**Objective (Task):**

• As a consultant, you must perform preliminary data analysis (EDA) and visualization to understand the profile of customers having savings account, who took personal loan in the last marketing campaign VS customers who didn’t take it up.

• Using EDA identify profile of customers whom bank can target for selling personal