

Targeting strategy for newly launched car finance proposition using propensity scores and profiling

RETAIL BANK

Client

Our client is a national retail bank with a full range of banking products and services, including credit cards, savings and loans, mortgages, and insurance. They are a modern banking organisation utilising today's technology to deliver premium service and products to their customers.

Purpose

The client recently launched a dedicated car finance offering, allowing customers to acquire both used and new cars using PCP or PCH financing. Within Short-Term Borrowing, alongside Credit Cards, Overdrafts and Loans, the new Car Finance product offers customers a dedicated way to finance their car, rather than through personal loans. With insufficient data on the uptake of their own product, Forecast set out to take the first steps to defining a targeting strategy using payment data to external providers.

Key deliverables and functionality of the solution included:

- Building the data pipeline from scratch using Teradata, Hadoop and SAS to build a modelling set and monthly scoring set, drawing from demographic data, product holdings and raw transaction data.
- Set of machine learning models generating model-based customer profiles and propensity scores, based on customers paying/not paying towards car financed elsewhere as well as uptake of car finance.
- Insight into key drivers of appetite for car finance, driving an understanding of the customer base.
- Identification of customers the bank would not consider lending to at this points, but who fit the profile of high propensity for finance.

Approach

Forecast worked directly with the STB Data & Analytics team and the wider business stakeholders to phrase the question and compile dataset. In addition to the key KPIs modelled for the Planning Tool, Forecast worked closely with the Finance team to build predictive models around longer-term Net Revenue impact.

Forecast delivered a full modelling solution, with data engineers working closely with the in-house teams to building out the data pipeline in Terada and Hadoop and with a data scientist modelling appetite for car finance in R (the bank's preferred analytics tool). Forecast worked to strict deadlines in close collaboration with the in-house Data & Analytics team during a 3-week 'spike', after which Forecast finished the project independently.

Outcome

The set of models and key driver analysis is a first step towards smart targeting for a new product. Rather than approaching customers with a loans offering, separate propensity models allow for the 'right-sizing' of the offering. The insight generated by the model-based profiles will inform campaign design into the future. Iterations on the modelling effort are planned when the bank's own offering has seen sufficient volumes.