

# Project: Cross-Sell Early Account Monitoring



University of  
New Haven

## 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).

### *Objective:*

The primary objective of the monitoring report is to assess the performance of customers who have opted into the Cross-Sell Program by transitioning from the Fuel-Only Card to the Universal Card. This assessment is conducted to make informed decisions about whether any tightening treatment should be implemented in response to customer behavior and financial performance. To achieve this, the objective can be further broken down into several key components:

- **Customer Performance Evaluation:** The first step is to evaluate the financial performance of customers who have opted-in. This involves monitoring various key variables and metrics that provide insights into their credit card usage, repayment behavior, and overall financial health, etc. Utilize data analysis techniques, such as regression analysis, decision trees or CHAID, to evaluate various variables that strongly correlate with customer performance.
- **Transaction Evaluation:** Analyze transaction data of past written-off Cross-Sell accounts and identify transaction-related variables and patterns which have predictive value for future performance of early Cross-Sell customers. Variables and patterns may include: transaction platform, transaction completed in certain time frame, etc.
- **Risk Assessment:** The report aims to assess the level of risk associated with these customers. By analyzing key variables, it becomes possible to identify potential signs of financial distress or credit risk. This includes looking at factors such as outstanding balances, late payments, credit utilization, and any delinquent indicators.

- **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%, opt-in date, etc.
- **Decision-Making:** Based on the analysis of customer performance and risk assessment, the report will provide a basis for making decisions regarding tightening treatments and potential financial impact (in revenue and write-off) to mitigate the risk. These treatments may include inactive account closure, credit limit decrease, term tightening.

This project will concentrate on fraud and it will look at the transaction level data.