

Credit card transaction fraud

Identifying which transactions are likely fraud, and which are not

Benefit

Increased fraud detection with existing resources and / or reduced investigation costs for find the fraudulent accounts. The solution also resulted in increased customer satisfaction with less wasteful calls.



Context

A large multinational bank used a set of rules to flag suspicious credit-card transactions. These transactions were queried with accountholders. There was insufficient capacity within the bank to query all such transactions. 98% of flagged transactions were not fraudulent and calling each client resulted in dissatisfaction from affected accountholders. Additionally, the call centre could cope with only 20% of the volume of transactions that were flagged for their attention. The bank was reluctant to hire the required additional personnel to reach the required capacity.

Methodology

The bank provided data relating to transactions that had been flagged and queried or investigated by the bank's staff as well as information about the accountholder in question. This allowed for Emerge to train models to estimate, with high accuracy, the likelihood of a flagged transaction actually being fraudulent.

Results

9,000

transactions approved without being paused for investigation each month

20

Additional fraud investigators were no longer required to be hired