

Application Scoring for Consumer Durable Loans

Statistical credit scoring at the application stage brings costs savings to a large retail bank

SUMMARY

Client

The bank is one of the largest providers of personal finance in India

Challenge

To improve the existing judgemental scorecard for consumer durable loans, so as to reduce delinquencies without hampering revenue growth

Solution

Fractal built a customised application scorecard by using application and repayment data of existing customers. An optimisation tool was also delivered to help the client set 'cut-off scores'.

Result

The statistical application scorecard has helped the client to reduce defaults by 50 basis points without decreasing approval rates. There were savings of INR 5 MM on a portfolio of INR 800 MM

The Solution

The bank had been using judgmental scorecards in the past. It now decided to implement a statistical application scorecard that provided a more accurate assessment of a customer's risk and reduced the turnaround time for decision making.

The Personal Finance Services (PFS) division of the bank engaged Fractal to develop the statistical scorecard for the consumer durable loans business.

Application and performance data of past applicants (including rejected applicants) was used by Fractal. Sophisticated classification techniques were used to build a scorecard to predict the default behavior of customers. The 'score' obtained by a customer indicated her probability of default.

In close consultation with the bank, Fractal also developed an optimisation tool to help the bank decide on a 'cut-off score' based on the risk appetite of the bank. The cut-off score was arrived at by considering the credit loss of accepting a 'bad' customer and the opportunity loss of rejecting a 'good' customer.

Since the model provided a probability of default to each customer, it also gave the bank the flexibility to alter its cut-off scores to meet its business objectives at different points in time. The cut-off score could be fixed to meet a pre-determined level of approvals, or to restrict defaults to an acceptable level or to maximize profitability.

The Business challenge

The bank is a leading provider of consumer loans in the Indian market. The bank wanted to grow its consumer durable loans portfolio without compromising on the credit quality. The inherent challenge in the product was the small ticket size of the loans and the large volumes. The other big challenge was to reduce the lead-time for the end-to-end credit decisioning process.

■ The Results

Fractal's application scorecard helped bring down defaults by about 50 basis points while still maintaining the same approval rate. There have been savings of about INR 5 MM on a portfolio of INR 800 MM. The bank now operates at a desired level of risk based on its risk appetite.

TESTIMONIAL

"While we've used judgmental models before, Fractal has provided us with an end-to-end statistical scoring solution - data extraction and preparation, modeling as well as deployment, giving us an immediate risk reduction tool. Their methodology helped in designing a risk management tool that reduces application processing time and provides better control on the risk profile of the consumer loans portfolio."

Head, Business Intelligence Unit

"Fractal's services have been valuable to us in our endeavor to manage optimal levels of risk on our portfolio. While judgmental scoring models help, statistical scoring models leverage the wealth of data present in an organization to provide a superior risk management tool - a percentage point reduction in loss rates can significantly change profitability for a financial services company".

Head, Retail Risk

📌 About Fractal

Fractal is a leading provider of customer analytics to consumer banks, credit card issuers, CPG companies and telecom companies. Fractal's analytical solutions have helped companies across the globe enhance profitability by powering their customer management efforts with scientific decision making.



INDIA

Fractal Analytics Ltd
Level 4, Corporate Enclave
B D Sawant Marg
Andheri, Mumbai 400099
Tel: +91 22 6704 2444 / 5
Fax: +91 22 6704 2446

SINGAPORE

Fractal Private Ltd
138 Cecil Street #03-02
Cecil Court
Singapore 069538
Tel: +65 6222 5101
Fax: +65 6222 5102

UNITED STATES

Fractal Analytics Inc
2500 Plaza Five
Jersey City, NJ 07311
Tel: 201 633 8728
Fax: 201 484 7201