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PROJECT REPORT

TITLE

**CROSS-SELLING OF FINANCIAL PRODUCTS**

**PROBLEM STATEMENT**

**Reaching out of current customers for additional Business in the banks leads to increased profitability to the banks. Most of customers in banks are depositors (liability customers) and few are asset customers (have personal loans). Converting the liability customers to asset customers boosts the bank revenue through interest on loan.**

INTRODUCTION

This project is about Thera bank which has a growing customer base. Majority of its customers are lability customers, the number of the Asset customers(borrowers) is quite small, the bank wants to bring in more loan business thus earning more interest on loans.

OBJECTIVES

To identify the potential customers.

To convert the liability customers to personal loan customers while retaining them as depositors

To reduce the marketing budget through better understanding of the market target

PACKAGES USED

* library(xlsx) read the excel file
* library(dplyr) # used for data manipulation
* library(ggplot2)
* Library lattice# to load
* Library(plyr)read the head of the dataset
* Library (nutshell)load data about measures of spread

DATA PREPARATION

The data set includes 4999 observations and 14 variables divided into 4 categories. Binary category which has 5 variables, including the target variable personal loan, also securities account, CD account, online banking and credit card. The interval category contains 5 variables; Age, Experience, income, CC avg and Mortgage. The ordinal category includes Family and Education. The last category is nominal with ID and Zip code.

DATA ANALYSIS



KEY

0- MEANS NO PERSONAL LOAN

1 -MEANS HAVE PERSONAL LOAN

SUMMARY

* A few of the customers have personal loans ,credit card and securities accounts. At least half of the customers have online accounts
* Income is positively skewed because there are a few people earning above 100000. the bank can target this group and sell more personal loans
* Most of the customers are aged between age 30yrs and 60yrs.so the bank should come up with a personal loan product that best suit this group .
* Most of the customers have family size ranging 1 to 4 so the bank should come up a children's saving account

THANKS