Platinumetrix

Analytics for a smarter tomorrow...

Client: US Banking and Finance Corporation

Business Background

Post the 2009 economic downturn, the time deposit products offering low rates were gradually beginning to lose market and more liquid savings portfolios like a Money market started gaining popularity. But for most banks, there were a large number of long-term deposits up for maturity, investments made on an average 5 years ago. Given the deposits down-market across US, where would these funds finally end up? Would they remain within the bank post maturity, getting channelized into the more liquid form, or could there be a massive balance attrition looming.

Problem Statement

Because it was almost imperative to retain these fund, into their own savings products, the banks were keen to understand and analyze the factors which might lead to balance churn and hence the need to develop a statistical model which would predict churn in advance, and help the bank take proactive retention strategy.

Analytical Approach

Solution was approached two-fold.

a) First part was to understand, the fate of the funds across the Certificate of Deposit accounts and how long does the customer typically take to put these funds back into the bank post maturity. For this a time to fund retention analysis was done using a survival time study.

b) The next part of the analysis involved assessing the churn rate and churn attributes for the existing savings accounts so that the CD customers could be proactively be treated to address future churn of large balance.
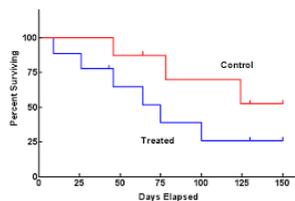
Survival Analysis used to assess the likely retention time for Time Deposit customers
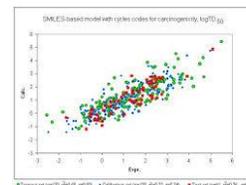

Logistic Regression used to predict customer churn amongst Savings customers

Both the models were built using historical data of 2 years provided by the bank using transaction history, static customer data, application level data, product holding, customer demographics, and service level data as key inputs.

Results and Recommendations

The Models went on to generate a fairly high degree of lift with an ability to identify 70% of potential account churn by targeting only 20% of the customers. This eventually translates to a potential cost savings of around US$56 million in customer targeting strategies for the savings product only. After the pilot the business implementation of the model resulted in Balance retention of more than US$340 million even at a 30% customer retention rate.
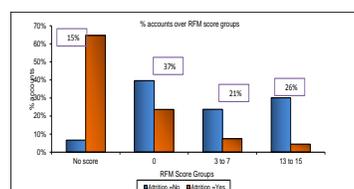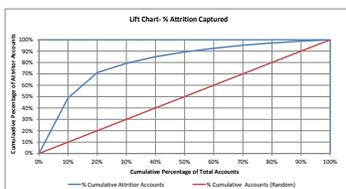
Percent Attrition vs Non-Attrition across RFM score – A key churn determinant