

CASE STUDY

Profitability Analysis for Mortgage Lenders

- ▶ **Objective**
Identify focus areas for client to ensure maximum profitability
- ▶ **Client**
Mortgage lenders specializing in non-conforming secured lending in the UK
- ▶ **Benefits**
Identified several opportunities for improving profitability and guided development of a differential broker commission structure

Project Objective

To identify drivers of profit - customer and product groups or segments, which would serve as basis for realigning business strategies and facilitate restructuring of broker commissions.

Client

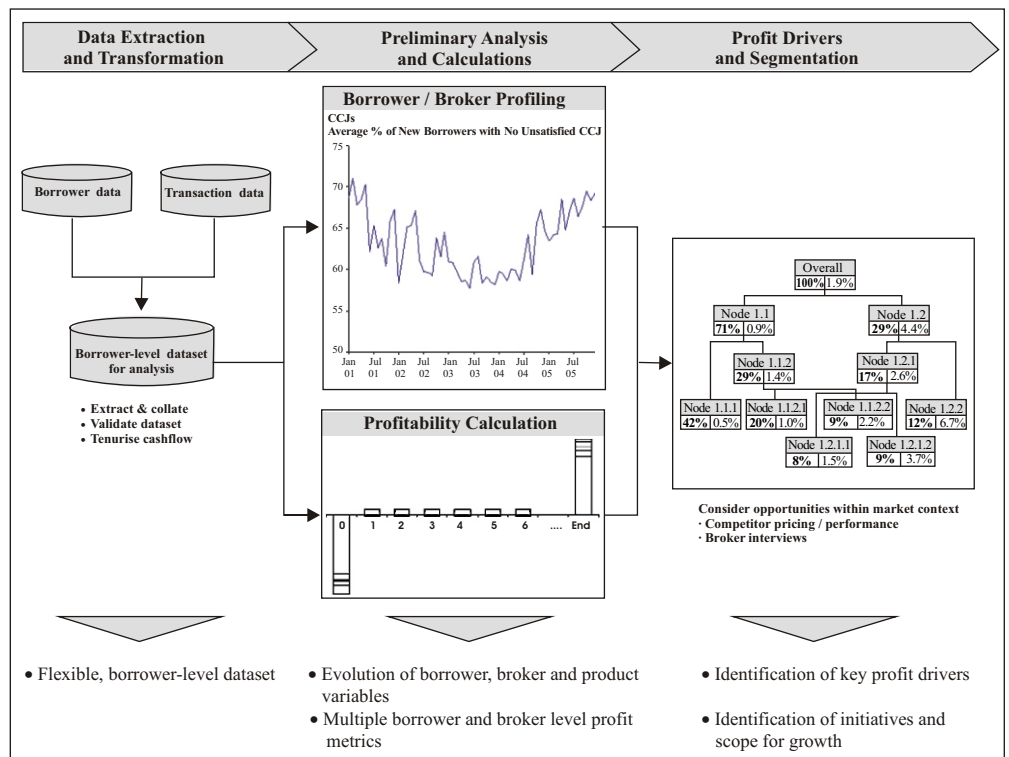
UK based financial organization that lends mortgage loans to borrowers with poor credit record (sub prime customer group).

Approach

Borrower and transaction level data from client (31000 accounts totaling 1 million transactions) were extracted into a suitable format. Profitability metrics Net Present Value and Return on Capital were calculated for all closed customer accounts (nearly 18000). Initial data analysis was aimed at data completeness and sensibility. Historical evolution of profitability and all causal variables borrower, product type, broker and account performance variables were profiled to remove unusual effects characteristic of specific time periods and arrive at a data subset more suitable for further analysis. Further analyses focused on finding what drove profitability. Bi-variate analysis on all causal variables was conducted to see direct impact of them on profitability, if any. Segmentation was then performed to find if there were any combinations of variables that drove profitability and which could not have been identified through bi-variate analysis. Segmentation was done using CART (Classification And Regression Trees).

Other Case Studies

- ↳ Predictive Analytics: *Product positioning through Analytics*
- ↳ Price Forecasting: *Forecasting petrochemical prices in a volatile market scenario*
- ↳ Churn Prediction: *Preemptive identification of customer churn thereby guiding customer retention activities*



Phased approach for Profitability Analysis

Solution and Benefits

Profiles for arrears, redemptions, losses and interest incomes were developed. A detailed analysis on profitability and consideration of market context indicated multiple opportunities for improved profitability such as differential pricing based on Products, Customers and their combinations and differential commissions for brokers. Using the current set of customers, profitability forecasts were made based on the insights obtained from the profitability segmentation.