MALAWI NATIONAL BANK

Background on the Case:

A small micro lending institution in Malawi, Africa has requested your assistance in better understanding the performance of their loan portfolio. The files provided are based on an actual case, however we will refer to the institution as the Malawi National Bank.

Micro loans are typically small loans that are provided in developing countries to assist people out of poverty. Recently the Malawi National Bank has been finding that many of the loans that have been advanced have not been paid back. To improve their loan portfolio, you have been retained to provide some analysis on their current portfolio, with the expectation of providing insights as to what may be the potential underlying factors that are causing the portfolio to deteriorate in performance.

You will use SAS programming to create a dataset for analysis that will include the information provided, plus several derived variables. The Malawi National Bank also has specific questions that they would like you to answer. In addition to answering their questions, they have requested you to explore the data using various data visualization techniques, to hopefully provide additional insight into their portfolio's performance to determine where they should focus their efforts on reducing the amount of 'bad' customers and improving on the amount of 'good' customers.

Metadata Definitions for the Raw Dataset

The LOAN_PORTFOLIO.CSV file that has been extracted for you has the following field definitions

AccountID
- A unique reference number for each account

BranchID
- A single digit number indicating the branch that has the loan. The codes are interpreted as follows:

2	Mandala
3	Kawale
4	Mzuzu
5	Blantrye
6	Salima
7	Mchinji

ProductID
- A four-digit character string indicating the type of product. The codes are interpreted as follows:

LN01	Group Business Loan
LN02	Individual Business Loan
LN03	Share Loan (used to purchase Shares)
LN04	Emergency Loan
LN05	Farming Loan
LN06	Woman's Loan
LN08	Payroll Secured Loan

DisbursedOn
- Date that the loan was advanced to the customer

Application Score
- 2-digit score ranging between 0 and 60. A higher score indicates that the branch 'predicted' that this application would be minimal risk of defaulting on the loan. A low score indicates that the branch 'predicted' that the loan was at a higher risk of defaulting.

ArrearsDays
- The number of days that the loan is in arrears (i.e. behind in its payments). The current date of this file extract was July 31, 2012.

Actual Application Grade

- Letter grade of loan application quality (A – High Quality, and D – Poor Quality)

Actual Good Bad Indicator

- Internal indicator where 1 – account is considered 'Good', and 0 – account is considered 'Bad'

Gender

- Single digit code indicating gender as follows;

M	Male
F	Female
G	Group

LiteracyLevel

- Single digit code indicating literacy level

U	Not Specified
C	College
E	Elementary
N	No formal education
O	No Formal Education
P	Primary
PT	Polytechnic
S	Secondary
T	Tertiary
U	University
X	Not Specified

Occupation

- Single digit code indicating occupation of loan applicant (no translation provided)

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PR	Priest
PRO	Professor
B	Business People
C	Civil Servants
E	Employee
F	Farmer
M	Self Employed
N	Unemployed
O	Other
T	Traders
U	Not Specified

Marital Status

- Single digit code indicating marital status of loan applicant

D	Divorced
G	Group
M	Married
S	Single
U	Not Specified
W	Widow
WI	Widower

Purpose Code

- A 2-digit code indicating the purpose for the loan

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1	Expanding Business
2	Land Purchase
3	House Construction
4	Buying a car
5	Business
6	School Fees
7	Buying a House
8	Paying school fees
9	Paying Medical Bills
10	Building House
11	Buying Farm Inputs
12	Purchase of Household Items
13	Other Purpose

Disbursement Amount
- The original amount of the loan that was provided to the customer. All financial figures are in local currency of Malawian Kwachas (1 US Dollar = 400 Malawian Kwachas)

Installment Amount
- The required monthly payments on the loan

ActualBalance
- The current balance of all unpaid portions of the loan

ArrearsAmount
- The current amount of all loan payments that have not yet been paid (are past due)