

Merchant Marketing at Turkish Credit Card Issuer

Business Problem

Client has a large network of merchants in its acquiring side of business. Client sends marketing messages via cell phones to its credit card customers on behalf of the merchants in its network. Client charges merchants a fee for each message sent. The messages are mostly promotional advertising. No targeting is made in communicating the messages. Customers routinely complain about the irrelevance of messages, and about intrusion. The goal is to increase the relevancy of messages.

Business Solution

Credit card transactions of consumers contain sufficient information for generating relevant marketing communications. The number of credit card transactions made in the merchant network exceeded 150M per month. The proposed solution is to build a personalization system where the preferences of card customers are determined as a function of their past transactions, geographic location, and time.

Business Results

The Personalization System has become the single means for selecting the subset of consumers for a marketing message.

Intelligence

Collaborative filtering algorithms were employed for building the personalization systems. Three different sets of algorithms were used to create an ensemble prediction system: Item-to-item CF algorithms, time dependent matrix factorization, and additive modelling with regularization.

Speed

Models are updated on a monthly basis.

Scale

The number of merchants exceeds 200K. The number of active card customers exceed 11M. The number of transactions per month exceeds 150M. The number of models maintained is roughly equal to the number of merchants.

Automation

System is fully automated.

Adaptivity

Models are automatically refreshed on a monthly basis with the addition of the last months additional transactions data.