The University of New Haven and Fleetcor

Project: Cross Sell Strategy Enhancement and Model Building

Project Requirements

Background:

Our company offers two distinct types of credit cards: the "Fuel-Only Card" and the "Universal Card." The fundamental difference lies in how they can use their cards, as the Fuel-Only Card is exclusively designated for gasoline purchases only, while the Universal Card extends its utility to a broader spectrum of goods and services, much like a conventional charge card.

As part of our ongoing efforts to drive revenue growth, our company has devised a strategic cross-selling initiative. This initiative, referred to as the "Cross-Sell Program," aims to augment our customer base for the Universal Card (aka Business Expense Card) by targeting existing both Cardholders. The rationale behind this program is to leverage the trust and loyalty established with our existing customers and encourage them to explore the broader financial benefits and conveniences offered by the Universal Card.

The mechanics of this program involve identifying eligible customers within our existing customers and extending a tailored promotional offer. This offer is made possible through an internal eligibility model that filters customers based on specific criteria. Those customers who meet these criteria and choose to opt in will: 1) receive a Universal Card with new account for Fuel-Only Card customers or 2) receive a credit limit increase under existing account for Universal Card customers, thereby unlocking an array of possibilities for their financial transactions. The additional credit line of the new Universal Card will be considered as Credit Line Increase (CLI).

Problem Statement:

As our company diligently continues the implementation of the Cross-Sell Program, aimed at expanding the adoption of Universal Cards among existing Fuel-Only Cardholders, a pertinent issue has arisen. It has become evident that not all customers who initially met the eligibility criteria and opted into the program have demonstrated the expected level of performance. Conversely, there are customers who did not initially meet the eligibility requirements but have exhibited exceptional performance in terms of low risk, great payment history, etc. This divergence in customer outcomes has prompted a need for a strategic reevaluation of the program, specifically in terms of opting customers in or out.

Primary Challenge

The primary challenge at hand is twofold:

Opt-Out Dilemma: A segment of customers who met the eligibility criteria and chose to opt into the Cross-Sell Program is underperforming, exhibiting low revenue generation, elevated risk profiles, and poor payment behavior. The underperformance of this group raises concerns about the program's effectiveness and whether these customers should be opted out to mitigate associated risk.

Opt-In Reassessment: Conversely, there exists a subgroup of customers who were initially deemed ineligible for the program but have defied expectations by demonstrating low risk and maintaining great payment records. The positive outcomes from this cohort beg the question of whether they should be reconsidered for the Universal Card offer and potentially opted in to harness their full financial potential.

To address these challenges, a fundamental reassessment of our existing eligibility model is imperative. The existing model, which determines customer eligibility for the Cross-Sell Program, requires a thorough revision. By revisiting the eligibility criteria and incorporating performance metrics, we can identify the optimal candidates for both "swap in" and "swap out" opportunities.

The overarching goal is to maximize the profitability of the Cross-Sell Program. Through the revision of the eligibility model and the subsequent analysis of potential "swap in" and "swap out" opportunities, our company can refine its approach to customer segmentation and selection. This, in turn, will optimize the allocation of Universal Cards to those who are most likely to generate value, while mitigating risks associated with underperforming customers.

Desired Deliverables:

Revised eligibility model:

1. **Review Existing Eligibility Criteria:** Begin by thoroughly examining the current eligibility criteria used for the Cross-Sell Program. Understand the factors and thresholds that determine a customer's eligibility for the Universal Card offer.
2. **Identify Performance Metrics:** Review the performance data provided, including revenue generation, risk metrics, payment behavior, and any other relevant metrics. These will be essential for reevaluating eligibility.
3. **Create a sensitivity analysis:** Review the bad rate difference between opt-in and non-opt-in customers within the same profile customer; bad rate difference by different CLI% for the opt-in customers. For example, what is the percentage of customers going bad on payments according to the credit limit they have.
4. **Analyze spend and loss difference between different parent accounts:** Opted-in customers can be divided into two groups: 1) previously Fuel-Only Card customers and 2) previously Universal Card customers. These two groups of customers may have different spend and loss patterns in nature. Analyze the spend and loss difference between these two groups and summarize the valuable findings.
5. **Create a Cross-Sell performance dashboard:** Show performance data (delinquency, write-off, spend, revenue, etc.) in different views, such as by line of business, portfolio, CLI%, etc. For both groups.
6. **Re-evaluate Eligibility Variables:** Utilize data analysis techniques, such as regression analysis, decision trees or CHAID, to evaluate various variables that strongly correlate with customer performance. Remove existing variables or add new variables if needed.
7. **Apply revised eligibility model based on new cutoffs and variables (if any):** Use the revised eligibility model to detect customers for both "swap in" and "swap out" opportunities.

8. **Adjust Cutoff Values:** Consider adjusting the cutoff values for existing eligibility variables. Calculate expected revenue and write-off and thus expected net gain from new cutoffs.
9. **Recommendation:** Provide final recommendation by summarizing number of customers for "swap in" and "swap out", expected revenue, expected write-off, expected net gain and any perceived risk.

All the universal card customers are fuel card customers.

The company has its own card.

This project is trying to identify who will not be able to pay.

Practically corporations can use this card to control the spending of their employees. The customer pays for the service of cost management,