

Application Scorecard for Auto Loan

Objective

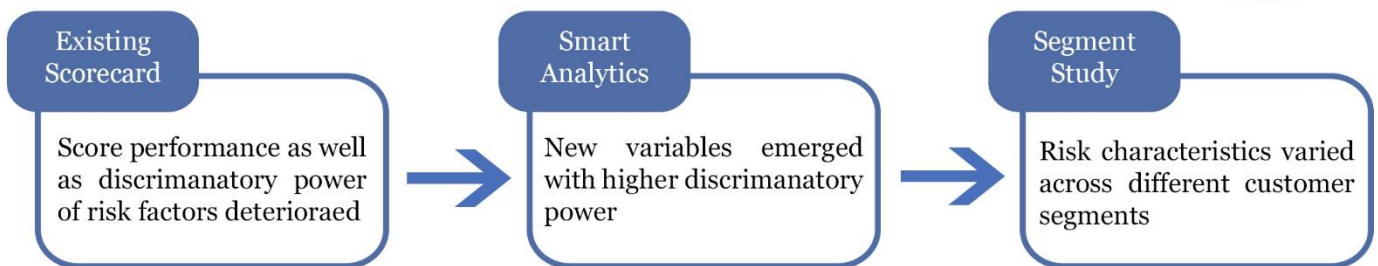
Application scorecard for sub-prime customers

- Review and recalibrate scorecard
- Use insight data to improve alignment between underwriting rules and scores

Challenges

- Methodology for current scorecard not well documented
- Scores not aligned with underwriting rules
- Data in batches – Credit history, product information, loan terms in different files from different time periods
- Performance available only for 8% TTD population who take up loan from 55% approval

Application Scorecard for a large automotive loan provider in UK



Solution

- Data collation to align all variables from same time-period was carried out using R for analysis
- Customers classification using domain knowledge and statistical methods – Decision tree and cluster analysis.
- Multiple scorecards each with superior performance than existing scorecard
- All scorecards rescaled to have similar odds
- Scorecard as a linear function for easy integration with loan origination system
- Reviewed underwriting rule and corporate reporting system and recommended changes

