Background

The bank planed conducting quarterly-based campaign for an insurance product new acquisition. In order for the campaign to be cost-effective, it was designed to target the new prospects with high propensities only. The list of new prospects was appended with a bunch of credit bureau and demographic attributes, which was purchased from a third-party vendor. About 30K prospects were randomly selected from the list and contacted through direct mail for the initial campaign. Approximate 3% of contacted prospects were acquire successfully in the first wave campaign. The bank would like to leverage the campaign result and available data to develop an acquisition model to improve the respone rate in following campaigns for the sake of cost-effective.

**Data**

Historicial Trans Union credit data and demographic data were collected for each prospect, which was attached below

**Outcome Time Window**

It is defined as the period of three months since a campaign being launched

**Target**

A respondent is defined as a prospect who paid his first insurance premium in the outcome time