

Donor Dataset

AnyState Veterans of Foreign Wars seeks to better target its solicitations for donation. By soliciting only the most likely donors, less money is spent on solicitation efforts and more money is available for charitable concerns. Solicitations involve sending a small gift to an individual with a request for donation. Gifts include mailing labels and greeting cards.

The organization has more than 3.5 million individuals in its mailing database. These individuals were classified by their response behaviors to previous solicitation efforts. Of interest is the class of individuals who were identified as lapsing donors. These individuals made their most recent donations between 12 and 24 months ago. The organization found that by predicting the response behavior of this group, they could use the model to rank all 3.5 million individuals in their database. With this ranking, a decision can be made to either solicit or ignore an individual in the current solicitation campaign. The current campaign refers to a greeting card mailing sent in June of 1997. It is identified in the raw data as the 97NK campaign.

A subset of slightly more than 19,000 records was selected for modeling. This subset was not chosen arbitrarily. In addition, the 481 fields were reduced to 52. Some of the fields were eliminated when their potential association with the analysis objective was considered. (For example, it is doubtful that CD player ownership is strongly correlated with donation potential.) Other fields were combined to form summaries of a specific customer behavior. In general, if the variable has **PROM** in its name, then the variable is related to the number of items that the organization sent to the customer. However, if the variable has **GIFT** in its name, then the variable is related to the amount of money that the customer sent to the organization.

The data are in 4 datasets: donor_census, donor_profile, donor_survey and giving_history, all linked by a common donor identifier, CONTROL_NUMBER. The following table details the variables and descriptions:

| Variable | Description |
|-----------------------------|--|
| CARD_PROM_12 | Count of card promotions in the past 12 months |
| CAUSES_DONATED_TO_LAST_YEAR | Number of causes or organizations donated to during last year (from donor survey) |
| CLUSTER_CODE | Socio-Economic Cluster Code |
| CONTROL_NUMBER | ID |
| DONOR_AGE | Donor Age |
| DONOR_GENDER | Donor Gender |
| FAMILIARITY_WITH_PROGRAMS | Degree of familiarity with AnyState's programs, 0 = unfamiliar, 1 = somewhat familiar, 2 = familiar, 3 = very familiar, 4 = extremely familiar (from donor survey) |
| FREQUENCY_STATUS_97NK | Count of Donations between June 1995 and June 1996 (capped at 4) |
| HOME_OWNER | Home Owner flag |
| INCOME_GROUP | Income Bracket, from 1 to 7 |
| IN_HOUSE | Flag for <i>In-House</i> donor program |
| LAST_GIFT_AMT | Amount of most recent donation |

| Variable | Description |
|-----------------------------|--|
| LIFETIME_AVG_GIFT_AMT | Average donation amount, ever |
| LIFETIME_CARD_PROM | Number of card promotions, ever |
| LIFETIME_GIFT_AMOUNT | Total donation amount, ever |
| LIFETIME_GIFT_COUNT | Total number of donations, ever |
| LIFETIME_GIFT_RANGE | Maximum gift amount less minimum gift amount |
| LIFETIME_MAX_GIFT_AMT | Maximum gift amount, ever |
| LIFETIME_MIN_GIFT_AMT | Minimum gift amount, ever |
| LIFETIME_PROM | Count of solicitations ever sent |
| MEDIAN_HOME_VALUE | Census data |
| MEDIAN_HOUSEHOLD_INCOME | Census data |
| MONTHS_SINCE_FIRST_GIFT | Months since first donation |
| MONTHS_SINCE_LAST_GIFT | Months since most recent donation |
| MONTHS_SINCE_LAST_PROM_RESP | Months since last solicitation response |
| MONTHS_SINCE_ORIGIN | Months since entry onto the file |
| MOR_HIT_RATE | Data recorded by a third-party Mail-Order Response rate |
| NUMBER_PROM_12 | Count of promotions in the past 12 months |
| OVERLAY_SOURCE | Source of Demographic overlay |
| PCT_MALE_MILITARY | Census data |
| PCT_MALE_VETERANS | Census data |
| PCT_OWNER_OCCUPIED | Census data |
| PCT_VIETNAM_VETERANS | Census data |
| PCT_WWII_VETERANS | Census data |
| PEP_STAR | Flag to identify consecutive donors |
| PER_CAPITA_INCOME | Census data |
| PUBLISHED_PHONE | Flag |
| REGENCY_STATUS_96NK | Categorization of donation patterns |
| RECENT_AVG_CARD_GIFT_AMT | Average donation amount to card promotions since June 1994 |
| RECENT_AVG_GIFT_AMT | Average donation amount to promotions since June 1994 |
| RECENT_CARD_RESPONSE_COUNT | Count of responses to card promotions since June 1994 |
| RECENT_CARD_RESPONSE_PROP | Proportion of responses to card promotions since June 1994 |
| RECENT_RESPONSE_COUNT | Count of responses to promotions since June 1994 |
| RECENT_RESPONSE_PROP | Proportion of responses to promotions since June 1994 |
| RECENT_STAR_STATUS | STAR status flag, since June 1994 |
| SES | A clustering of the levels of CLUSTER_CODE |
| STATE | State abbreviation |
| TARGET_B | B=Binary, flag for response to 97NK—Target Variable |
| TARGET_D | Dollar amount of response to 97NK |
| URBANICITY | Categorization of residency |
| WEALTH_RATING | Measures wealth relative to others within state |

| Variable | Description |
|--------------------------|--|
| WILLINGNESS_TO_RECOMMEND | Willingness to recommend AnyState as a worthy charity to other potential donors, on a scale of 1 to 10 (from donor survey) |