A screenshot of a graph

Description automatically generated with low confidence

A picture containing text, crossword puzzle, screenshot, diagram

Description automatically generated

New Model

Table1 correlation Matrix and descriptive statistics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Mean | Std.Dev | Min | Max | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
| [1] | DV:Donation Amount | 11291 | 48728 | 10 | 2030418 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| [2] | Campaign Goal | 47178 | 137898 | 100 | 4000000 | 0.55 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| [3] | Tax Deductibility | 0.95 | 0.216 | 0 | 1 | 0.024 | -0.048 | 1 |  |  |  |  |  |  |  |  |  |  |
| [4] | Campaign Duration | 121 | 115 | 2 | 630 | 0.24 | 0.043 | -0.028 | 1 |  |  |  |  |  |  |  |  |  |
| [5] | Campaign Video | 0.35 | 0.48 | 0 | 1 | 0.036 | 0.034 | 0.0025 | 0.036 | 1 |  |  |  |  |  |  |  |  |
| [6] | Number of images | 3 | 1.56 | 0 | 5 | 0.063 | 0.063 | -0.026 | 0.065 | 0.03 | 1 |  |  |  |  |  |  |  |
| [7] | Words of campaign | 138 | 67 | 1 | 294 | 0.21 | 0.25 | -0.03 | 0.05 | 0.011 | 0.12 | 1 |  |  |  |  |  |  |
| [8] | Campaign Causes | 3.5 | 0.907 | 1 | 4 | -0.027 | -0.069 | 0.047 | -0.09 | 0.0019 | -0.026 | -0.013 | 1 |  |  |  |  |  |
| [9] | Campaign Polarity | 0.158 | 0.154 | -0.8 | 1 | -0.02 | -0.019 | -0.062 | -0.05 | -0.01 | 0.054 | 0.022 | -0.043 | 1 |  |  |  |  |
| [10] | Creator Type | 0.64 | 0.93 | 0 | 7 | -0.17 | -0.49 | 0.09 | -0.25 | 0.071 | -0.023 | -0.24 | 0.059 | -0.032 | 1 |  |  |  |
| [11] | Financial Size | 12270501 | 7382845 | 50000 | 20000000 | 0.1 | 0.005 | 0.31 | -0.046 | 0.014 | -0.012 | 0.015 | -0.017 | -0.01 | 0.12 | 1 |  |  |
| [12] | Sector | 1.03 | 1.25 | 0 | 7 | 0.016 | 0.11 | -0.026 | 0.044 | 0.0053 | -0.019 | 0.1 | -0.18 | -0.062 | -0.13 | 0.034 | 1 |  |
| [13] | Starting year | 3.37 | 1.39 | 0 | 5 | -0.062 | -0.08 | -0.07 | -0.047 | -0.015 | -0.012 | -0.03 | 0.19 | -0.036 | 0.11 | -0.087 | -0.021 | 1 |
| [14] | Campaign Promise | 699 | 5554 | 0 | 312500 | 0.24 | 0.53 | -0.12 | 0.22 | -0.041 | 0.02 | 0.25 | -0.024 | -0.029 | -0.82 | -0.13 | 0.12 | 0.12 |

Scatter plot

Actual Donation Amount + Campaign Promise

Scatter plot

Number of distinct donors + Campaign Promise

A picture containing line, plot, diagram, screenshot

Description automatically generated

VIF Test

Actual Donation Amount 1.367359

Campaign Goal 1.523575

NPO Ipc Status For Tax Deductibility 15.184339

duration\_day 2.196129

Campaign Video 1.551285

Campaign\_Image\_num 4.528547

Num\_desc\_cam 5.155816

Cam\_causes 14.164605

Description\_Campaign\_polarity 1.990055

Creator Type\* 1.589660

Scale\_type 4.194312

Sector 1.734332

Campaign\_Start\_Year 6.988540

Campaign Promise 1.043978

The new regression result.

A screenshot of a computer

Description automatically generated with medium confidence

R square drops a lot, In order to check it’s right or not, I use original data without removing the non-registered organizations(use the 15979 rows data) to run the new model again. The result is below. It shows the worse performance is caused by the new data set.

A screenshot of a computer

Description automatically generated with medium confidence

Before BOX-COX translation.

A picture containing screenshot, diagram, line, text

Description automatically generatedA picture containing text, diagram, screenshot, line

Description automatically generated

A blue line with a red line

Description automatically generated with low confidence

After BOX-COX translation.

A picture containing diagram, plot

Description automatically generated

A picture containing screenshot, plot, line, text

Description automatically generated